#### Draft

# REDWOOD CITY TRANSIT DISTRICT DTPP AMENDMENTS

Subsequent Environmental Impact Report

State Clearinghouse No. 2021080554

Prepared for City of Redwood City May 6, 2022





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### **CHAPTER 1**

### Introduction

### 1.1 Purpose of this SEIR

The proposed Transit District DTPP Amendments would consist of amendments to the City's General Plan and Downtown Precise Plan (DTPP) that would create a new sub-area, the Transit District area, within the DTPP area focused on transit-oriented development. In addition to creating the Transit District area boundaries, identifying a Transit District-specific development cap for office use, and adding residential development potential, the proposed Transit District DTPP Amendments envision a relocated and enlarged Caltrain station and tracks as part of a new and relocated Transit Center; make circulation improvements; and alter some land use controls (development standards) to support transit-oriented development.

Pursuant to the California Environmental Quality Act (CEQA), the City determined that a program-level Subsequent Environmental Impact Report (SEIR) is necessary to evaluate the environmental impacts of the proposed Transit District DTPP Amendments.

The purpose of this SEIR is to:

- Inform the City decisionmakers, the general public, and responsible and trustee public agencies of the nature of the proposed General Plan and Transit District DTPP Amendments, their potentially significant environmental effects, feasible measures to mitigate those effects, as well as reasonable and feasible alternatives:
- To serve as a reference and tiering document for subsequent review of individual projects undertaken to implement the proposed General Plan and Transit District DTPP Amendments; and
- To satisfy CEOA requirements.

As described in CEQA and the CEQA Guidelines, public agencies cannot approve projects that may cause a significant environmental impact without adopting mitigation measures or alternatives to avoid or substantially lessen those significant environmental effects, where feasible. In discharging this duty, a public agency has an obligation to balance the project's significant effects on the environment with its benefits, including economic, social, technological, legal and other benefits. This SEIR is an informational document, the purpose of which is to identify the potentially significant environmental effects of implementing the proposed General Plan and Transit District DTPP Amendments, and to indicate the manner in which those significant effects can be avoided or significantly lessened. The SEIR also identifies any significant and unavoidable adverse impacts that cannot be mitigated to a less-than-significant

level. Reasonable and feasible alternatives are identified that would avoid or substantially lessen any significant adverse environmental effects of the proposed General Plan and Transit District DTPP Amendments.

The City decisionmakers are required to consider the information in the SEIR, along with any other relevant information, in making their decision whether to approve the proposed General Plan and Transit District DTPP Amendments and each specific project that may be brought forth for approval in the future to implement the proposed General Plan and Transit District DTPP Amendments. Although the SEIR does not determine the ultimate decision that will be made regarding implementing the proposed Transit District DTPP Amendments or any individual project, CEQA requires the City to consider the information in the SEIR and make findings regarding each significant effect identified in the SEIR.

If determined to comply with CEQA, the City will certify the Final SEIR prior to approving the proposed General Plan and Transit District DTPP Amendments.

### 1.2 Determination to Prepare an SEIR

Section 15162 (Subsequent EIRs and Negative Declarations) of the CEQA Guidelines provides:

- When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
  - 1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
  - 2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
  - 3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
    - A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    - B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
    - C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative: or

D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Pursuant to Section 15162 of the CEQA Guidelines described above, a SEIR is required if the City, as the CEQA Lead Agency, determines on the basis of substantial evidence in light of the whole record that there have been substantial changes to the project and/or the circumstances under which the project is undertaken, or substantial new information has arisen, and that one or more of the foregoing will result in new or substantially more severe impacts and that thus necessitate major revisions to the prior environmental impact report and/or new mitigation measures or alternatives are now feasible.

The City has determined, pursuant to CEQA, that the proposed General Plan and Transit District DTPP Amendments will require the preparation of a SEIR to substantially revise the DTPP Final Environmental Impact Report (DTPP Final EIR, State Clearinghouse No. 2006052027), a programmatic environmental analysis certified in 2011. A SEIR is warranted because there is reasonable potential that the proposed General Plan and Transit District DTPP Amendments may result in new or substantially more severe significant environmental effects than those identified in the certified DTPP Final EIR.

# 1.3 SEIR Relationship to Previous CEQA Documentation

As noted above, the SEIR constitutes a substantial revision of the DTPP Final EIR, a programmatic environmental analysis certified in 2011 and analyzes proposed amendments to the City's General Plan and DTPP (hereafter referred to as "Transit District DTPP Amendments") that would, if adopted, create the Transit District area, comprised of a subset of the area subject to the DTPP adopted in 2011 and amended in 2012, 2013, and 2016. The SEIR relies on and incorporates information contained in the DTPP Final EIR where that information remains relevant, and provides additional information and analysis where warranted. Impact evaluations are based on an updated (2021 baseline) and identify where conclusions vary from the DTPP Final EIR. To facilitate comparison to the DTPP Final EIR, the SEIR is organized in the same way, with the same chapter headings.

The City is also considering broader General Plan and DTPP amendments. The Transit District is not dependent on those DTPP amendments. A separate SEIR is being prepared for those amendments. The Transit District is independently justified and serves the distinct purpose of creating and planning for the Transit District specifically.

#### 1.4 Environmental Review Process

### 1.4.1 Notice of Preparation and Public Scoping

On August 27, 2021, a Notice of Preparation (NOP) was published for the Transit District DTPP Amendments SEIR. A 31-day public comment period ended on September 27, 2021. A copy of the NOP is included in **Appendix A**. A scoping meeting was held on September 7, 2021 via teleconference to accept public input on environmental topics to be analyzed in the SEIR and approaches to the impact analyses.

#### 1.4.2 Draft SEIR

This Draft SEIR is being circulated to governmental agencies and to interested organizations and individuals that may wish to review and comment on the document. CEQA Guidelines sections 15086(c) and 15096(d) require Responsible area of expertise or project activities that are required to be carried out or approved by the agency, and the agency should support those comments with either oral or written documentation. Publication of the Draft SEIR initiates a 45-day public review period, during which time the City will accept comments on the Draft SEIR. The public review period for the Draft SEIR for the proposed Transit District DTPP Amendments is from May 6, 2022 through June 21, 2022.

### 1.4.3 Comments and Responses and Final SEIR

Following the close of the public and agency comment period on this Draft SEIR, the City will prepare responses to all written comments and to oral comments received at the public hearing that raise CEQA-related environmental issues regarding the Transit District DTPP Amendments and the analysis in this SEIR. The responses will be published in the Final SEIR. The Final SEIR will be considered by the City in a public meeting and certified if it is determined to be in compliance with CEQA. Upon certification of the Final SEIR, the City will consider whether to adopt the proposed Transit District DTPP Amendments.

#### How to Comment on this SEIR

If you have comment on the adequacy or accuracy of the Draft SEIR, please direct your comments in writing, via mail or e-mail, to:

Lindy Chan, Principal Planner City of Redwood City 1017 Middlefield Road, Redwood City, CA 94063 (650) 780-7237 | lchan@redwoodcity.org

### 1.4.4 Mitigation Monitoring and Reporting Program

Throughout this SEIR, mitigation measures have been described in language that will facilitate establishment of a Mitigation Monitoring and Reporting Program (MMRP). As required under CEQA (see CEQA Guidelines, Section 15097), an MMRP will be prepared and presented to the City at the time of certification of the Final EIR for the proposed Transit District DTPP

Amendments and will identify the specific timing and roles and responsibilities for implementation of adopted mitigation measures.

### 1.5 SEIR Scope

Consistent with CEQA Guidelines section 15162, this SEIR includes only the information necessary to make the previous CEQA documentation adequate for the project as revised. As provided for in the CEQA statutes and guidelines, the environmental focus of this SEIR is limited to areas of controversy or issues related to the proposed project changes known to the City (the Lead Agency) or identified by other interested agencies and individuals in response to the City's Notice of Preparation (NOP).<sup>2</sup> These focused areas include (listed in the order that these topics are addressed in this SEIR):

- Land Use and Planning
- Population and Housing
- Aesthetics and Shadows
- Cultural and Historic Resources (including Paleontological and Tribal Cultural Resources)
- Public Services (including Recreation)
- Transportation
- Utilities and Infrastructure (including Hydrology and Water Quality)
- Noise and Vibration
- Air Quality
- Climate Change (Greenhouse Gas Emissions, Energy and Sea Level Rise)
- Hazards and Hazardous Materials
- Biological Resources
- Geology and Soils

### 1.6 SEIR Organization and Content

The impact and mitigation information in this SEIR is generally organized under the 13 headings listed in *Section 1.4* above. The report describes the following in chapters 4 through 16 for each respective impact category:

1. The **existing environmental setting**, focusing on any changes in environmental conditions which may have occurred since the DTPP Final EIR was prepared;

The Notice of Preparation (NOP) is a CEQA-required brief notice sent by the Lead Agency to notify the Responsible Agencies, Trustee Agencies, potentially involved federal agencies, and other interested parties requesting notice, that the Lead Agency plans to prepare an EIR or SEIR for a project; the NOP solicits guidance regarding EIR or SEIR scope and content. The City's NOP for the Proposed Transit District, which was released August 27, 2021, is included in Appendix A of this SEIR. In addition, a public scoping meeting, noticed in the NOP, was held on September 7, 2021 pursuant to CEQA Guidelines section 15082(c) (Notice of Preparation and Determination of Scope of EIR) to solicit comments regarding the appropriate scope and content of the SEIR.

- 2. The **regulatory setting** including any changes to plans and policies, such as a land use or regulatory plan, or other regional or local plans, codes, and adopted documents that would be pertinent to the project plus any changes in the regulatory setting since the DTPP Final EIR was prepared;
- 3. Any new **supplemental impact findings**, including impacts which may have changed due to new information, changed circumstances, or changes in the project, and therefore were not considered in the previous CEQA documents; and
- 4. Any **supplemental mitigation measures** to avoid or reduce impact changes or new impacts not identified in the previous CEQA documents.

In addition, this SEIR includes a chapter evaluating cumulative environmental impacts (Chapter 17); a chapter summarizing the SEIR information in terms of various CEQA-required assessment conclusions, including growth-inducing effects, significant unavoidable impacts, irreversible environmental changes, and effects found not to be significant (Chapter 18); an explanation of alternatives to the proposed project (Chapter 19); and a chapter outlining the City's mitigation monitoring and reporting program (Chapter 21) in keeping with CEQA Guidelines section 21081.6.

# 1.7 "Significant Impacts" and Other Key SEIR Terminology

This SEIR identifies those adverse environmental impacts that are expected to be "significant," and corresponding mitigation measures warranted to eliminate or reduce those impacts to "less-than-significant" levels. Where it is determined that a particular impact cannot be mitigated to a less-than-significant level, the SEIR identifies that impact as "unavoidable." (see Section 18.2, Significant Unavoidable Impacts). Identified significant impacts that are not listed in Section 18.2, Significant and Unavoidable Impacts, can be mitigated to a less-than-significant level by implementation of the associated mitigation measure(s) identified in this SEIR. The individual environmental topic chapters provide more detail.

CEQA Guidelines section 15130 mandates that an EIR consider and discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. A cumulative impact is the result of the combination of the impacts resulting from the project together with other projects causing related impacts. (see *Chapter 17*, *Cumulative Impacts*).

The particular SEIR terms noted above ("significant," "unavoidable," "mitigation," "cumulative") and other key CEQA terminology used in this EIR are defined below.

• Significant Impact. "Significant effect on the environment" (significant impact) means, "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant." (CEQA Guidelines, section 15382)

- Cumulative Impacts. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (CEQA Guidelines, sections 15355[a] and [b])
- **Significant Unavoidable Impact.** "Significant unavoidable impact" is defined as a significant adverse environmental impact for which either no mitigation or only partial mitigation is feasible. If the project is to be approved without imposing an alternative design, the Lead Agency must include in the record of the project approval a written statement of the specific reasons to support its action i.e., a "statement of overriding considerations." (CEQA Guidelines, sections 15126.2[c] and 15093[b])
- **Significance Criteria.** The criteria used in this EIR to determine whether an impact is or is not "significant" are based on: (a) CEQA-defined "mandatory findings of significance" i.e., where any of the specific conditions occur under which the Legislature and the Secretary of Resources have determined constitute a potentially significant effect on the environment, which are listed in CEQA Guidelines section 15065; (b) specific criteria that a Resources Agency has determined are "normally" considered to constitute a "significant effect on the environment"; (c) the relationship of the project effect to the adopted policies, ordinances, and standards of the Lead Agency and of responsible agencies; and/or (d) commonly accepted practice and the professional judgment of the EIR authors and Lead Agency staff.
- Mitigation Measure. For each significant impact, the EIR must identify a specific "mitigation" measure or set of measures capable of "(a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (d) reducing or eliminating the impact over time by preservation or maintenance operations during the life of the action; or (e) compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements." (CEQA Guidelines, section 15370)

### 1.8 Intended Uses of the SEIR

The City is the Lead Agency<sup>3</sup> for all environmental documentation and procedural requirements associated with the proposed Transit District DTPP Amendments. This SEIR has been prepared by the City in keeping with State environmental documentation requirements set forth in the CEQA statute and the CEQA Guidelines. The report is intended to inform City decision-makers, other responsible agencies, and the general public of the proposed Transit District DTPP Amendments changes and of the environmental consequences of their approval. The scope of this SEIR is intentionally limited to evaluation and discussion of the environmental implications of

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The CEQA Guidelines define the "Lead Agency" as the public agency that has the principal responsibility for carrying out or approving a project. (CEQA Guidelines, Section 15367)

these changes. The SEIR is not intended to address the merits of, or the economic or social impacts of, the Transit District DTPP Amendments.

The CEQA Guidelines stipulate that an SEIR is intended to serve as a public information and disclosure document identifying those environmental impacts associated with the proposed project changes that are expected to be significant, and describing mitigation measures and alternatives that could minimize or eliminate these significant adverse impacts.<sup>4</sup> Such impacts and mitigation needs are discussed in this SEIR to the level of detail necessary to allow reasoned decisions about the project and conditions of project approval.

As described above and detailed in Chapter 3 of this SEIR, the proposed Transit District DTPP Amendments include establishing the Transit District area boundaries, establishing office maximum allowable development caps specific to the Transit District area, evaluating residential development capacity, modifying circulation to enhance access to the Transit Center area and modifying other development standards for the Transit District area. Therefore, the City has determined that a program-level SEIR is appropriate. Like the programmatic DTPP Final EIR certified in 2011, this program SEIR analyzes General Plan and DTPP amendments that would, if adopted, govern future development in the Transit District area. Future proposals, such as the relocation and/or expansion of the Caltrain station and proposed grade separations between the rail tracks and the street, would be subject to separate project-level CEQA review. Other specific development proposals (e.g., Sequoia Station development project) would be examined in light of the program SEIR to determine whether additional environmental review is required. The City anticipates using a checklist or similar device to determine whether the environmental effects of future development proposals are within the scope of the program EIR, as described in CEQA Guidelines Section 15168(c)(2), or further review is required.

As the Lead Agency, the City also intends for this SEIR to serve as the CEQA-required environmental documentation for consideration of this project by Responsible Agencies<sup>5</sup> and Trustee Agencies,<sup>6</sup> potentially including, but not limited to, Caltrain and the California Department of Transportation (Caltrans) (see "Other Government Agency Approvals" in *Chapter 3, Project Description*, of this SEIR).

<sup>&</sup>lt;sup>4</sup> CEOA Guidelines section 15121(a).

Under CEQA Guidelines, the term "Responsible Agency" includes all public agencies, other than the Lead Agency, which have discretionary approval authority over aspects of the project for which the Lead Agency has prepared an EIR.

Under CEQA Guidelines, the term "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by the project which are held in trust by the people of California. (CEQA Guidelines Section 15385.) The only Trustee Agencies in California are the California Department of Fish and Wildlife (CDFW), State Lands Commission, California Department of Parks and Recreation, and (in limited circumstances) the University of California.

### **CHAPTER 2**

### **Executive Summary**

This SEIR chapter includes: (1) a summary description of the proposed Transit District Amendments, with associated General Plan and Downtown Precise Plan (DTPP) amendments; (2) a summary description of the approvals required to implement the project; (3) a summary list of related environmental issues (areas of controversy); (4) a summary of significant supplemental environmental impact and mitigation findings of this SEIR resulting from project implementation, and any impacts and mitigations from the certified DTPP Final EIR that apply to the project; (5) a summary of SEIR-identified alternatives to the proposed project; and (6) a summary of how the SEIR-identified mitigation measures would be implemented.

This summary should not be relied upon for a thorough understanding of the proposed Transit District Amendments or its associated impacts and mitigation needs. Please refer to Chapters 3 through 19 of this SEIR for a more complete description of the proposed Transit District Amendments, associated impacts and mitigation measures, and alternatives.

### 2.1 Project Overview

The proposed Transit District Amendments would consist of amendments to the City's General Plan and DTPP that would create a new sub-area, the Transit District area, within the DTPP area focused on transit-oriented development with approximately 16.6 acres of land located to the west of the Caltrain right-of-way.

The proposed Transit District DTPP Amendments would establish and cap development potential for office use for this new sub-area of the DTPP in an amount of floor area that would be distinct from, and not subject to, the cap on office square footage that applies elsewhere in the DTPP. In addition, the proposed Transit District DTPP Amendments would allow for residential development capacity (CEQA clearance) in the district that would be separate from the number of residential units assumed elsewhere in the DTPP area. However, no cap on the number of residential units would be established, consistent with the state's Housing Accountability Act (HAA; Government Code Sec. 65589.5) and Housing Crisis Act (HCA). Also consistent with these state laws, the cap on residential development in the DTPP is proposed to be eliminated by the City Council's adoption of a new Redwood City General Plan Housing Element in late 2022. Any office or residential

The HAA, originally passed in 1982 and amended multiple times since (most recently in 2020), limits the authority of a local agency, such as Redwood City, to "deny, reduce the density of, or make infeasible housing development projects that are consistent with objective local development standards and contribute to meeting housing need" (California Department of Housing and Community Development, Housing Accountability Unit website [https://www.hcd.ca.gov/community-development/accountability-enforcement.shtml; reviewed December 16, 2021]). The HCA, added by SB 330 in 2019 and amended in 2021, prohibits certain local agency actions to reduce housing capacity. The HCA's provisions, among other things, prohibit rezoning that results in a net loss of housing capacity; prohibit non-objective and retroactive design standards; and impose certain procedural requirements on local agencies.

development exceeding the amount studied in this SEIR would potentially be subject to additional environmental review. There are currently no office or residential uses on the parcels within the proposed Transit District; therefore, any proposed new office and residential uses would represent all new development potential. There are currently retail uses in the area that are conditionally permitted, however, no change is proposed to retail development potential. Replacement of existing retail space with new retail uses within the Transit District area, along with any potential net increase in retail space within the Transit District area, would not necessitate an increase in the retail development cap, and no change in the retail cap is proposed. This is because the adopted DTPP, which governs the entirety of the DTPP area, would continue to do so within the new Transit District area with respect to other permitted uses such as retail, civic uses, and hotels, with sufficient capacity remaining in the cap for net new retail space. Accordingly, retail is discussed herein for informational purposes only.

In addition to creating the Transit District area boundaries, identifying a Transit District-specific development cap for office use, and adding residential development potential, the proposed Transit District DTPP Amendments would anticipate a relocated and enlarged Caltrain station and tracks as part of a new and relocated Transit Center;<sup>3</sup> make circulation improvements; and alter some land use controls (development standards) related to, among other things, building design, building massing, circulation, and parking in the DTPP to support transit-oriented development.

### 2.2 Required Approvals

### 2.2.1 City of Redwood City

The proposed Transit District Amendments would require the following discretionary approvals by the City of Redwood City:

- Certification of the Final SEIR
- Adoption of a Mitigation Monitoring or Reporting Program
- Adoption of General Plan amendments, including revisions to the Downtown maximum
  allowable development cap for office use that is distinct from, and not subject to, the office
  cap applicable to the remainder of the DTPP, and the addition of residential development
  potential, to implement the proposed Transit District DTPP Amendments
- Adoption of amendments to the DTPP, including, but not necessarily limited to, the following:
  - Amendment to establish the Transit District as a sub-area within the DTPP, with supplemental controls in addition to those applicable elsewhere in the DTPP;

Retail uses are conditionally permitted in the DTPP areas designated Downtown General and principally permitted elsewhere in the DTPP, including the area designated Downtown Core, which encompasses Sequoia Station and the Broadway frontage of the proposed Transit District area. Office uses are principally permitted throughout the DTPP.

In conversations with the Peninsula Corridor Joint Powers Board (JPB), City staff has identified additional space that would be needed to accommodate the proposed four-track Caltrain station and potential grade separations (separate projects that would be undertaken independently from the Transit District project analyzed in this SEIR and would be subject to additional, separate CEQA review).

- Amendment of the maximum allowable development cap for office use to create a cap specific to the Transit District that is distinct from, and not subject to, the office cap applicable to the remainder of the DTPP, along with the addition of the residential development potential cleared by CEQA under this SEIR;
- Minor amendments to minimum heights and to massing regulations (but no changes to the maximum allowable heights);
- Revisions to the DTPP New Streets (Circulation) Regulations and associated revisions to DTPP maps, as well as to update the typology of some streets and eliminate some planned but unbuilt streets;
- Revisions to DTPP Parking Regulations to lower the parking requirement to reflect
  anticipated reduced future parking demand, current best practices and future plans for
  Caltrain track expansion that will encourage non-driving modes of transportation while
  continuing to incentivize shared parking and the ability for project applicants to pay a fee
  to the City in lieu of providing new parking spaces (at the same time, bicycle parking
  requirements may be increased);
- Revisions to the DTPP maps to accommodate potential future relocation of the Caltrain station to the north side of Broadway and expansion of the station to four tracks as part of Caltrain's 2040 Service Vision plan (the station relocation would be a separate project);
- Revisions to the DTPP Public Frontages and Use Regulations;
- Allowance for exceptions to mandatory Standards in the DTPP Development Regulations for sites identified as potentially providing privately owned publicly accessible open space that is identified on the Potential Public Open Space Map in DTPP Section 3.2.1, and for sites that are constrained by potential anticipated Caltrain track improvements and realignment. This would entail permitting limited exceptions to building placement requirements (i.e., build-to-corner, building setback, and frontage coverage requirements) to allow corner setbacks, other setbacks from the street, and lesser lot coverage than is currently required; and lowering the required minimum heights from 35 feet to 25 feet, or less with a potential exception). The exceptions would allow for reduced massing and shadows, an enhanced pedestrian experience, and provide support for ground floor retail;
- Addition to the DTPP's list of permitted architectural styles to include Contemporary design; and
- Amendments to various maps, figures, and charts in the DTPP to implement the foregoing.

### 2.2.2 Other Agencies

Amendment of the General Plan and DTPP to implement the proposed Transit District Amendments is not anticipated to require review and/or approval from other jurisdictional agencies; however, related circulation improvements may require such approvals, including from the Peninsula Corridor Joint Powers Board, operator of Caltrain (including, but not necessarily limited to, approvals in connection with the existing and new Transit Centers, Caltrain right-of-way, and parking), as well as from Caltrans (including, but not necessarily limited to, approvals in connection with proposed changes to El Camino Real, a state highway [State Route 82]). Additionally, the City/County Association of Governments of San Mateo County, through its Airport Land Use Commission, would have to make a determination of consistency with the

County Airport Land Use Compatibility Plan (ALUCP) for San Carlos Airport, with respect to certain policies within the proposed Transit District Amendments.

Further, individual development projects that could proceed pursuant to the proposed Transit District Amendments could be subject to consistency review with respect to the ALUCP, as well as to other permitting requirements from the City of Redwood City and entities including, but not limited to, the Bay Area Air Quality Management District, Regional Water Quality Control Board, Caltrain, and Pacific Gas & Electric Co.

### 2.3 Environmental Issues (Areas of Controversy)

As required by the CEQA Guidelines, this SEIR addresses the following areas of potential environmental impact or controversy known to the Lead Agency (the City), including those issues and concerns identified by the City in its Notice of Preparation (NOP) of this EIR (dated August 27, 2012)<sup>4</sup> and by other agencies, organizations, and individuals in response to the NOP. Specific environmental concerns and the chapters of this SEIR that they relate to are summarized below (listed in the order that they are addressed in this SEIR):

- Land Use and Planning (Chapter 4)<sup>5</sup>
  - Need additional community outreach and improved survey prior to advancing current proposed increases in development;
  - Too much residential density in the City; should be more single-family development;
  - Do not increase development at all above what was already approved in the DTPP;
  - Concern about intensity and height of office space proposed; should be more residential, including affordable units (jobs/housing imbalance);
  - Reconsider amount of proposed office space to reflect shifts in demand for office due to COVID-19 pandemic;
  - Include alternative(s) with less office development; and
  - Support for transit-oriented development and creation of a dynamic urban core.
- *Population and Housing (Chapter 5)* 
  - (see comments above in Land Use and Planning related to jobs/housing balance and residential density)

<sup>&</sup>lt;sup>4</sup> The Notice of Preparation (NOP) is a CEQA-required brief notice sent by the Lead Agency to notify the Responsible Agencies, Trustee Agencies, potentially involved federal agencies, and other interested parties requesting notice, that the Lead Agency plans to prepare an EIR or SEIR for a project; the NOP solicits guidance regarding EIR or SEIR scope and content. The City's NOP for the Proposed Transit District, which was released August 27, 2021, is included in Appendix A of this SEIR. In addition, a public scoping meeting, noticed in the NOP, was held on September 7, 2021, pursuant to CEQA Guidelines Section 15082(c) (Notice of Preparation and Determination of Scope of EIR) to solicit comments regarding the appropriate scope and content of the SEIR.

Some of the comments in this category address the merits of the proposed project or process-related issues; they are included here under the overall "cateh-all" category of Planning.

- Cultural and Historic Resources (including Paleontological and Tribal Cultural Resources) (Chapter 7)
  - Comply with SB 18 and AB 52 with respect to tribal consultation requirements.
- Transportation and Circulation (Chapter 9)
  - Caltrain station does not need to be expanded, it just needs improvements to enhance passenger comfort;
  - Follow Caltrans' Transportation Impact Study Guide when evaluating transportation impacts;
  - Include a robust Transportation Demand Management (TDM) plan to reduce vehicle miles traveled (VMT) and other impacts to transportation and circulation;
  - Identify transportation impact fees needed to provide fair share contributions toward multi-modal and regional transit improvements;
  - Encroachment permits from Caltrans are required for any work conducted in the Caltrans right-of-way;
  - Concern about relying on uncertain Caltrain plans to establish project need/ development intensity;
  - Need to address increased traffic, especially on El Camino Real.
- Utilities and Infrastructure (including Hydrology and Water Quality) (Chapter 10)
  - Concern about the City's water supply and its ability to meet demand of proposed increase in development.
  - The need to supplement potable water usage with recycled water for indoor dual-plumbed and irrigation systems.
  - Concern about the City's sanitary sewer system capacity and its ability to meet demand of proposed increase in development
  - Consider saltwater infiltration in groundwater due to sea-level rise
- *Air Quality (Chapter 12)* 
  - Do not approve new development unless it can achieve net-zero carbon emissions.
- Climate Change (Greenhouse Gas Emissions, Energy and Sea Level Rise) (Chapter 13)
  - (see comment above in *Air Quality* related to emissions, and in Utilities and Infrastructure related to saltwater infiltration due to sea level rise)
- Geology and Soils (Chapter 16)
  - Concern that contaminated soil at Sequoia Station may be encountered once excavation to the depth required to support taller buildings is conducted.

# 2.4 Summary of SEIR Impacts and Mitigation Measures

For each of the 13 environmental topics listed above, any new significant, or substantially more severe significant, project or cumulative impacts impact and associated mitigation measure(s) identified in this SEIR plus any significant project or cumulative impact and associated mitigation measure(s) identified in the DTPP Final EIR that remain applicable to the proposed Transit District Amendments are summarized in **Table 2-1**. The summary table has been organized to correspond with the more detailed impact and mitigation discussions in Chapters 4 through 16 of this SEIR. The table is arranged in five columns: (1) identified impacts, (2) potential significance without mitigation, (3) recommended mitigation measures, (4) the entity responsible for implementing each mitigation measure, and (5) the level of impact significance after implementation of the mitigation measure(s).

Any future development project considered for approval would be subject to all applicable mitigation measures identified in this SEIR.

As a result of the California Supreme Court's decision with respect to impacts of the environment on a project, two potential non-CEQA impacts related to Noise and Vibration are not further addressed in this SEIR. However, the City would continue to enforce the prior mitigation measures with clarifying edits as conditions of approval:

#### Condition of Approval 11a: Noise Reduction Measures for Multifamily Housing

The City shall require noise studies consistent with the requirements of the California Building Code to be conducted for proposed new multifamily residential projects within the Transit District area to identify noise reduction measures necessary to achieve compatibility with City Noise Element guidelines (55 dBA CNEL at sensitive exterior spaces) and Title 24 standards (45 dBA CNEL within residential units). Each noise study must be approved by the City's Building Inspection Division prior to issuance of a building permit. Identified noise reduction measures, in order of preference so that windows can be opened, may include:

- Site and building design so as to minimize noise in shared residential outdoor activity areas by locating such areas behind the buildings, in courtyards, or orienting the terraces toward the interior of lots rather than streets;
- Site and building design so as to minimize noise in the most intensively occupied and noise-sensitive interior spaces of units, such as bedrooms, by placing such interior spaces and their windows and other openings in locations with less noise exposure;
- Windows and doors with a high Sound Transmission Class (STC) rating and noiseattenuating wall assemblies;
- Forced air mechanical ventilation systems in all units exposed to noise level
  exceeding Title 24 standards to allow residents the option of reducing noise by
  keeping the windows closed.

Table 2-1
Summary of Potentially Significant Impacts and Recommended Mitigation Measures

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation		
Cultural and Historic Resources	ultural and Historic Resources					
Impact CR-1: Implementation of the proposed Transit District Amendments would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.	S	Mitigation Measure CR-1: (formerly Mitigation Measure 7-4 from the DTPP Final EIR with clarifying amendments): The Project Applicant for each subsequent development project that requires a discretionary approval and that is adjacent to a historic resource shall engage a qualified architect or architectural historian approved by the City and meeting the Secretary of the Interior's Professional Qualifications Standards (36 CFR part 61) and by the City's Historic Resources Advisory Committee to review the proposed development for its potential impacts on the adjacent historic resource. Any site and architectural design modifications identified through this review process as necessary to avoid a "substantial adverse change" in the significance of the adjacent historic resource and protect its continued eligibility for listing on the California Register, as determined by the City, shall be required of the Project Applicant as conditions of project approval.	Project Applicant, qualified architect or architectural historian, City Historic Resources Advisory Committee	LS		
	S	Mitigation Measure NO-3 (formerly Mitigation Measure 11-3 from the DTPP Final EIR with clarifying amendments): The City shall reduce ground-borne vibration levels that may be generated by future site-specific demolition and construction activities by imposing conditions of approval on all future projects involving demolition and construction activities, which conditions shall require the Project Applicant to ensure the following ground-borne vibration abatement measures are implemented by the construction contractor:  • Restrict vibration-generating activity to between the hours of 7:00 AM and 5:00	Project Applicant, construction contractor, City	LS		
		<ul> <li>PM, Monday through Friday. Prohibit such activity on weekends and holidays.</li> <li>Notify occupants of land uses located within 200 feet of pile-driving activities of the project construction schedule in writing.</li> </ul>				
		Investigate in consultation with City staff possible pre-drilling of pile holes as a means of minimizing the number of percussions required to seat the pile.				
		Conduct a pre-construction site survey documenting the condition of any historic structure located within 200 feet of pile driving activities.				
		<ul> <li>Monitor pile driving vibration levels to ensure vibration does not exceed appropriate thresholds for the building (5 mm/sec [0.20 inches/sec]) ppv for structurally sound buildings and 2 mm/sec (0.08 inches/sec) ppv for historic buildings.</li> </ul>				

TABLE 2-1 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation			
Cultural and Historic Resources (cont.)	cultural and Historic Resources (cont.)						
Cultural and Historic Resources (cont.)  Impact CR-2: Implementation of the proposed Transit District Amendments would not potentially cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	S	Mitigation Measure CR-2 (formerly Mitigation Measure 7-1 from the DTPP Final EIR with clarifying amendments): Implementation of the following mitigation measures would reduce the potential impacts of new development facilitated by the proposed Transit District Amendments on undiscovered archeological resources to a less-than-significant level:  a) In the event that any deposit of prehistoric or historic archeological materials is encountered during project construction activities, the construction contractor shall ensure that all work within an appropriate buffer area around the discovery, but not less than 50 feet, shall be stopped and a qualified archeologist meeting federal criteria under 36 CFR 61 shall be contacted to assess the find(s) and make recommendations. The project applicant(s) shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.  In the event prehistoric or historic archaeological materials cannot be avoided by project activities, the City Community Development and Transportation Department shall confirm that the project applicant has retained a qualified archaeological material unearthed by project construction activities shall be evaluated by the qualified archaeologist. If the find(s) are determined to not be a historical resources pursuant to CEQA Guidelines Section 15064.5(a) or a unique archaeological resource pursuant to Public Resources Code Section 21083.2(g) by the qualified archaeologist, and was not identified as a tribal cultural resource by a Native American representative, avoidance is not necessary. If the find(s) are determined by the qualified archaeologist to be a historical resource or a unique archaeological resource, the resource shall be avoided if feasible. If the City determines that avoidance is not feasible, project impacts shall be mitigated in accordance with the City Communi	City Community Development and Transportation Department, City Building Department, qualified archaeologist, construction contractor	LS			
		scientifically consequential information from and about any discovered archaeological materials and include recommendations for the treatment of these					

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation
Cultural and Historic Resources (cont.)				
Impact CR-2 (cont.)		The City Community Development and Transportation Department shall confirm that the project applicant has retained a qualified archaeologist for the preparation and implementation of the data recovery plan, which shall be conducted prior to any additional earth-moving activities in the area of the resource. The recovery plan shall be submitted to the project applicant, the City Community Development and Transportation Department. Once the recovery plan is reviewed and approved by the City Community Development and Transportation Department and any appropriate resource recovery completed, project construction activity within the area of the find may resume. A data recovery plan shall not be required for resources that have been deemed by the qualified archaeologist, in coordination with the City, as adequately recorded and recovered by studies already completed as per CEQA Guidelines Section 15126.4 (b)(3)(D). The qualified archaeologist shall determine the need for archaeological construction monitoring in the vicinity of the find thereafter.  b) Prior to the issuance of grading permits within the Transit District area, the City Building Department shall confirm that any development applicant has required all construction crews to undergo training for the identified of federal or state-eligible cultural resources, and that the construction crews are aware of the potential for previously undiscovered archaeological resources within the plan area, of the laws protecting these resources and associated penalties, and of the procedures to follow should they discover cultural resources during project-related work. All future individual development projects proposed in the Transit District area will be subject to applicable CEQA review and evaluation requirements, and to the extent that such projects are found to have the potential to disturb or destroy archaeological resources, appropriate mitigation measures would be required to address any identified significant impacts.		
Impact CR-4: Implementation of the proposed Transit District Amendments would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.	S	See Mitigation Measure CR-2 (formerly Mitigation Measure 7-1 from the DTPP Final EIR with clarifying amendments)	City Community Development and Transportation Department, qualified archaeologist,	LS

TABLE 2-1 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation
Utilities and Infrastructure				<u>I</u>
Impact UT-1: Implementation of the proposed Transit District DTPP Amendments would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	S	Mitigation Measure UT-1: Emergency Water Storage: All subsequent development projects in the Transit District area, regardless of size, shall pay a fair-share contribution towards the cost of providing emergency water storage for all proposed uses to fund the design and construction of such storage.	Project Applicant, City	LS
Impact UT-2: With Implementation of the proposed Transit District Amendments, the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	S	Mitigation Measure UT-2a Recycled Water Infrastructure: The developer of all subsequent development projects in the Transit District area, regardless of size, shall be required to install an extension of recycled water supply pipelines to each development project with sufficient recycled water capacity to provide for all of the project's recycled water demands while achieving the required pressure, flow, and other system design criteria of recycled water system pursuant to City of Redwood City standards. Where a project developed earlier pays the entire cost of recycled water pipeline extension to the Transit District area, the original developer may be reimbursed by subsequent development projects located within the Transit District area which must pay a fair-share contribution (based upon its proportion of wastewater generated from within the Transit District area) towards the extension. of recycled water supply pipelines to connect the project to the City's recycled water system prior to ground disturbance.	Project Applicant, City	LS
Noise				1
Impact NO-1: Implementation of the proposed Transit District Amendments would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	S	Mitigation Measure NO-1: Construction Noise Reduction (formerly Mitigation Measure 11-1 from the DTPP Final EIR with clarifying amendments): The City shall require Project Applicants to reduce demolition and construction noise impacts on adjacent uses by imposing conditions of approval on all future projects involving demolition and construction activities. These conditions shall require the Project Applicant to undertake the following conventional construction-period noise abatement measures:  Construction Plan. Prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with nearby noise-sensitive facilities so that construction activities and the event schedule can be scheduled to minimize noise disturbance. This plan shall be provided to all noise-sensitive land uses within 500 feet of the construction site.	Project Applicant, City	LS

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation
Noise (cont.)				
Impact NO-1 (cont.)		Construction Scheduling. Ensure that noise-generating construction activity is limited to between the hours of 7:00 AM to 8:00 PM Monday through Friday, except when authorized by the Building Official (Redwood City Municipal Code Section 24.32).		
		Construction Equipment Mufflers and Maintenance. Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.		
		Equipment Locations. Locate stationary noise-generating equipment required on construction project sites as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project site.		
		Construction Traffic. Route all construction traffic to and from the construction sites via designated truck routes to the maximum extent feasible. Prohibit construction-related heavy truck traffic in residential areas where feasible.		
		Quiet Equipment Selection. Use quiet construction equipment, particularly air compressors, wherever feasible.		
		Temporary Barriers. Construct solid plywood fences around construction sites adjacent to residences, operational businesses, or noise-sensitive land uses.		
		Temporary Noise Blankets. Temporary noise control blanket barriers shall be erected along building facades of construction sites to attenuate noise from elevated activities if noise conflicts cannot be resolved by scheduling. (Noise control blanket barriers can be rented and quickly erected.)		
		Noise Disturbance Coordinator. For projects that would last over one year in duration, the City may choose to require the Project Applicant to designate a "Noise Disturbance Coordinator" who shall be responsible for responding to any local complaints about construction noise. The Disturbance Coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. The Project Applicant shall post, in a conspicuous location a telephone number for the Disturbance Coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. (The Noise Disturbance Coordinator shall work directly with an assigned City staff member.)		

TABLE 2-1 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation
Noise (cont.)				
Impact NO-2: Implementation of the proposed Transit District Amendments would not generate a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	S	Mitigation Measure NO-2: Operational Noise Performance Standard: Prior to the issuance of any building permit, future project applicants within the Transit District area shall ensure that all mechanical equipment is selected and designed to reduce impacts on surrounding uses by meeting the performance standards of Chapters 36.7.B of the Redwood City Zoning Code, limiting noise from stationary sources such as mechanical equipment to 55 dBA at the property lines. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance has been verified by the City. Methods of achieving these standards include, but are not limited to, using low-noise-emitting HVAC equipment, locating HVAC and other mechanical equipment within a rooftop mechanical penthouse, and using shields and parapets to reduce noise levels to adjacent land uses. For emergency generators, industrial-grade silencers can reduce exhaust noise by 12 to 18 dBA, and residential-grade silencers can reduce such noise by 18 to 25 dBA (American Society of Heating, Refrigeration, and Air Conditioning Engineers, Technical Committee on Sound and Vibration, 2006). Acoustical screening can also be applied to exterior noise sources and can achieve up to 15 dBA of noise reduction (Environmental Noise Control, 2014).  An acoustical study shall be prepared by a qualified acoustical engineer during final building design to evaluate the potential noise generated by building mechanical equipment and to identify the necessary design measures to be incorporated to meet the City's standards. The study shall be submitted to the Director of the City of Redwood City Community Development and Transportation Department for review and approval before the issuance of any building permit.	Project Applicant, qualified acoustical engineer, City	LS
Impact NO-3: Implementation of the proposed Transit District Amendments would not generate excessive groundborne vibration or groundborne noise levels.	S	Mitigation Measure NO-3: Vibration Reduction (formerly Mitigation Measure 11-3 from the DTPP Final EIR with clarifying edits): The City shall reduce ground-borne vibration levels that may be generated by future site-specific demolition and construction activities by imposing conditions of approval on all future projects involving demolition and construction activities, which conditions shall require the Project Applicant to ensure the following ground-borne vibration abatement measures are implemented by the construction contractor:  Restrict vibration-generating activity to between the hours of 7:00 AM and 5:00 PM, Monday through Friday. Prohibit such activity on weekends and holidays.  Notify occupants of land uses located within 200 feet of pile-driving activities of the project construction schedule in writing.  Investigate in consultation with City staff possible pre-drilling of pile holes as a means of minimizing the number of percussions required to seat the pile.  Conduct a pre-construction site survey documenting the condition of any historic structure located within 200 feet of pile driving activities.	Project Applicant, construction contractor(s), City	LS

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation
Noise (cont.)				
Impact NO-3 (cont.)		Monitor pile driving vibration levels to ensure vibration does not exceed appropriate thresholds for the building (5 mm/sec (0.20 inches/sec) ppv for structurally sound buildings and 2 mm/sec (0.08 inches/sec) ppv for historic buildings.		
Air Quality				
Impact AQ-2: Adoption of the proposed Transit District Amendments would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	S	<ul> <li>Mitigation Measure AQ-2a: Best Management Practices for Construction Dust Suppression.</li> <li>All subsequent projects, regardless of size, shall implement best management practices to reduce construction impacts, particularly fugitive dust, to a less-than-significant level.</li> <li>Specifically, the project applicant for any subsequent development project in the Transit District area shall require all construction plans to specify implementation of the following best management practices:</li> <li>All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>All vehicle speeds on unpaved roads shall be limited to 15 mph.</li> <li>All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</li> <li>Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</li> <li>All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</li> <li>Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phon</li></ul>	Project Applicant, construction contractor(s)	SU

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation
Air Quality (cont.)				
Impact AQ-2 (cont.)		Mitigation Measure AQ-2b: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants.	Project Applicant, construction	SU
		Project applicants proposing projects that exceed BAAQMD screening levels shall prepare a project-level criteria air pollutant assessment of construction and operational emissions at the time the project is proposed. The project-level assessment could include a comparison of the project with other similar projects where a quantitative analysis has been conducted, or a project-specific criteria air pollutant analysis to determine whether the project exceeds the BAAQMD's criteria air pollutant thresholds.	contractor(s)	
		In the event that a project-specific analysis finds that the project could result in significant construction criteria air pollutant emissions that exceed BAAQMD significance thresholds, the project sponsor shall implement the following emission reduction measures to the degree necessary to reduce the impact to less than significance thresholds, and shall implement additional feasible measures if necessary to reduce the impact to less than the significance thresholds.		
		Clean Construction Equipment		
		1. The project applicant shall use electric construction equipment when feasible.		
		2. The project applicant shall ensure that all diesel off-road equipment shall have engines that meet the Tier 4 Final off-road emission standards, as certified by CARB, except as provided for in this section. This requirement shall be verified through submittal of an equipment inventory that includes the following information: (1) Type of Equipment, (2) Engine Year and Age, (3) Number of Years Since Rebuild of Engine (if applicable), (4) Type of Fuel Used, (5) Engine HP, (6) Verified Diesel Emission Control Strategy (VDECS) information if applicable and other related equipment data. A Certification Statement is also required to be made by the Contractor for documentation of compliance and for future review by the air district as necessary. The Certification Statement shall state that the Contractor agrees to compliance and acknowledges that a violation of this requirement shall constitute a material breach of contract.		
		The City may waive the requirement for Tier 4 Final equipment only under the following unusual circumstances: if a particular piece of off-road equipment with Tier 4 Final standards is technically not feasible or not commercially available; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or there is a compelling emergency need to use other alternate off-road equipment. For purposes of this mitigation measure, "commercially available" shall mean the availability of Tier 4 Final		

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation
Air Quality (cont.)				
Impact AQ-2 (cont.)		engines similar to the availability for other large-scale construction projects in the region occurring at the same time and taking into consideration factors such as (i) potential significant delays to critical-path timing of construction for the project and (ii) geographic proximity to the project site of Tier 4 Final equipment.		
		3. The project applicant shall require the idling time for off-road and on-road equipment be limited to no more than 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment. Legible and visible signs shall be posted in multiple languages (English, Spanish, Chinese) in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit.		
		Operational Emission Reductions		
		As required by Mitigation Measure CC-1, projects shall be constructed without natural gas infrastructure and shall be "all electric."		
		As required by Mitigation Measure CC-1 (if feasible), projects shall provide EV charging infrastructure consistent with the applicable Tier 2 CALGreen standards in effect at the time.		
		3. Project applicants shall demonstrate compliance with the City's TDM ordinance by providing evidence of associated trip reductions to the City on an annual basis.		
		All newly constructed loading docks on commercial properties that can accommodate trucks with Transport Refrigeration Units (TRUs) shall be equipped with EV charging equipment to power TRUs during loading and unloading at docks. This measure does not apply to temporary street parking for loading or unloading.		
		Emissions Offsets		
		If a project-specific analysis finds that the project could result in criteria air pollutant emissions that exceed BAAQMD significance thresholds despite implementation of the above emission reduction measures, the project applicant shall pay mitigation offset fees to the BAAQMD's Bay Area Clean Air Foundation or other governmental entity. The mitigation offset fee shall fund one or more emissions reduction projects within the San Francisco Bay Area Air Basin. The fee will be determined by the City, the project applicant, and the BAAQMD or other governmental entity, and be based on the type of projects available at the time of the payment. The fee is intended to fund emissions reduction projects to achieve annual reductions of ROG, NO <sub>X</sub> , and PM <sub>10</sub> equal to the amount required to reduce emissions below significance levels after implementation of other emission reduction strategies identified above.		

TABLE 2-1 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation
Air Quality (cont.)				
Impact AQ-3: Adoption of the proposed Transit District Amendments would not expose sensitive receptors to substantial pollutant concentrations.	S	Mitigation Measure AQ-3: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction.  Project applicants within the Transit District area proposing projects within 1,000 feet of existing or approved sensitive receptors shall prepare a project-level HRA of construction impacts at the time the project is proposed. The HRA shall be based on project-specific construction schedule, equipment and activity data and shall be conducted using methods and models approved by the BAAQMD, CARB, OEHHA and U.S. EPA. Estimated project-level health risks shall be compared to the BAAQMD's health risk significance thresholds for projects.  In the event that a project-specific HRA finds that the project could result in significant construction health risks that exceed BAAQMD significance thresholds, the project applicant shall implement Mitigation Measure AQ-2b's requirement for the use of all Tier 4 Final construction equipment to reduce project-level health risks to a less than significant level. In addition, all tower cranes and man- and material-lifts shall be electric powered and forklifts shall be electric or LNG powered.	Project Applicant, City	LS
Impact C-AQ-1: Adoption of the Transit District would result in a cumulatively considerable contribution to the regional cumulative air quality impacts.	S	Implement Mitigation Measure AQ-2b.	Project Applicant, construction contractor(s)	SU
Impact C-AQ-2: Adoption of the Transit District, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to local health risk impacts.	S	Implement Mitigation Measure AQ-3.	Project Applicant, City	LS
Climate Change				
Impact CC-1: Implementation of the proposed Transit District Amendments would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	S	Mitigation Measure CC-1: Enforce No Natural Gas Requirement and Require Compliance with EV Requirements in CALGreen Tier 2: Subsequent development projects proposed as part of the Transit District Amendments shall not be eligible for exceptions from the "all electric" requirement in the City's Reach Codes, and shall comply with EV requirements in the most recently adopted version of CALGreen Tier 2 at the time that a building permit application is filed.	Project Applicant	SU

TABLE 2-1 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation
Climate Change (cont.)				
Impact CC-2: Implementation of the proposed Transit District Amendments would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	S	Implement Mitigation Measure CC-1.	Project Applicant	SU
Impact C-CC-1: Implementation of the proposed Transit District Amendments would not result in a cumulatively considerable contribution to GHG emissions that may have a significant impact on the environment or conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases.	S	Implement Mitigation Measure CC-1.	Project Applicant	SU
Biological Resources				
Impact BIO-1: Implementation of the proposed Transit District Amendments would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	S	Mitigation Measure BIO-1 (formerly Mitigation Measure 15-3 from the DTPP Final EIR): Project applicant shall ensure that all tree removal and trimming, as well as ground disturbing activities, are scheduled to take place outside of the breeding season (February 15 to August 31). If construction is unavoidable during this time, a qualified biologist shall conduct a survey for nesting birds no more than three days prior to the removal or trimming of any tree and prior to the start of ground disturbing activities. If active nests are not present, project activities can proceed as scheduled. If active nests of protected species are detected, a suitable buffer shall be established around the nest based on CDFW standards, and the buffer shall remain in place until the City has determined, in consultation with the qualified biologist, that the buffer is no longer necessary to avoid significant impacts to the nest.	Project Applicant, qualified biologist, and CDFG (if applicable)	LS
Impact BIO-4: Implementation of the proposed Transit District Amendments would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	S	Implement Mitigation Measure BIO-1	Project Applicant, qualified biologist, and CDFG (if applicable)	LS
Impact BIO-5: Implementation of the proposed Transit District Amendments would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	S	Mitigation Measure BIO-5 (formerly Mitigation Measure 15-4 from the DTPP Final EIR): The Project applicant shall ensure that any project in the Transit District area that would involve the removal of any tree shall complete the application and review process specified in the City's Tree Preservation Ordinance (Municipal Code chapter 35) prior to project approval.	City, Project Applicant	LS

TABLE 2-1 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation		
Geology and Soils	Geology and Soils					
Impact GEO-2: Implementation of the proposed Transit District Amendments would not result in substantial soil erosion or the loss of topsoil.	S	Mitigation Measure GEO-2 (formerly Mitigation Measure 16-3 from the DTPP Final EIR with clarifying amendments): The City shall require Project Applicants for future development projects in the Transit District area involving a grading area of 10,000 or more square feet to prepare erosion control plans subject to City approval and consistent with the required project Stormwater Pollution Prevention Plans (SWPPPs) as well as Best Management Practices (BMPs) specified by the Redwood City Stormwater Management and Discharge Control Program (Municipal Code Chapter 27A). The plans and BMPs shall be implemented during construction. Erosion during all phases of construction shall be controlled through the use of erosion and soil transport control facilities. These shall include the use of catch basins and filter fabrics, and the direction of stormwater runoff away from disturbed areas. The plans shall also provide for long-term stabilization and maintenance of remaining exposed soils after construction is completed. Areas disturbed by construction shall be either covered with impervious surfaces (e.g., buildings and pavement) or fully stabilized with landscaping and/or native vegetation. All revegetated areas shall be irrigated and maintained as necessary to ensure the long-term survival of the vegetation.	City, Project Applicant	LS		
Impact GEO-4: Implementation of the proposed Transit District Amendments would not be located on expansive or corrosive soil creating substantial direct or indirect risks to life or property.	S	Mitigation Measure GEO-4a (formerly Mitigation Measure 16-1 from the DTPP Final EIR with clarifying amendments): The detailed, design-level geotechnical investigations required by the City Building Official shall include analysis of expansive soil hazards and recommend stabilization measures. Once grading plans have been developed, the actual use of expansive soils in engineered fill construction shall be further evaluated by a geotechnical engineer and the location primary borrow source areas for fills shall be determined. Additionally, supplemental field and laboratory testing of potential cut materials shall be completed. In addition to observing all cut and fill slope construction, the project geotechnical engineer shall inspect and certify that any expansive soils underlying individual building pads and all roadway subgrades have been either removed or amended in accordance with City-approved construction specifications. If expansive soils are not fully remediated on each lot and in the area of all public and private improvements at the time of site development, the project geotechnical engineer shall make site-specific recommendations for grading, drainage installation, foundation design, the addition of soil amendments, and/or the use of imported, non-expansive fill materials, as may be required to fully mitigate the effects of weak or expansive soils and prevent future damage to project improvements. These recommendations shall be reviewed by a City-retained registered geologist and, following his or her approval, be incorporated into a report to be included with each building permit application and with the plans for all public and common area improvements. In addition, since proper drainage, in particular, can improve the performance of expansive soils by significantly reducing their tendency to shrink and swell, deed restrictions shall be imposed to prohibit significant modification of finished lot grades that would adversely affect site drainage.	Project Applicant, project geotechnical engineer, City Building Official	LS		

TABLE 2-1 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES

Impacts	Potential Significance without Mitigation	Mitigation Measure(s)	Mitigation Responsibility	Potential Significance with Mitigation				
Geology and Soils (cont.)	Geology and Soils (cont.)							
Impact GEO-4 (cont.)	S	Mitigation Measure GEO-4b (formerly Mitigation Measure 16-2 from the DTPP Final EIR with clarifying amendments): Project plans and specifications shall ensure that water systems and other buried metal infrastructure in all future development within the Transit District area shall, in addition to other coatings called for in the specifications, have cathodic protection using a sacrificial anode system. Design criteria for cathodic protection shall conform to Part VII (G) of the City's water system design criteria and standard specification details Section 02661.	Project Applicant, City	LS				
		Concrete mix designs shall conform to California Department of Transportation (Caltrans) Memo to Designers 10-5 January 2002 Protection Reinforcement Against Corrosion Due to Chlorides, Acids, and Sulfates.						
Impact GEO-6: Implementation of the proposed Transit District DTPP Amendments would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	S	Mitigation Measure GEO-6 (formerly Mitigation Measure 7-5 from the DTPP Final EIR with clarifying amendments): Prior to the issuance of grading or demolition permits, the Community Development & Transportation Department, in coordination with a qualified paleontologist, shall assess individual development project proposals within the Transit District area for the potential to destroy unique paleontological resources. The City's Community Development and Transportation Department shall require development proposals entailing significant earthworks or deep foundations with the potential to penetrate sedimentary rock layers to incorporate a study by a professional paleontologist to assess the potential for damage of paleontological resources. Should the paleontologist determine that the proposal has the potential to damage paleontological resources, the paleontologist shall provide detailed provisions for the protection of these resources to the City's Community Development & Transportation Department. These provisions may include the complete avoidance of the resource, in-place preservation, and/or complete data recovery as discussed in Mitigation Measure CR-2. Implementation of this measure would reduce the potential impact on paleontological resources to a less-than-significant level.	Project Applicant, qualified paleontologist, Community Development & Transportation Department	LS				

SOURCE: ESA, 2021.

# **Condition of Approval 11b: Groundborne Vibration Measures for Habitable Buildings**

The City shall require a detailed site-specific vibration study prior to development of new habitable buildings within 100 feet of the Caltrain or California High Speed Rail right-of-way. The study shall demonstrate that groundborne vibrations associated with rail operations either would not exceed applicable FTA groundborne vibration impact criteria, or can be reduced to below the applicable FTA criteria thresholds through building design and construction measures (e.g. stiffened floors, modified foundations), which shall be required as conditions of permit approval.

## 2.5 Summary of Alternatives

The potential environmental consequences of the DTPP were analyzed in detail in the DTPP Final EIR. After considering a reasonable range of potentially feasible alternatives, the City chose to adopt a combination of two alternatives instead of the proposed project: (1) revised maximum allowable density (MAD) caps providing for an increase in office/commercial and a decrease in retail; and (2) revised historic resource preservation regulations.

As discussed in the various SEIR chapters analyzing environmental topics (e.g., Cultural and Historic Resources, Public Services, Transportation and Circulation, Noise, Air Quality, Biological Resources, Geology and Soils), the proposed Transit District Amendments would result in only one significant impact (and its corresponding cumulative impact) that could not be mitigated to a less-than-significant level. That impact involves the potential for regional criteria air pollutant emissions in excess of the Bay Area Air Quality Management District (BAAQMD) threshold from subsequent development projects within the Transit District area. Chapter 19 of this SEIR includes an analysis of the No Project Alternative, which is a CEQA requirement, a Reduced Development Alternative and an Altered Land Use Mix. The No Project Alternative would not implement the proposed Transit District Amendments, and future development in the area would be subject to the current DTPP and General Plan. The Reduced Development Alternative and the Altered Land Use Mix Alternative would each have somewhat lesser effects than would the proposed Transit District Amendments with respect to impacts related to the intensity of development—traffic (including traffic that might potentially interfere with emergency evacuation plans); criteria air pollutant, toxic air contaminant, and greenhouse gas emissions; noise and vibration; population or employment; and demand for public services and utilities. With the exception of a potential impact of subsequent individual development project(s) with respect to criteria air pollutants, which could be significant and unavoidable for each alternative, as it could for the proposed Transit District Amendments, all of these impacts would be less than significant for each alternative, in some cases with mitigation. Impacts of each alternative related to the footprint of subsequent development projects—archaeological, tribal cultural resources, and historical resources; hazards and hazardous materials; geological and paleontological resources; and biological resources—would generally be the same as or similar to those of the proposed Transit District Amendments, and, as with the proposed Transit District Amendments, all would be less than significant, in some cases with mitigation.<sup>6</sup>

<sup>6</sup> CEQA Guidelines Section 15126.6(b).

The Reduced Development Alternative would be considered the Environmentally Superior Alternative.

## 2.6 Mitigation Implementation

For those mitigation measures identified in this SEIR that are adopted by the City, a mitigation monitoring and reporting program will be undertaken by City staff to ensure and verify mitigation implementation. Implementation of most of the mitigation measures recommended in this SEIR could be effectively implemented through incorporation into the final version of one or more of the various project components (e.g., the project itself, and/or related DTPP and General Plan amendments) and/or can be implemented (monitored and verified) through the City's normal development review procedures following adoption of these components. Pursuant to CEQA Guidelines Section 15087, adoption of a mitigation monitoring and reporting program will be necessary before the project can be adopted by the City Council of Redwood City.

2. Executive Summary

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## **CHAPTER 3**

## **Project Description**

### 3.1 Introduction

After holding several study sessions and conducting community outreach, the City of Redwood City (City) is leading a process to amend its General Plan and Downtown Precise Plan (DTPP) to accommodate growth in jobs and housing with a new Transit Center for trains and buses in the heart of downtown, which is collectively referred to as the Transit District DTPP Amendments. <sup>1</sup>

On November 4, 2019, the City Council directed staff to create a new Transit District in the area adjacent to the existing Redwood City Transit Center, which provides access to bus service operated by the San Mateo County Transit District (SamTrans) and to the Redwood City Caltrain Station and Caltrain commuter rail service operated by the Peninsula Corridor Joint Powers Board (JPB).<sup>2</sup> On January 27, 2020, the City Council approved a Memorandum of Understanding (MOU) to work with Caltrain and SamTrans and provided direction for community input and visioning to support transit-oriented development. On February 24, 2020, the City Council considered initiation of a General Plan amendment and DTPP amendment to accommodate the proposed Sequoia Station redevelopment project, which is located within the proposed Transit District. The City Council did not initiate the General Plan amendment process for Sequoia Station and instead directed staff to move forward with a City-led process to develop the Transit District DTPP Amendments, beginning with community engagement to consider priorities for land use to support a transit-rich district.

## 3.2 Project Location

Redwood City, the county seat of San Mateo County, is bounded generally by the cities of San Carlos, Belmont, and Foster City and unincorporated areas of San Mateo County to the north; San Francisco Bay to the east; the cities of Menlo Park and Atherton and unincorporated San Mateo County to the south; and the city of Woodside and unincorporated San Mateo County to the west. Regional access to Redwood City and the DTPP area is provided by U.S. Highway 101 (Bayshore Freeway) via the Whipple Avenue interchange to the north of the Plan area, and by the Veterans Boulevard/Woodside Road (State Highway 84) interchange to the south of the Plan area. Subregional access is provided by EI Camino Real (State Route 82), a north-south

As discussed in detail in Chapter 17, Cumulative Impacts, Caltrain is planning for potential relocation and expansion of the existing Redwood City Caltrain station in conjunction with implementation of the adopted Caltrain 2040 Long-Range Service Vision.

SamTrans also operates paratransit service (Redi-Wheels and RediCoast) in the immediate vicinity of the Transit District area and provides administrative staff for Caltrain.

roadway that extends from San Francisco to San José.<sup>3</sup> The existing DTPP area encompasses about 183 acres within the historic center of Redwood City, and is generally bounded by Brewster Avenue to the north, Veterans Boulevard and the Kaiser Medical Center to the east, Maple Street to the south, and El Camino Real to the west.

The proposed Transit District would be a sub-area within the DTPP, generally located between Brewster Avenue to the north, the Caltrain tracks to the east, Jefferson Avenue to the south, and El Camino Real, California Street, and Perry Street to the west (see **Figure 3-1**). The site comprises approximately 16.6 acres, and includes approximately 2,200 linear feet along the Caltrain tracks, which form the eastern Transit District area boundary.<sup>4</sup> The Transit District would include the Caltrain right-of-way, city streets, and the following three areas:

- Perry Parcel (Caltrain parking lot along Perry Street; approximately 2.5 acres);
- Transit Center (Caltrain station and SamTrans bus depot; approximately 2.1 acres); and
- Sequoia Station Shopping Center (approximately 12 acres).

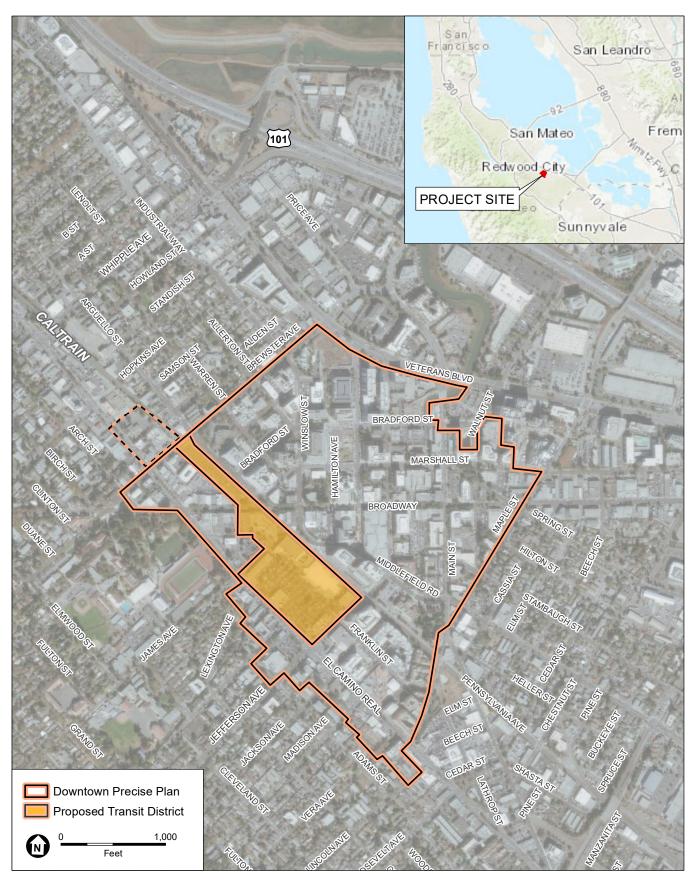
## 3.3 Project Objectives

The proposed Transit District DTPP Amendments would consist of amendments to the Redwood City General Plan and Downtown Precise Plan (DTPP) to achieve the following City objectives:

- To establish a new sub-area within the DTPP—the Transit District—focused on transitoriented development with a new hub of office, residential and retail uses adjacent to the Redwood City Transit Center, including the Caltrain Station and the SamTrans bus depot, thereby potentially minimizing automobile travel and vehicle miles traveled, consistent with the City's greenhouse gas reduction goals.
- To allow for redevelopment of the existing Transit Center and Sequoia Station properties with a mix of retail, office, and residential uses that is responsive to market demands and can be constructed within existing height limitations (i.e., no changes to the maximum height allowed) and that maximizes development potential of the area in terms of both job and housing opportunities;
- To anticipate a potential future four-track Caltrain station, north of the existing station, that would allow for expanded service with completion of Caltrain's electrification program (currently under construction) and for long-term implementation of the Caltrain Business Plan, which calls for substantially increased frequency of service and the use of the Redwood City Transit Center as a transfer point between local and express trains;

El Camino Real and U.S. Highway 101 are both north-south roadways. However, the San Francisco Peninsula extends generally northwest to southeast and, particularly in and near Redwood City, El Camino Real runs at roughly a 45-degree angle to north-south, while Highway 101 is closer to east-west in orientation. Nevertheless, for simplicity, for this SEIR, streets parallel to El Camino Real are considered to run north-south, including Veterans Boulevard, while Whipple, Brewster and Jefferson Avenues and streets parallel to them are considered to run east-west, unless otherwise stated in a particular context.

The acreage of the proposed Transit District is 0.9 acres less than the 17.5 acres identified in the Notice of Preparation of an Environmental Impact Report, published in August 2021. The reason for the change is a pending exchange of land between Caltrain and a private entity that is proposing development of a site that, with the land exchange, would be partially within the original Transit District area. Accordingly, the proposed Transit District has been adjusted to exclude this development site.



SOURCE: ESRI Imagery; City of Redwood City, 2021

Transit District DTPP Amendments SEIR

Figure 3-1
Project Site Location



- To designate land uses appropriate to the Transit District area and the total amount of development to be permitted in the Transit District area. To that end, establish a separate development cap for office use that is distinct from, and not subject to, the office cap applicable to the remainder of the DTPP, and to allow residential uses that contribute to a thriving hub of office, residential and retail uses;
- To make circulation improvements to promote quality vehicular, bicycle and pedestrian connections.
- To lower the parking requirement to reflect anticipated reduced future parking demand, current best practices and future plans for Caltrain track expansion that will encourage non-driving modes of transportation while continuing to incentivize shared parking and the ability for project applicants to pay a fee to the City in lieu of providing new parking spaces;<sup>5</sup>
- To require frontage improvements to support active transportation consistent with RWCmoves, Redwood City's Citywide Transportation Plan; with the City's El Camino Real Corridor Plan; and with the City's in-progress Vision Zero strategy to eliminate traffic fatalities and severe injuries and the RWC Walk Bike Thrive initiative;
- To provide options for more design flexibility to allow for increased diversity in architecture and style; and
- To maintain existing DTPP maximum building height limits (i.e., no changes to the maximum allowable height) in the proposed Transit District, but allow for some development flexibility by permitting limited exceptions to building placement requirements (i.e., build-to-corner, building setback, and frontage coverage requirements) to allow corner setbacks, other setbacks from the street, and lesser lot coverage than is currently required; and lowering the required minimum heights from 35 feet to 25 feet, or less with a potential exception. The exceptions would allow for reduced massing and shadows, an enhanced pedestrian experience, and provide support for ground floor retail.

## 3.4 Existing Land Uses

The following describes existing land uses on each of the three areas that comprise the proposed Transit District.

### 3.4.1 Perry Parcel

The Perry Parcel (Assessor's Parcel Number [APN] 052-323-010) is located at the northernmost portion of the proposed Transit District, between Brewster Avenue and Broadway. The Caltrain-owned parcel contains a surface parking lot with approximately 135 spaces, including three disabled-accessible spaces, located between Perry Street and the Caltrain tracks, and also includes the Caltrain right-of-way and train tracks in this area.

As part of the DTPP, the Perry Parcel has a zoning designation of P (Planned Community) and has a height limit of 8 stories (92 feet), except that the southernmost 40 feet in depth extending

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In accordance with Section 30.3 of the Redwood City Zoning Code, in-lieu parking fees "shall be used exclusively to make available additional parking spaces for public use within the Downtown Parking Zone."

north from Broadway is within a 3-Story Stepdown Height Zone and therefore has a height limit of 3 stories (35 feet).

### 3.4.2 Transit Center

South of the Perry Parcel, across Broadway, is the existing Transit Center which includes the Redwood City Caltrain Station and the SamTrans bus depot (APNs 052-354-030, 052-352-010, and 052-356-090, along with a vacated portion of the Winklebleck Street right-of-way and additional Caltrain-owned land along the tracks). Adjacent to the Transit Center, fronting Broadway, is a vacant retail building of approximately 9,500 square feet and surface parking lot with 20 parking spaces (APNs 052-354-010 and 052-354-020). The Caltrain Station is an unstaffed facility consisting of two open-air boarding and alighting platforms, one for northbound and one for southbound trains, with benches and small transit shelters on both platforms. Standalone ticket machines are available within transit shelters on both the northbound and southbound platforms.

The SamTrans bus depot is adjacent to the southbound Caltrain platform. Several SamTrans bus lines, taxis, transportation network companies (TNCs) and privately-operated shuttles that provide service to local business parks and Stanford University serve the bus depot, Caltrain Station, and the immediate vicinity. Transit shelters are provided on the boarding/alighting islands. The Transit Center also includes a Caltrain surface parking lot with approximately 90 spaces, including six disabled-accessible spaces, as well as space for passenger pickup and drop-off.

As part of the DTPP, the Transit Center has a zoning designation of P (Planned Community) and has a height limit of 8 stories (92 feet), except that the northernmost 40 feet in depth extending south from Broadway is within a 3-Story Stepdown Height Zone and therefore has a height limit of 3 stories (35 feet).

## 3.4.3 Sequoia Station

South of the Transit Center and James Avenue is the Sequoia Station shopping center. Existing uses within Sequoia Station include approximately 178,000 square feet of retail space, along with approximately 925 surface parking spaces. Safeway, which occupies the largest retail space at Sequoia Station (approximately 65,000 square feet), owns a portion of the property, which also includes several smaller retail stores and a bank branch, along with surface parking (APN 052-550-070, 052-550-080, and 052-550-130). SamTrans owns the subsurface parking level (approximately 308 spaces, including six disabled-accessible spaces that serve the Transit Center [APN 052-550-010]). The remainder of the shopping center is owned by Lowe Enterprises, a national real estate developer and the project applicant for Sequoia Station (APN 052-550--090, -052-550-100, 052-550-110, and 052-550-120). The Lowe portion of the center totals approximately 103,000 square feet of retail space, with CVS, Old Navy, Barnes and Noble, and Pet Food Express being the largest tenants; the Lowe portion also includes surface parking. Sequoia Station is bounded by James Avenue, the Caltrain tracks, Jefferson Avenue, and

Many private shuttles conduct pickups and drop-offs on Winslow Street, adjacent to the northbound Caltrain platform.

El Camino Real. The City owns a small parcel (APN 052-550-050), immediately adjacent to the southern boundary of Sequoia Station. This parcel, along the north side of Jefferson Avenue at Franklin Street, is used for street and utility improvements.

As part of the DTPP, the Sequoia Station site has a zoning designation of P (Planned Community) and has a height limit of 12 stories (136 feet) on the eastern portion, adjacent to the Caltrain tracks, and a height limit of 10 stories (114 feet) along the western portion, adjacent to El Camino Real, except that the first 20 feet in depth from El Camino Real is within a 4-Story Stepdown Height Zone and therefore has a height limit of 4 stories (48 feet).

## 3.5 Project Components

The proposed Transit District DTPP Amendments would consist of amendments to the City's General Plan and DTPP that would create a new sub-area, the Transit District, within the DTPP area focused on transit-oriented development with approximately 16.6 acres of land located to the west of the Caltrain right-of-way. The DTPP would continue to apply to the Transit District, except where expressly provided otherwise.

The proposed Transit District DTPP Amendments would establish and cap development potential for office use for this new sub-area of the DTPP in an amount of floor area that would be distinct from, and not subject to, the cap on office square footage that applies elsewhere in the DTPP. In addition, the proposed Transit District DTPP Amendments would allow for residential development capacity (CEQA clearance) in the district that would be separate from the number of residential units assumed elsewhere in the DTPP area. However, no cap on the number of residential units would be established, consistent with the state's Housing Accountability Act (HAA; Government Code Sec. 65589.5) and Housing Crisis Act (HCA). Also consistent with these state laws, the cap on residential development in the DTPP is proposed to be eliminated by the City Council's adoption of a new Redwood City General Plan Housing Element in late 2022.<sup>7</sup> Any office or residential development exceeding the amount studied in this SEIR would potentially be subject to additional environmental review. There are currently no office or residential uses on the parcels within the proposed Transit District; therefore, any proposed new office and residential uses would represent all new development potential. There are currently retail uses in the area that are conditionally permitted, however, no change is proposed to retail development potential. Replacement of existing retail space with new retail uses within the

The HAA, originally passed in 1982 and amended multiple times since (most recently in 2020), limits the authority of a local agency, such as Redwood City, to "deny, reduce the density of, or make infeasible housing development projects that are consistent with objective local development standards and contribute to meeting housing need" (California Department of Housing and Community Development, Housing Accountability Unit website [https://www.hcd.ca.gov/community-development/accountability-enforcement.shtml; reviewed December 16, 2021]). The HCA, added by SB 330 in 2019 and amended in 2021, prohibits certain local agency actions to reduce housing capacity. The HCA's provisions, among other things, prohibit rezoning that results in a net loss of housing capacity; prohibit non-objective and retroactive design standards; and impose certain procedural requirements on local agencies. Because the Housing Element update and the Transit District Amendments are being processed at the same time and it is unclear which will be adopted first, both documents currently assume elimination of the cap on residential development in the DTPP.

Retail uses are conditionally permitted in the DTPP areas designated Downtown General and principally permitted elsewhere in the DTPP, including the area designated Downtown Core, which encompasses Sequoia Station and the Broadway frontage of the proposed Transit District. Office uses are principally permitted throughout the DTPP.

Transit District area, along with any potential net increase in retail space within the Transit District area, would not necessitate an increase in the retail development cap, and thus no change in the retail cap is proposed. Accordingly, retail is discussed in herein for informational purposes only. Any office or residential development exceeding the amount studied in this SEIR would potentially be subject to additional environmental review. There are currently no office or residential uses on the parcels within the proposed Transit District; therefore, any proposed new office and residential uses would represent all new development potential. There are currently retail uses in the area that are conditionally permitted, however, no change is proposed to retail development potential. Replacement of existing retail space with new retail uses within the Transit District area, along with any potential net increase in retail space within the Transit District area, would not necessitate an increase in the retail development cap, and thus no change in the retail cap is proposed. Accordingly, retail is discussed herein for informational purposes only.

In addition to creating the Transit District area boundaries, identifying a Transit District-specific development cap for office use, and adding residential development potential, the proposed Transit District DTPP Amendments would anticipate a relocated and enlarged Caltrain station and tracks as part of a new and relocated Transit Center; <sup>10</sup> make circulation improvements; and alter some land use controls (development standards) related to, among other things, building design, building massing, circulation, and parking in the DTPP to support transit-oriented development.

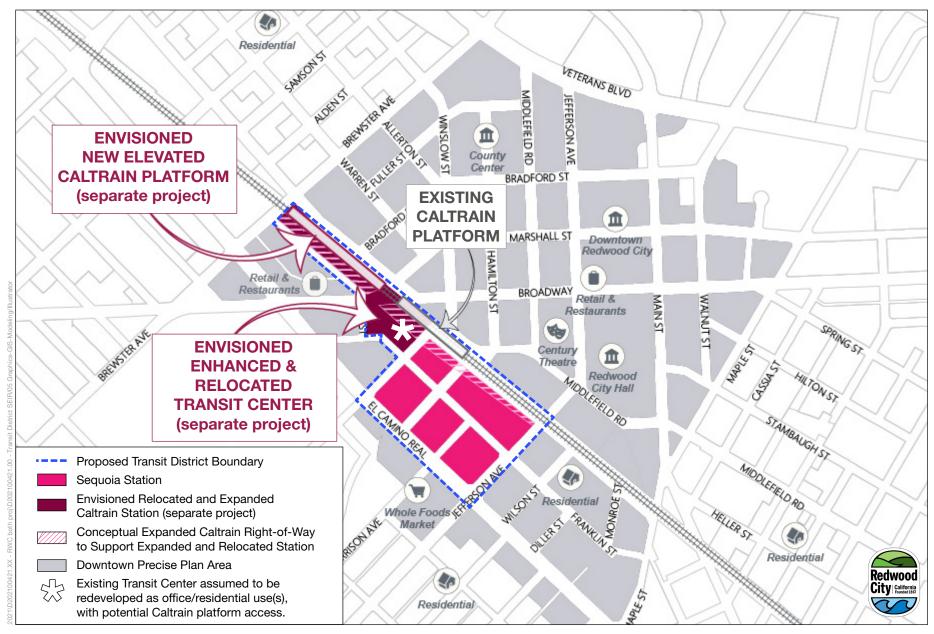
Each of the above components is described in greater detail below. **Figure 3-2** depicts the proposed Transit District DTPP Amendments and the surrounding context.

## 3.5.1 Development and Land Use Controls

The Transit District is envisioned as a new hub of office, residential and retail uses adjacent to the Redwood City Transit Center (Caltrain Station and SamTrans bus depot). The Transit District DTPP Amendments would identify an office development cap and provide for new residential development potential specifically for the new Transit District area that would represent an increase beyond what was previously evaluated under the certified Final DTPP Environmental Impact Report (EIR), to support transit-oriented development. As noted above, the existing DTPP would continue to govern the Transit District area with respect to other permitted uses such as retail, civic uses, and hotels.

Retail uses are conditionally permitted in the DTPP areas designated Downtown General and principally permitted elsewhere in the DTPP, including the area designated Downtown Core, which encompasses Sequoia Station and the Broadway frontage of the proposed Transit District. Office uses are principally permitted throughout the DTPP.

In conversations with the JPB, City staff has identified additional space that would be needed to accommodate the planned four-track Caltrain station and potential grade separations (separate projects that would be undertaken independently from the proposed Transit District DTPP Amendments analyzed in this SEIR and would be subject to additional, separate CEQA review). As noted above, the proposed Transit District DTPP Amendments envision the planned expansion and relocation of the Caltrain Station and Redwood City Transit Center. Grade separation of certain street crossings of the Caltrain tracks is also being evaluated by the City, independent of the Transit District DTPP Amendments.



SOURCE: City of Redwood City

Transit District DTPP Amendments SEIR



### **Development Assumptions and Maximum Office Development Cap**

To establish an office development cap and provide CEQA clearance for residential development potential specific to the proposed Transit District within the DTPP, City staff prepared projections of development in the proposed Transit District based on assumed buildable area pursuant to the controls in the DTPP (e.g., height limits, massing standards, etc.). <sup>11</sup> Development is assumed to occur on the site of the existing Sequoia Station shopping center, which is anticipated to be redeveloped with retail, office and residential uses, as well as on the site of the existing Redwood City Transit Center, assuming that the station has relocated. The proposed Transit District DTPP Amendments envision that redevelopment of the Perry Parcel, at the northern end of the proposed Transit District, would include the relocated Transit Center, including both a relocated Caltrain Station and SamTrans bus depot, and may include a small amount of retail or office as part of the station. **Table 3-1** depicts the increased office and residential development capacity analyzed in this EIR and specific to the Transit District DTPP Amendments.

Table 3-1
Proposed Land Uses in Downtown Precise Plan for the Transit District DTPP Amendments

Land Use	Office Development Cap and Residential Development Assumption <sup>a</sup>	
Office Space	1,630,000 square feet	
Residential Units	1,100 units	

#### NOTE:

<sup>a</sup> All development totals represent net new development in the proposed Transit District.

SOURCE: City of Redwood City, 2021

As noted above, it is anticipated that existing retail space would be redeveloped within the Transit District area and there would be no net increase in retail floor area beyond that already permitted under the DTPP. Retail uses would continue to be a strong component of the Transit District area; however, the existing retail space is anticipated to be redeveloped in a denser, more transit-friendly pattern than under existing conditions, as the Transit District DTPP Amendments would provide for mixed-use development, in multi-story buildings with ground-floor retail below, office and/or residential uses above, and subterranean and/or structured parking.

As is the case with the existing adopted DTPP, the proposed Transit District DTPP Amendments would permit building heights of 8, 10, and 12 stories in the Transit District area, with the greatest height limits along the Caltrain tracks between James and Jefferson Avenues; this would not represent a change from existing height limits. Accordingly, it can be anticipated that subsequent development pursuant to the proposed Transit District DTPP Amendments could require the provision of standby and emergency power—required for buildings with an occupiable floor level more than 75 feet above grade pursuant to the California Building Code (Sections 403.4.8, 2702, and 3003). These backup power systems, which allow for emergency operation of building components such as elevators, fire detection systems, emergency lighting, and fire pumps, among other things, would likely be provided through the installation of backup generators, which are most commonly diesel-fueled. In general, such diesel backup generators are operated only for emergency use and occasional testing; the latter is commonly limited to 50 hours per year. Backup generators require a permit from the Bay Area Air Quality Management District.

### Land Use Controls

The Transit District DTPP Amendments would include district-specific amendments to certain land use controls in the DTPP. Among these are the following:

- Allowance for exceptions to mandatory Standards in the DTPP Development Regulations for sites identified as potentially providing privately owned publicly accessible open space that is identified on the Potential Public Open Space Map in DTPP Section 3.2.1, and for sites that are constrained by potential anticipated Caltrain track improvements and realignment. This would entail permitting limited exceptions to building placement requirements (i.e., build-tocorner, building setback, and frontage coverage requirements) to allow corner setbacks, other setbacks from the street, and lesser lot coverage than is currently required; and lowering the required minimum heights from 35 feet to 25 feet, or less with a potential exception). The exceptions would allow for reduced massing and shadows, an enhanced pedestrian experience, and provide support for ground floor retail;
- Revisions to the DTPP parking ratios to lower the vehicle parking requirement and increase the bicycle parking requirement to reflect anticipated reduced future parking demand, current best practices, and future plans for Caltrain track expansion that will encourage non-driving modes of transportation while continuing to incentivize shared parking and the ability to pay in-lieu fees;
- Revisions to the DTPP New Streets regulations to facilitate track expansions and station relocation while maintaining strong visual and physical multi-modal connections to the Downtown and Transit Center, as well as to update the typology of some streets and eliminate some planned but unbuilt streets;
- Addition of Contemporary Design to the DTPP's list of permitted architectural styles in the proposed Transit District; and
- Revisions to the DTPP Public Frontages and Use Regulations to make certain changes in vehicular circulation, described below under "Circulation Improvements."

No major changes are proposed to the DTPP with respect to permitted or conditionally permitted land uses, although a new category would be created for the proposed Transit District, with permitted uses substantially consistent with those in the Downtown Core. 12 Additionally, the Transit District DTPP Amendments would not make any changes in allowable maximum building heights (that is, there would be no changes to the permitted maximum building heights). However, as noted above, the Transit District DTPP Amendments would introduce some flexibility with respect to allowing for exceptions, at certain sites, to requirements concerning building placement and minimum heights. The DTPP would continue to govern the Transit District area with respect to retail development potential and other permitted uses (e.g., hotels, civic uses), as well as in regard to other controls set forth in the DTPP, including, but not limited to, Historic Preservation, Use Regulations, Façade Composition, Signage, and aspects of New

Specific revisions to the Use Regulations Chart that are relevant to the proposed Transit District involve permitting Civic uses, including Arts and Cultural Centers, in all areas of the proposed Transit District, and prohibiting Restricted Uses (bail bonds offices, liquor stores; second-hand retail, pawn shops & used clothing shops; sexuallyoriented businesses; social service facilities; and temporary uses) in the proposed Transit District. Additionally, consistent with Article 59 of the Zoning Code, Storefront Cannabis uses would be permitted in accordance with Zoning Code Article 59 and Chapter 32 of the Redwood City Municipal Code.

Streets, Public Frontage Regulations, Parking, Building Height and Massing, and Architectural Character not explicitly set forth above as proposed for revision.

### 3.5.2 Circulation Improvements

As part of the proposed Transit District Amendments, the City proposes certain alterations to DTPP vehicular circulation within the Transit District area. As shown in **Figure 3-3**, the requirement for the following new roadways would be eliminated from the City's General Plan and DTPP:

- Lane from Broadway to Jefferson Avenue, between the Caltrain right-of-way and the Transit Center and the Sequoia Station Shopping Center site to allow for widening of the Caltrain right-of-way in connection with potential future relocation and expansion of the Transit Center; and
- Harrison Avenue, a designated City Street, between Franklin Street and the Caltrain right-ofway. (Harrison would be a "recommended" new street between El Camino Real and Franklin Street only.)

In addition, the following planned but unbuilt streets would be reclassified/converted in the City's General Plan and DTPP:

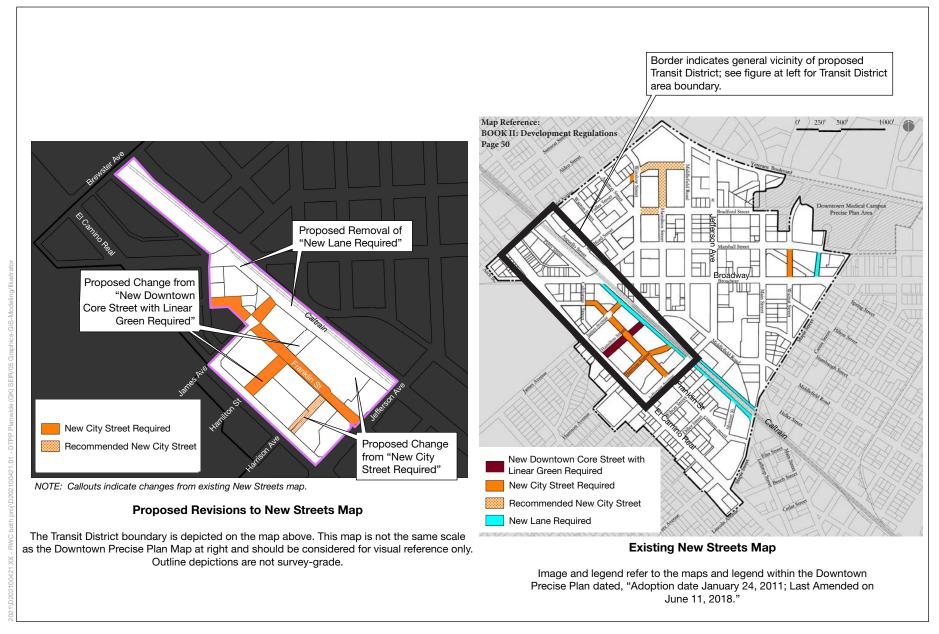
- Hamilton Street between El Camino Real and Franklin would be reclassified from a "Downtown Core Street" to a "City Street"; and
- Hamilton Street between Franklin Street and Caltrain right-of-way would be changed from a
  "Downtown Core Street" and would instead be identified as a potential privately owned,
  publicly accessible open space that could allow pedestrian and bicycle travel only, with nonemergency motor vehicles prohibited.

The streets proposed for elimination and/or reclassification were proposed in the DTPP as New Streets but, to date, have not been constructed. These proposed amendments factor in changed conditions, such as anticipated relocation of the Transit Center to the north.

The Transit District DTPP Amendments also propose pedestrian, bicycle, and transit enhancements to improve safety and connectivity to and from the potential future relocated Transit Center, including an expanded Caltrain Station, and the greater Downtown and surrounding neighborhoods. Among these would be a requirement for protected bike lanes and potential improvements to bus loading along El Camino Real, Brewster Avenue, Arguello Street, and James Avenue in and adjacent to the Transit District area. Widened sidewalks and protected pedestrian crossings would also be provided on certain designated streets. These pedestrian, bicycle, and transit improvements would be consistent with the circulation plan set forth in the DTPP, with minor exceptions.<sup>13</sup>

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<sup>13</sup> For example, the proposed Transit District DTPP Amendments would alter some of the existing DTPP street designations within the Sequoia Station site, as described above.



SOURCE: City of Redwood City

Transit District DTPP Amendments SEIR



## 3.6 Uses of the SEIR and Required Approvals

### 3.6.1 City of Redwood City

The City of Redwood City is the lead agency under CEQA for preparation of the proposed Transit District DTPP amendments environmental analysis. This SEIR is intended to provide the City, other public agencies, and the general public with the relevant environmental information needed to consider the proposed DTPP amendments to create the Transit District DTPP Amendments. Like the programmatic DTPP Final EIR certified in 2011, this program SEIR analyzes General Plan and DTPP amendments that would, if adopted, govern future development in the Transit District area. Future specific development proposals would be examined in light of the program SEIR to determine whether additional environmental review is required. The City anticipates using a checklist or similar approach to determine whether the environmental effects of future development proposals are within the scope of the program SEIR, as described in CEQA Guidelines Section 15168(c)(2), or whether further review is required.

The City anticipates that implementation of the Transit District DTPP Amendments would require the following discretionary approvals by the City of Redwood City:

- Certification of the Final SEIR
- Adoption of a Mitigation Monitoring or Reporting Program
- Adoption of General Plan amendments, including revisions to the Downtown maximum allowable development cap for office use that is distinct from, and not subject to, the office cap applicable to the remainder of the DTPP, and the addition of residential development potential, to implement the proposed Transit District DTPP Amendments
- Adoption of amendments to the DTPP, including, but not necessarily limited to, the following:
  - Amendment to establish the Transit District as a sub-area within the DTPP, with supplemental controls in addition to those applicable elsewhere in the DTPP;
  - Amendment of the maximum allowable development cap for office use to create a cap specific to the Transit District that is distinct from, and not subject to, the office cap applicable to the remainder of the DTPP, along with the addition of the residential development potential cleared by CEQA under this SEIR;
  - Minor amendments to minimum heights and to massing regulations (but no changes to the maximum allowable heights);
  - Revisions to the DTPP New Streets (Circulation) Regulations and associated revisions to DTPP maps, as well as to update the typology of some streets and eliminate some planned but unbuilt streets;
  - Revisions to DTPP Parking Regulations to lower the parking requirement to reflect
    anticipated reduced future parking demand, current best practices and future plans for
    Caltrain track expansion that will encourage non-driving modes of transportation while
    continuing to incentivize shared parking and the ability for project applicants to pay a fee
    to the City in lieu of providing new parking spaces (at the same time, bicycle parking
    requirements may be increased);

- Revisions to the DTPP maps to accommodate potential future relocation of the Caltrain station to the north side of Broadway and expansion of the station to four tracks as part of Caltrain's 2040 Service Vision plan (the station relocation would be a separate project);
- Revisions to the DTPP Public Frontages and Use Regulations;
- Allowance for exceptions to mandatory Standards in the DTPP Development Regulations for sites identified as potentially providing privately owned publicly accessible open space that is identified on the Potential Public Open Space Map in DTPP Section 3.2.1, and for sites that are constrained by potential anticipated Caltrain track improvements and realignment. This would entail permitting limited exceptions to building placement requirements (i.e., build-to-corner, building setback, and frontage coverage requirements) to allow corner setbacks, other setbacks from the street, and lesser lot coverage than is currently required; and lowering the required minimum heights from 35 feet to 25 feet, or less with a potential exception). The exceptions would allow for reduced massing and shadows, an enhanced pedestrian experience, and provide support for ground floor retail;
- Addition to the DTPP's list of permitted architectural styles to include Contemporary design; and
- Amendments to various maps, figures, and charts in the DTPP to implement the foregoing.

## 3.6.2 Other Government Agency Approvals

Amendment of the General Plan and DTPP to implement the Transit District DTPP Amendments is not anticipated to require review and/or approval from other jurisdictional agencies; however, related circulation improvements may require such approvals, including from Caltrain (including, but not necessarily limited to, approvals in connection with the existing and new Transit Centers, Caltrain right-of-way, and parking) and from Caltrans (including, but not necessarily limited to, approvals in connection with proposed changes to El Camino Real, a state highway [State Route 82]). Additionally, the City/County Association of Governments of San Mateo County, through its Airport Land Use Commission, would have to make a determination of consistency with the County Airport Land Use Compatibility Plan (ALUCP) for San Carlos Airport, with respect to certain policies within the proposed Transit District DTPP Amendments.

Further, individual development projects that could proceed pursuant to the proposed Transit District DTPP Amendments could be subject to consistency review with respect to the ALUCP, as well as to other permitting requirements from the City of Redwood City and entities including, but not limited to, the Bay Area Air Quality Management District, Regional Water Quality Control Board, Caltrain, and Pacific Gas & Electric Co.

## **CHAPTER 4**

## Land Use and Planning

This SEIR chapter analyzes the effects of the proposed Transit District DTPP Amendments on land use and planning, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

### Findings of the 2010 Final EIR

The DTPP Final EIR found that the DTPP would not physically divide an established community, conflict with existing land use, or substantially conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating and environmental effect. This impact was determined to be less than significant, and no mitigation was required.

## 4.1 Environmental Setting

### 4.1.1 Regional and Citywide

Redwood City is located in the San Francisco Bay Area's Peninsula subregion, approximately 25 miles south of San Francisco, and approximately 20 miles north of San Jose. Redwood City is bordered on the east by the San Francisco Bay, on the west by the Santa Cruz Mountains, on the north by the cities of San Carlos, Belmont, and Foster City and unincorporated areas of San Mateo County; and on the south by the cities of Menlo Park and Atherton and unincorporated San Mateo County. The City's Downtown area includes the Redwood City Transit Center, which includes a Caltrain station that provides regional commuter rail transit service between San Francisco and Gilroy, a distance of 77 miles, as well as SamTrans, which provides local bus access within the peninsula. Regional automobile access to Redwood City is provided by U.S. 101 and Interstate 280.

Most of Redwood City's office, commercial, and residential uses are located west of U.S. 101, and the majority of open space and industrial uses are located east of U.S. 101. Older central neighborhoods surround Downtown, and newer outlying residential neighborhoods are located toward the periphery. Other notable land uses include the Redwood Shores planned community; light/industrial research and development areas; heavy industrial uses at the Port of Redwood City; and public/institutional uses, including parks, schools, and community centers.

### 4.1.2 Downtown Land Uses

As of June 2021, there were approximately 2,851,508 square feet of non-residential uses, 2,899 residential units, and 100 lodging units within the DTPP area.

TABLE 4-1
EXISTING LAND USES IN THE DTPP AREA

	Existing (2021)		
Land Use	Amount	Unit	
Commercial/Retail	1,157,000	sf	
Office	1,694,508	sf	
Residential	2,899	Dwelling units	
Lodging	100	Rooms	
TOTAL Non-residential	2,851,508	sf	

#### NOTES:

SOURCE: The City of Redwood City, February, 2022

### 4.1.3 Existing Transit District Area Land Uses

The Transit District area comprises approximately 16.6 acres, and includes approximately 2,200 linear feet along the Caltrain tracks, which form the eastern Transit District area boundary. The Transit District area would include the Caltrain right-of-way, city streets, and the following three areas:

- Perry Parcel (approximately 2.5 acres);
- Transit Center (approximately 2.1 acres); and
- Sequoia Station Shopping Center (approximately 12 acres).

Existing land uses on each of the three areas that comprise the Transit District area are summarized below and described in further detail in Section 3.4 of Chapter 3, *Project Description*, of this SEIR. These three areas are depicted on **Figure 3-2**.

### Perry Parcel

The Perry Parcel includes a Caltrain-owned surface parking lot with approximately 135 spaces, including three disabled-accessible spaces. This parcel also includes the Caltrain right-of-way and train tracks.

### **Transit Center**

The existing Transit Center includes the Redwood City Caltrain Station and the SamTrans bus depot, along with a vacated portion of the Winklebleck Street right-of-way and additional Caltrain-owned land along the tracks. Adjacent to the Transit Center, fronting Broadway, is a

a sf = square feet

9,500-square-foot vacant retail and a surface parking lot with 20 parking spaces. The Transit Center also includes a Caltrain surface parking lot with approximately 90 spaces.

### **Sequoia Station**

South of the Transit Center and James Street is the Sequoia Station shopping center. Existing uses within Sequoia Station include approximately 178,000 square feet of retail space, along with approximately 925 surface parking spaces. The City also owns a small parcel immediately adjacent to the southern boundary of Sequoia Station. This parcel, along the north side of Jefferson Avenue at Franklin Street, is used for street and utility improvements.

# 4.1.4 Land Uses Adjacent to and Surrounding the Transit District area

Land uses adjacent to and surrounding the Transit District area include: a mix of office, mixed-use residential, surface parking lot, and open space uses on the northeast; residential, retail, office, institutional, and surface parking lots on the southwest, mixed-use residential and commercial uses on the southeast; and a commercial use on the northwest. Beyond the immediate land uses, residential neighborhoods comprise most of the surrounding area to the north, west, and south, while the area to the east comprises mostly institutional and commercial uses.

## 4.2 Regulatory Setting

Section 4.2 of DTPP Final EIR Chapter 4, *Land Use and Planning*, includes the regulatory setting for this topic and is still current for this SEIR, except as noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

### 4.2.1 City of Redwood City General Plan

The City of Redwood City General Plan (General Plan) establishes the key goals, policies, and programs for the physical development of the City through 2030. Goals and policies relevant to land use and planning include the following:

- *Goal BE-2*: Recognize, maintain, and celebrate the unique qualities of Redwood City's neighborhoods.
- *Policy BE-2.4*: Provide opportunities for housing development at a range of densities and housing types that provide various choices for current and future residents.
- *Policy BE-2.5*: Protect neighborhoods from the encroachment of incompatible activities or land uses that may have a negative impact on the residential living environment.
- Policy BE-11.3: Plan for and accommodate mixed-use projects along corridors, where a site or sites are developed in an integrated, compatible, and comprehensively planned manner involving two or more land uses. Combine residential and office uses with commercial development to reduce automobile trips and encourage walking, and facilitate compact, sustainable development.

- *Policy BE-11.4*: Promote mixed-use developments that include higher-density residential units that transition sensitively with adjacent lower-density residential uses.
- *Policy BE-11.7*: Provide the appropriate density and intensity of land uses to facilitate high levels of transit use along corridors.
- *Policy BE-11.11*: Explore establishing minimum development intensities and/or heights along primary corridors.
- Goal BE-12: Transform the El Camino Real Corridor into a "Grand Boulevard" that supports walking, transit, bicycling, and economic development.
- *Policy BE-12.1*: Integrate land use and transportation planning and development to transform El Camino Real to an urban, pedestrian-friendly, and transit-oriented boulevard for residents to live, work, shop and play.
- *Policy BE-12.2*: Encourage the replacement of older low-scale, auto-oriented development with well-designed new projects that offer pedestrian orientation, higher densities with more efficient use of land, and continued productive economic value.
- *Policy BE-12.5*: Provide vibrant public spaces and gathering places along the El Camino Real Corridor.
- *Goal BE-16*: Re-create Broadway as a multi-modal Corridor that links Downtown to properties across Woodside Road.
- Policy BE-16.1: Pursue new land use approaches along the different segments of the Broadway Corridor consistent with the Land Use Map. These land use approaches are designed to encourage development at an intensity and pattern that supports a street car transit system.
- *Policy BE-16.2*: Prepare and implement a streetscape plan to create a stronger entrance into Downtown and to integrate the diverse size and scale of the commercial and mixed-use activities.
- Policy BE-18.1: Adopt and implement the new Downtown Precise Plan.
- *Policy BE-18.2*: Allow for a range of uses, building types, and building heights, to promote diverse mixed-use development, pedestrian activity, and a vibrant city center.
- *Policy BE-18.5*: Encourage development and growth in the Downtown such that it serves as the city's major center of local and regional-serving retail, including encouraging relocation of retail into the Downtown core.
- *Policy BE-18.6*: Continue to foster pedestrian-oriented redevelopment in areas surrounding the Caltrain Station. Prioritize redevelopment of the Middlefield Parking Lot and other public owned land in the vicinity to support Downtown activity.
- *Policy BE-18.7*: Pursue mixed-use housing and commercial development in Downtown that includes a range of housing options and affordability levels.
- *Policy BE-18.8*: Provide the amenities and range of entertainment, shopping, and cultural offerings that will make Downtown a vital regional and local destination.

• *Policy BE-18.9*: Create a network of attractive, interesting public places and spaces that encourage walking and lingering through connections to Broadway, adjacent neighborhoods, transit, and El Camino Real.

The Transit District area is located in the MU – D (Mixed Use – Downtown) General Plan land use district.

### 4.2.2 Redwood City Zoning Code

The Redwood City Zoning Code (Zoning Code) implements the General Plan. The Zoning Code establishes specific standards for the use and development of properties and regulates development intensity using methods such as minimum lot size and setbacks, maximum lot coverage, height, and floor area ratio.

The Transit District area is located in the DTPP area, which is zoned P (Planned Community District). The DTPP, discussed below, regulates the use and development of properties in this area.

### 4.2.3 Redwood City Downtown Precise Plan (DTPP)

The DTPP controls land use and development regulations in Downtown Redwood City. The DTPP imposes "standards" (mandatory) and "guidelines" (permissive) to guide new development, including permitted land uses; density of buildings and structures; 1 building heights and disposition; architectural character (including façade design and composition); site design and planning (including building placement, parking, and landscaping); signage; public frontages, streets, and streetscapes; and preservation and maintenance of historic resources.

The DTPP defines the Perry Parcel as Downtown General and Downtown Core with active ground-floor uses required along Broadway; the Transit Center as Downtown General and Downtown Core with active ground-floor uses required along Broadway; and the Sequoia Station as Downtown Core with active ground-floor uses required adjacent to the DTPP-proposed Hamilton Green (a linear green within Hamilton Street) and along El Camino Real.<sup>2</sup>

### **Downtown Core Use District**

Permitted uses in the Downtown Core and Downtown General districts include general retail, neighborhood retail, personal & business services, office, general residential, lodging, live-work, and civic uses. Conditionally allowed uses include entertainment, public open space, and restricted uses.<sup>3</sup>

It should be noted that the DTPP applies form-based code, which regulates land development to achieve a specific urban form rather than separation of uses. The DTPP establishes density for the entire plan area rather than on a site-by-site basis.

As explained in Chapter 3, *Project Description*, the proposed Transit District DTPP Amendments would eliminate the planned Hamilton Green in favor of a potential privately owned, publicly accessible open space on the planned but unbuilt segment of Hamilton Street between Franklin Street and the Caltrain tracks.

Restricted uses include liquor stores, sexually-oriented businesses, and bail bond offices, among others.

### **Downtown General Use District**

Permitted uses in the Downtown General Use District include neighborhood retail, personal and business services, office, workshop, general residential, specialized residential, lodging, livework, and civic uses. Conditionally permitted uses include general retail, entertainment, public open spaces, and restricted uses.

# 4.2.4 14 CFR Part 77—Safe, Efficient Use, and Preservation of the Navigable Airspace

The Transit District area is located about 1.6 miles south of the San Carlos Airport and the Federal Aviation Administration (FAA) is tasked with managing the national airspace. The FAA has promulgated regulations at Code of Federal Regulations (CFR) Title 14, Part 77 (Part 77), to preserve the navigability of the nation's airspace and maintain its safe and efficient use. The Part 77 regulations establish requirements for notifying the FAA of certain types of proposed construction or alteration of already existing structures. In addition, Part 77 identifies the standards used to determine obstructions to air navigation, and the process for conducting aeronautical studies to identify obstructions to air navigation and their effect on airspace.

Under 14 CFR Part 77.9, the FAA requires that it be notified of certain types of construction. This includes any construction of a new structure or alteration of an existing structure that is more than 200 feet above ground level where it is located, or that would exceed certain imaginary surfaces extending outward and upward from an airport's runways. The FAA is notified by submitting Form FAA 7460-1, Notice of Proposed Construction or Alteration, at least 45 days before the beginning of construction. It should be noted that the tallest buildings allowed pursuant to the DTPP would be 136 feet.

In response to the submittal of Form 7460-1, the FAA will prepare an aeronautical study to identify whether the proposed construction or alteration would be considered an obstruction to air navigation. Obstructions in airspace are presumed to be hazards to air navigation unless the aeronautical study concludes otherwise. The standards for determining obstructions in airspace are established in 14 CFR Part 77.17.

Upon completion of the aeronautical study, the FAA will either issue a Determination of No Hazard to Air Navigation or a Determination of Hazard to Air Navigation. A Determination of No Hazard to Air Navigation may include certain additional information, such as supplemental notice requirements or recommendations for marking and lighting the structure consistent with guidance in FAA Advisory Circular 70/7460-1L Change 2, Obstruction Marking and Lighting. A Determination of Hazard to Air Navigation indicates that a structure would have a substantial

Examples of specialized residential uses are assisted living facilities, senior housing, boarding houses and dormitories.

<sup>5</sup> The notification requirement includes both permanent structures and temporary structures such as tower cranes used in construction.

Federal Aviation Administration, Form FAA 7460-1, Notice of Proposed Construction or Alteration, Section 77.9, Construction or Alteration Requiring Notice, 2017. Available at https://www.faa.gov/documentLibrary/media/Form/FAA\_Form\_7460-1\_042020.pdf. Accessed February 6, 2022.

impact on air navigation. Part 77 also includes provisions for petitioning the FAA for discretionary review of a project. The DTPP Final EIR Chapter 14, *Hazards and Hazardous Materials*, contains a discussion of safety hazards related to airports.

### 4.2.5 California State Aeronautics Act

The California Department of Transportation (Caltrans) Division of Aeronautics is responsible for administering much of the California State Aeronautics Act (Public Utilities Code Section 21001 et seq.). The State Aeronautics Act requires counties, with certain exceptions, to form airport land use commissions (ALUCs) (Public Utilities Code Section 21670(b)). The purpose of an ALUC is to conduct airport land use compatibility planning and to prevent the creation of new noise and safety problems in areas surrounding airports.

One of the primary responsibilities of ALUCs is to prepare airport land use compatibility plans (ALUCPs). The State Aeronautics Act directs the Caltrans Division of Aeronautics to provide guidance for ALUCs in preparing ALUCPs by publishing the Caltrans *California Airport Land Use Planning Handbook* (Caltrans Handbook). The Caltrans Handbook was last updated in October 2011.

The Caltrans Handbook is intended to provide information on compatible land use planning to ALUCs, their staff, airport proprietors, cities, counties, consultants, and the public; identify the requirements and procedures for preparing effective compatibility planning documents; and define exceptions where applicable. The Caltrans Handbook is to be used by all ALUCs responsible for providing compatible land use planning near each existing and new public-use or military airport within their jurisdictions. Although the Caltrans Handbook provides guidance for complying with baseline safety and compatibility requirements, ALUCs may choose to be more restrictive based on local conditions.

Public Resources Code Section 21096 states that if a lead agency prepares an EIR for a project situated within ALUCP boundaries, the Caltrans Handbook is to be used as a technical resource to assist in preparation of the EIR to the extent that the EIR analyzes airport-related safety hazards and noise problems. The DTPP is within the *Airport Influence Area* (AIA) for the San Carlos Airport; therefore, California State Aeronautics Act applies to subsequent projects proposed within the Transit District area.

# 4.2.6 Comprehensive Airport Land Use Compatibility Plan for the San Carlos Airport

The City/County Association of Governments of San Mateo County prepared the state-mandated ALUCP for the environs of San Carlos Airport. <sup>9</sup> The City/County Association of Governments

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California Department of Transportation, Division of Aeronautics, California Airport Land Use Planning Handbook, October 2011.

<sup>8</sup> California Department of Transportation, Division of Aeronautics, California Airport Land Use Planning Handbook, October 2011, p. vii.

<sup>&</sup>lt;sup>9</sup> ESA Airports, 2015 (October). Comprehensive Airport Land Use Compatibility Plan for the Environs of San Carlos Airport. Prepared for the City/County Association of Governments of San Mateo County. Available at: https://ccag.ca.gov/wp-content/uploads/2015/11/SQL FinalALUCP Oct15 read.pdf. Accessed February 3, 2022.

(C/CAG) of San Mateo County develops ALUCPs to encourage compatible land uses in the vicinity surrounding an airport by providing for the "orderly growth of each public airport and the area surrounding the airport" while safeguarding "the welfare of the inhabitants within the vicinity of the airport and the public in general."<sup>10</sup>

The ALUCP provides applicable policies with regard to Noise Restriction, Height Restriction, Safety Restriction, and Overflight Restriction Areas around the Airport. The Transit District area is not within any noise contours for the San Carlos Airport.

The *Height Restriction Area* represents height restrictions in areas covered by imaginary airspace surfaces at and around the Airport, as defined by criteria promulgated in 14 CFR Part 77. Development of the height restriction policies also considered height restrictions associated with one-engine-inoperative minimum clearance surfaces, as defined by performance criteria established in 14 CFR Part 25.121.<sup>11</sup> The FAA has no authority over local land use; therefore, the height restriction policies provide a nexus between federal regulations and local land use planning.

The Safety Restriction Area comprises six safety zones developed based on guidance provided in the 2002 Caltrans Handbook. The safety zones represent areas of progressive risk for aircraft accidents. The safety policies in the ALUCP apply in areas located within the safety zones. Like the noise policies, the safety policies include criteria determining the acceptability of specific land uses based on the safety zone. The compatibility criteria limit maximum population density and include requirements for maintaining various percentages of open space based on safety zone. The Transit District area is located within Safety Zone 6.

Finally, the *Overflight Restriction Area* covers all areas within the AIA. Aircraft overflight policies address sensitivity to aircraft overflights beyond the noise contours. The overflight policies require avigation easements for certain types of projects and apply state law requiring disclosure of a property's location within an AIA as part of the sale of residential real estate. <sup>12</sup>

The Transit District area is mostly within Area A of the AIA, but the northern end of the Perry Parcel overlaps Area B. Discretionary actions such as the proposed Transit District DTPP Amendments must be reviewed by the C/CAG for a determination of the consistency of the proposed land use policy action(s) with the ALUCP. This must occur prior to adoption by the City Council of Redwood City.

For additional discussion of the ALUCP, including consistency with policies related to noise and safety, refer to Chapter 11, *Noise and Vibration*, and to the DTPP Final EIR.

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<sup>10</sup> Ibid.

On March 12, 2019, the City of San José City Council accepted the completed Downtown Airspace and Development Capacity Study, selecting Scenario 4, which would affirm the City's development policy to use FAA Terminal Instrument Procedures (TERPS) surfaces in lieu of the One-Engine Inoperative (OEI) surfaces to determine maximum building heights in the Downtown Core and Diridon Station planning areas.

An avigation [correct spelling] easement grants the right of overflight in the airspace above or near an affected property.

## 4.2.7 Plan Bay Area 2050

SB 375 requires all metropolitan regions in California to complete a sustainable communities strategy (SCS) as part of a regional transportation plan. In the Bay Area, the MTC and ABAG are jointly responsible for developing and adopting an SCS that integrates transportation, land use, and housing to meet GHG reduction targets set by the California Air Resources Board.

Plan Bay Area 2050, adopted in October 2021, serves as the SCS for the Bay Area, in accordance with SB 375. <sup>13</sup> Plan Bay Area 2050 is comprised of 35 strategies across the elements of housing, the economy, transportation, and the environment. A core household and employment growth strategy of Plan Bay Area is "focused growth" in existing communities along the existing transportation network. Key to implementing this focused growth strategy are Priority Development Areas (PDAs) and Transit-Rich Areas (TRAs), as recommended and approved by local governments. As defined by the plan, PDAs are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. Plan Bay Area also recommends increasing non-auto travel mode share and reducing vehicle miles traveled per capita and per employee by promoting transit-oriented development, transit improvements, and active transportation modes such as walking and bicycling.

The Transit District area is located within the "Redwood City Downtown" PDA. This means it is located within an existing community, within one-half mile of frequent transit, and in an area planned for future housing and job growth by the City and the regional agencies.

Prior to *Plan Bay Area 2050*, Plan Bay Area 2040, adopted in 2017, was the most recent regional transportation plan and sustainable communities strategy for the Bay Area region. *Plan Bay Area 2050* updates Plan Bay Area 2040 and is consistent with the current Regional Housing Needs Allocation cycle. However, since *Plan Bay Area 2050* was adopted in late 2021, Plan Bay Area 2040 continues to serve as the basis for regional and county-wide transportation models until the models are updated. Updates to the models are anticipated within the next several years.

## 4.3 Impacts and Mitigation Measures

### 4.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe land use and planning impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the certified DTPP Final EIR.

## 4.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact to land use and planning could occur if implementation of the proposed Transit District DTPP Amendments would:

<sup>13</sup> Association of Bay Area Governments, *Plan Bay Area 2050*, Final, adopted October 21, 2021.

- a) physically divide an established community; or
- b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

At the time the DTPP Final EIR was prepared, Appendix G of the CEQA Guidelines included the following threshold, "Be incompatible with existing land use in the vicinity." However, in December 2018, this threshold was removed from Appendix G of the CEQA Guidelines to reflect recent changes to the CEQA statutes and court decisions.

Therefore, this section does not evaluate physical environmental impacts associated with compatibility or potential plan conflicts in detail. Instead, the various environmental resource evaluations elsewhere in this SEIR chapter discuss the potential physical/environmental effects and potential incompatibilities that may be considered in the determination of physical environmental impacts. For example: Land uses that produce excessive noise, light, dust, odors, traffic, or hazardous emissions may be undesirable when they intrude on places used for residential activities (e.g., residences, parks). Thus, certain industrial or commercial uses—which can produce noise and odors—may not be considered compatible with residential, educational, or healthcare uses, unless buffers, landscaping, or screening could protect residents from health hazards or nuisances. Potential impacts associated with any such potential land use incompatibilities are addressed in the applicable environmental resource sections elsewhere in this SEIR (e.g., the chapters concerning Air Quality, Noise, Transportation), rather than in this chapter.

Similarly, the determination of a significant impact—which, by definition, must involve a physical change—is separate from the legal determination of plan consistency. Thus, the analysis in Impact LU-2 focuses on the proposed Transit District DTPP Amendments' potential for a substantial conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, where the identified conflict would result in a significant environmental impact.

### 4.3.3 Impacts and Mitigation Measures

The proposed Transit District DTPP Amendments would apply to a smaller overall area than the original DTPP area. In addition to creating district boundaries, the proposed Transit District DTPP Amendments envisions 1,100 dwelling units and 1.63 million square feet of office space while also anticipating potential, future relocated and enlarged Caltrain station and tracks. Overall, impacts related to land use and planning would be the same under the proposed Transit District DTPP Amendments as those identified the DTPP Final EIR for reasons described below, and would not be new or more severe.

# Impact LU-1: Implementation of the proposed Transit District DTPP Amendments would not physically divide an established community. (Less than Significant)

The DTPP Final EIR found that the DTPP would reinforce, with no substantial change in, established community-wide land use patterns. The DTPP Final EIR found that implementation

of the DTPP would result in beneficial environmental effects related to division of an established community because it would "...encourage Downtown area infill activity, with significant beneficial land use effects in revitalizing the City's historic Downtown; facilitate development where services and infrastructure can be most efficiently provided by promoting higher residential densities near or within an existing shopping, service, employment, and public transportation center; and promote compact, transit-accessible, pedestrian-oriented, mixed use development patterns and land reuse." No mitigation measures were necessary.

Under CEQA, physical division of an established community generally applies to projects, such as highway construction, that would create a barrier that would physically sever two or more connected parts of a community. <sup>14</sup> This CEQA criterion is not intended to apply to effects that may create a perceived barrier, such as increased traffic, or create a challenge to crossing a street, or other real or perceived inconveniences.

Implementation of the proposed Transit District DTPP Amendments would not include physical barriers or obstacles to circulation that would restrict existing patterns of movement between the Transit District area and the surrounding neighborhoods, although changes to the existing railroad corridor and at-grade railroad crossings are being planned as separate projects, as discussed in Chapter 17, Cumulative Impacts.

The proposed Transit District DTPP Amendments would include features designed to encourage and promote public access, improve vehicular, bicycle and pedestrian circulation, where limited access exists today, and encourage alternative modes of transportation besides automobile. Specifically, the proposed Transit District DTPP Amendments would convert the planned but unbuilt portion of Hamilton Street between El Camino Real and Franklin Street from a Downtown Core Street to a City Street, and the planned but unbuilt segment of Hamilton Street between Franklin Street and the Caltrain right-of-way would be converted from a Downtown Core Street to instead be identified as a potential privately owned, publicly accessible open space that could facilitate pedestrian and bicycle access across the existing and proposed tracks to downtown, with non-emergency motor vehicles prohibited. This street segment does not currently exist as a public street. In addition, the Transit District DTPP Amendments proposes pedestrian, bicycle, and transit enhancements to improve safety and connectivity to and from the relocated Transit Center, including an expanded Caltrain Station, the greater Downtown, and surrounding neighborhoods. Among these would be implementing existing requirements for bike facilities, including for protected bike lanes and potential improvements to bus loading along El Camino Real, Brewster Avenue, Arguello Street, and James Avenue. These pedestrian, bicycle, and transit improvements would be consistent with the circulation plan set forth in the DTPP.

The proposed Transit District DTPP Amendments would increase connectivity in and around Downtown and would reinforce existing land use patterns by allowing for infill development in the DTPP. The proposed Transit District DTPP Amendments would not physically divide an established community, and impacts from the proposed Transit District DTPP Amendments

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<sup>&</sup>quot;We believe, however, that this guideline was intended to apply to projects, such as highway construction, that would constitute physical barriers dividing a community." *Cathay Mortuary, Inc. v. San Francisco Planning Commission* (207 Cal. App. 3d 275), January 20, 1989.

would generally be beneficial, which would be the same as the DTPP Final EIR and would not result in new or more severe impacts than those identified in the Final EIR. Therefore, this impact would be *less than significant*.

Mitigation: None required.

Impact LU-2: Implementation of the proposed Transit District DTPP Amendments would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)

The DTPP Final EIR found less-than-significant impacts related to conflicts with plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

The criterion for determining significance with respect to a land use plan emphasizes conflicts with plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. This criterion recognizes that an inconsistency with an individual plan, policy, or regulation does not necessarily equate to a significant physical impact on the environment unless that plan or policy is specifically intended to avoid or mitigate an environmental impact.

Applicable regional and local land use plans that regulate development within the Transit District area include Plan Bay Area 2050, the ALUCP, the General Plan, the DTPP, and the Zoning Code. Because the proposed Transit District DTPP Amendments is by definition an amendment of the DTPP and the General Plan to create the Transit District area, no conflicts with these local plans would occur.

#### Plan Bay Area 2050

*Plan Bay Area 2050* integrates transportation, land use, and housing to meet GHG emissions reduction targets for the San Francisco Bay Area. With regard to land use, *Plan Bay Area 2050* focuses growth and development in PDAs and TRAs, which are served by public transit and have been identified as appropriate for additional, compact development. <sup>15</sup> The Transit District area is located within the Redwood City Downtown. <sup>16</sup>

The proposed Transit District DTPP Amendments would not conflict with *Plan Bay Area 2050* because the Amendments would allow for a new hub of office, residential and retail uses adjacent to the Redwood City Transit Center. The compact growth pursuant to the plan would occur within a PDA included in Plan Bay Area 2050, which would further the objectives set forth for PDAs in *Plan Bay Area 2050*. In addition, the Transit District area is adjacent to a high-quality transit corridor, and in an area planned for future housing and job growth. Thus, the proposed Transit District DTPP Amendments would implement and not conflict with *Plan Bay Area 2050*,

<sup>&</sup>lt;sup>15</sup> Association of Bay Area Governments, *Plan Bay Area 2050*, Final, adopted October 21, 2021.

Metropolitan Transportation Commission, Priority Development Areas, MTC Open Data Layer Library, September 20, 2021, Available: https://arcg.is/0aKuL9. Accessed February 5, 2022.

including its Sustainable Communities Strategy goals of supporting sustainable growth through a more consolidated, compact development pattern that encourages new density and intensity in infill opportunity areas accessible to a multitude of transportation options, including transit. For this reason, the impact related to Plan Bay Area 2050 would be *less than significant*. Plan Bay Area 2050 was adopted in 2021, thus, consistency with *Plan Bay Area 2050* was not analyzed in the DTPP Final EIR.

### Comprehensive Airport Land Use Compatibility Plan for the San Carlos Airport

A portion of the Transit District area lies within the AIA for the San Carlos Airport, although no portion of the Transit District area is located within a noise contour. Since the AIA overlaps the Transit District area boundaries, the proposed Transit District DTPP Amendments would be required to comply with applicable policies in the ALUCP for the San Carlos Airport, including airspace protection policies, overflight policies, safety compatibility policies, airspace protection policies, overflight policies, and AIA policies.

Consistent with policies in the ALUCP, the proposed Transit District DTPP Amendments would not conflict with ALUCP policies pertaining to structure heights because proponents for all proposed developments will be subject to the requirements of 14 CFR Part 77 and required to submit Form 7460-1, *Notice of Proposed Construction or Alteration*, to the FAA. This would initiate preparation of an aeronautical study to determine whether specific development would include components that would obstruct airspace and potentially operate as hazards to air navigation.

The State Aeronautics Act requires local agencies with jurisdiction over land in an AIA that propose to amend a general plan or specific plan, or to adopt or approve a zoning ordinance or building regulation, to submit the proposed action to the ALUC of the C/CAG for a determination of consistency with the ALUCP prior to issuing a permit for the development (Public Utilities Code Section 21676.5(a)). This requirement is reflected in ALUCP Section 3.3.1, which assigns the C/CAG the responsibility for reviewing all proposed amendments to determine whether they are consistent or inconsistent with the ALUCP.

The ALUC of the C/CAG makes a determination of whether a project is consistent with the ALUCP when it reviews the General Plan and DTPP amendments included as part of the proposed Transit District DTPP Amendments. If the Airport Land Use Commission finds that the proposed Transit District DTPP Amendments would be inconsistent with the ALUCP policies, the City Council may adopt a resolution by two-thirds majority vote to override the ALUCP determination, if it makes specific findings that the proposed action is consistent with the purposes of the enabling statute (refer to Public Utilities Code Section 21670(2)). Based on the foregoing, the proposed Transit District DTPP Amendments would not obviously or substantially conflict with the ALUCP. This impact would be the same as the DTPP Final EIR and would not result in new or more severe impacts than those identified in the Final EIR. This impact would be *less than significant*.

#### General Plan and Downtown Precise Plan

The General Plan, adopted in 2010, envisioned Redwood City growing by 9,103 housing units and 28,002 jobs by 2030. Subsequently, the Downtown Precise Plan, adopted in 2011, envisioned Downtown growing by 2,500 housing units and 1,300 jobs by 2030. The DTPP did not change the overall number of housing units and jobs envisioned in the General Plan for the City.

As described under the heading "Direct Population Growth" in Chapter 5, *Population and Housing*, the proposed Transit District DTPP Amendments would allow for 1,100 new residential units and 1.63 million net new square feet of office space by 2040.

As described in Chapter 3, *Project Description*, the proposed Transit District DTPP Amendments would include General Plan amendments, including revisions to the Downtown maximum allowable development cap for office use that is distinct from, and not subject to, the office cap applicable to the remainder of the DTPP, and the addition of residential development potential such that the Transit District area is assumed to develop with 1,100 dwelling units and 1.63 million square feet of office space. In addition, the proposed Transit District DTPP Amendments would include district-specific amendments to certain land use controls in the DTPP.

As an amendment to the DTPP, the proposed Transit District DTPP Amendments would not conflict with the plan. The proposed Transit District DTPP Amendments would involve pedestrian-oriented improvements such as the conversion of the planned but unbuilt portion of Hamilton Street between Franklin Street and the Caltrain right-of-way from a Downtown Core Street to be identified as a potential privately owned, publicly accessible open space that could provide access for pedestrian and bicycle travel only, with non-emergency motor vehicles prohibited. In addition, the proposed Transit District DTPP Amendments would advance goals related to "place-making" along major corridors and in centers through mixed-use development to support office, residential and retail uses along two major corridors, El Camino Real and Broadway. The increased development intensity would also integrate into the larger DTPP consistent with General Plan goals related to integrating buildings into the surrounding environment. Finally, the proposed Transit District DTPP Amendments would allow for housing capacity in close proximity to transit, which would be consistent with goals related to encouraging dense development whereby residents are within a 20-minute walk or bike ride from leisure or civic activities.

A project is consistent with the General Plan if, considering all of its aspects, it will further the objectives and policies of the General Plan and will not obstruct their attainment. Perfect conformity with every policy set forth in the General Plan is not required; rather, it is sufficient that a project would be in substantial conformance with the objectives, policies, general land uses and programs specified in the General Plan. At the same time, the Transit District DTPP Amendments proposes certain amendments to the General Plan to ensure that it would not conflict with any General Plan policy that is fundamental, mandatory, and clear.

The proposed Transit District DTPP Amendments would introduce some development flexibility by permitting limited exceptions to building placement requirements (i.e., build-to-corner, building setback, and frontage coverage requirements) to allow corner setbacks, other setbacks

from the street, and lesser lot coverage than is currently required; and lowering the required minimum heights from 35 feet to 25 feet, or less with a potential exception. The exceptions would allow for reduced massing and shadows, an enhanced pedestrian experience, and provide support for ground floor retail. However, inasmuch as these changes would allow for reductions in currently permitted building massing, no adverse physical effects (e.g., impacts related to aesthetics, including shadow), no significant impact related to General Plan consistency would arise.

In addition, with approval of the proposed General Plan and DTPP amendments, the Transit District DTPP Amendments would achieve consistency with the General Plan (including the DTPP) because it would further the objectives, policies, general land uses, and programs of the General Plan. These include the General Plan's goal BE-11, which aims to create engaging retail, residential, and mixed-use destinations along corridors, and the General Plan's policy BE-18.6, which outlines the City's goal for transit-oriented development in areas surrounding the Caltrain station. In addition, the proposed Transit District DTPP Amendments would support the following policies related to pedestrian- and transit-oriented development to support non-automobile modes of transportation: BE-2.4, BE-11.3, BE-11.7, BE-11.11, BE-12, BE-12.1, BE-12.2, BE-16.1, BE-18.2, BE-18.5, and BE-18.6. For these reasons, the proposed Transit District DTPP Amendments' impact related to the General Plan and DTPP would be the same as the DTPP Final EIR and would not result in new or more severe impacts than those identified in the Final EIR. Therefore, this impact would be *less than significant*.

### **Zoning Code**

The General Plan sets the broad parameters for growth in Redwood City and establishes future land use patterns. At the same time, the City uses zoning to establish uses and development standards for properties. The Transit District area is zoned P (Planned Community District), and is governed by land use controls and development standards within the DTPP.

The proposed Transit District DTPP Amendments would amend the DTPP maps to reflect the creation of the new district and amend some land use controls and development standards related to, among other things, building design, building massing, and circulation. One such amendment to the DTPP would be related to the DTPP Public Frontages and Use Regulations. Because the DTPP maps would be amended and land use controls and development standards within the Transit District Area would be adjusted as described in Section 3.6.7 in Chapter 3, *Project Description*, the Transit District DTPP Amendments would not conflict with the City's Zoning Code or other applicable development standards, and this impact would be the same as the DTPP Final EIR and would not result in new or more severe impacts than those identified in the Final EIR. Therefore, this impact would be *less than significant*.

### Land Use and Planning Conclusion

If the Redwood City Council finds that amendments to the General Plan and DTPP are warranted to allow implementation of the proposed Transit District DTPP Amendments, the City would resolve any conflicts through a legislative amendment of the General Plan and DTPP.

A conflict with a plan, policy, or regulation does not indicate a significant environmental land use impact under CEQA unless a project substantially conflicts with a land use plan or policy adopted to avoid or mitigate an environmental effect, such that the conflict would result in a substantial adverse physical change in the environment related to land use. To the extent that such conflicts may result in substantial physical environmental impacts, this EIR discloses and analyzes these physical impacts in the relevant environmental topic sections. See, for example, Chapter 12, *Air Quality*; Chapter 11, *Noise and Vibration*; and Chapter 9, *Transportation and Circulation*.

Overall, the proposed Transit District DTPP Amendments and impacts related to conflicts with plans and policies would be the same as those identified in the DTPP Final EIR and would not result in new or more severe impacts. This impact would be *less than significant*.

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### 4.4 References

Mitigation: None required

Association of Bay Area Governments, *Plan Bay Area 2050*, Final, adopted October 21, 2021.

- California Department of Transportation, Division of Aeronautics, *California Airport Land Use Planning Handbook*, October 2011.
- ESA Airports, 2015 (October). Comprehensive Airport Land Use Compatibility Plan for the Environs of San Carlos Airport. Prepared for the City/County Association of Governments of San Mateo County. Available at: https://ccag.ca.gov/wp-content/uploads/2015/11/SQL FinalALUCP Oct15 read.pdf. Accessed February 3, 2022.
- Federal Aviation Administration, Form FAA 7460-1, *Notice of Proposed Construction or Alteration*, Section 77.9, Construction or Alteration Requiring Notice, 2017. Available at https://www.faa.gov/documentLibrary/media/Form/FAA\_Form\_7460-1\_042020.pdf. Accessed February 6, 2022.
- Metropolitan Transportation Commission, Priority Development Areas, MTC Open Data Layer Library, September 20, 2021, Available: https://arcg.is/0aKuL9. Accessed February 5, 2022.

## **CHAPTER 5**

## Population and Housing

This SEIR chapter analyzes the effects of the proposed Transit District DTPP Amendments on population and housing, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

### Findings of the DTPP Final EIR

Population and housing impacts of the DTPP were analyzed on pp. 5-7 to 5-10 of the DTPP Final EIR. The DTPP Final EIR planned for up to 5,500 new residents and determined that impacts from the DTPP with respect to growth inducement and displacement of housing and people would be less than significant.

## 5.1 Environmental Setting

### 5.1.1 Existing Project Site Population, Housing, and Employment

The Transit District area does not currently contain any housing units, but does contain approximately 187,500 square feet of building space, of which 178,000 square feet is occupied with retail uses. The remaining 9,500 square feet is either occupied by retail uses or vacant. The major occupied retail uses include a Safeway, CVS, Old Navy, Barnes and Noble, and Pet Food Express. There are no residential or other employment generating uses in the Transit District area. The occupied retail uses in the Transit District area collectively generate a daily employment population of approximately 1,120.1

# 5.1.2 Existing and Projected Citywide and Regional Population, Housing, and Employment

Between 2010 and 2020, growth in Redwood City occurred at a faster rate than in San Mateo County as a whole (including Redwood City). According to the U.S. Census Bureau Decennial Census, the population of Redwood City increased between 2010 and 2020 by 9.7 percent as

Fehr & Peers, 2022. Redwood City Transit District DTPP Amendments Draft Transportation Analysis, April 2022. Included as Appendix B of this Draft SEIR.

compared with a 6.4 percent increase in the population of San Mateo County.<sup>2,3</sup> According to the California Department of Finance, the number of housing units in Redwood City increased between 2010 and 2020 by 8.1 percent, compared to a 3.6 percent increase in San Mateo County.<sup>4</sup> Lastly, according to the Association of Bay Area Governments (ABAG), the number of jobs in Redwood City and San Mateo County has increased between 2010 and 2020 by 20 percent and 16 percent, respectively.<sup>5</sup>

ABAG makes projections about housing, job, and population growth for the purposes of regional transportation planning and compliance with state law on housing needs. ABAG's *Plan Bay Area 2040* projects that the population of Redwood City and San Mateo County will continue to grow, averaging 1.2 percent and 0.8 percent each year between 2020 and 2040, respectively.<sup>6</sup>

In addition, ABAG forecasts that the number of households and jobs in Redwood City will continue to grow at a faster rate than in San Mateo County. ABAG forecasts that the number of households in Redwood City and San Mateo County will grow between 2020 and 2040 by 1.2 percent and 0.6 percent each year, respectively. Lastly, ABAG forecasts that the number of jobs in Redwood City and San Mateo County will grow between 2020 and 2040 by 1.1 percent and 0.9 percent, respectively. 8

**Table 5-1** summarizes population, housing, and job growth in Redwood City and San Mateo County.

U.S. Census Bureau, 2010 Census. Available at https://data.census.gov/cedsci/table?q=population&t= Employment&g=0500000US06081\_1600000US0660102&y=2010&tid=DECENNIALSF12010.P1. Accessed December 2, 2021.

<sup>3</sup> U.S. Census Bureau, 2020 Census. Available at https://data.census.gov/cedsci/table?q=population&t=Populations %20and%20People&g=0500000US06081\_1600000US0660102&y=2020&tid=DECENNIALPL2020.P1. Accessed December 2, 2021.

California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State— January 1, 2011–2021, Sacramento, CA. Available at www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/. Accessed December 3, 2021

Association of Bay Area Governments, *Projections 2040*, 2017. Available at projections.planbayarea.org/. Accessed December 2, 2021.

Ibid. It is noted that, while ABAG and MTC in October 2021, jointly adopted an updated regional plan, *Plan Bay Area 2050*, growth projections arising from that most recent planning effort are not yet available at the level of detail that includes local jurisdictions such as Redwood City; that is, the available *Plan Bay Area 2050* projections are at the county and sub-county level (Redwood City is included in the "South San Mateo County" subregion, which includes communities for which anticipated growth is considerably different than is Redwood City's. Moreover, regional transportation models, such as that used by the City/County Association of Governments of San Mateo County, are based on the growth projections from the *Plan Bay Area 2040*, and it routinely takes a year or more for these models to be updated to incorporate the most recent round of ABAG/MTC projections, once those projections are released at the census tract level of detail.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

Table 5-1
Population, Housing, and Employment Growth in Redwood City and San Mateo County (2010–2040)

Year	Redwood City			San Mateo County		
	Population	Housing	Jobs <sup>c</sup>	Population	Housing	Jobs <sup>c</sup>
2010	76,815 <sup>a</sup>	29,167 <sup>b</sup>	59,290	718,451 <sup>a</sup>	271,031 <sup>b</sup>	343,335
2020	84,292 <sup>a</sup>	31,536 <sup>b</sup>	71,050	764,442 <sup>a</sup>	280,859 <sup>b</sup>	399,275
2030	90,995 <sup>c</sup>	33,740 <sup>d</sup>	73,015	853,260 <sup>c</sup>	302,520 <sup>d</sup>	423,005
2040	103,940 <sup>c</sup>	38,085 <sup>d</sup>	86,720	916,590 <sup>c</sup>	317,965 <sup>d</sup>	472,045

#### NOTES:

- <sup>a</sup> These data are sourced from the U.S. Census Bureau, 2010 and 2020 Census.
- b These data are sourced from the California Department of Finance
- <sup>C</sup> These data are sourced from the Association of Bay Area Governments (ABAG) *Plan Bay Area 2040*

#### SOURCES

Association of Bay Area Governments, *Projections 2040*, 2017. Available at projections.planbayarea.org/. Accessed December 2, 2021. California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State—January 1, 2010–2021, Sacramento, CA, Accessed December 3, 2021. Available at www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.
U.S. Census Bureau, 2000 and 2010 Census. Available at https://data.census.gov/cedsci/. Accessed December 2, 2021.

#### **Jobs/Housing Balance**

The term "jobs/housing balance" is used describe the ratio of employed residents to the number of jobs in a city or region. <sup>9,10</sup> This ratio is used as one indicator of the potential degree of in- and out-commuting. When there are substantially more employed residents than jobs in an area, more people must commute to another area, requiring longer commutes than if they worked locally (and vice versa). A well-balanced ratio (close to one employed resident to one job) is typically desirable for environmental, economic, and quality-of-life reasons, although many other factors influence average commute distance. Travel models provide more detailed data about the extent of commuting in a region than are indicated by the ratio.

Redwood City has historically had substantially more local jobs than employed residents. As shown in **Table 5-2**, the number of employed residents and local jobs in Redwood City grew between 2010 and 2020 from 36,898 and 59,290, respectively, to 45,400 and 71,050, respectively.<sup>11,12,13</sup>

These data are sourced from the ABAG Plan Bay Area 2040. Note these figures refer to total households, not total housing units, because projections for total housing units through 2040 are not provided in Plan Bay Area 2040. In general, the number of households is similar to the number of housing units.

<sup>&</sup>lt;sup>9</sup> This is calculated by dividing the number of jobs by employed residents. A jobs-to-employed-residents ratio is used instead of a jobs-to-housing-units ratio because there can be more than one employed resident per housing unit. The ratio of jobs to employed residents is more accurate for assessing the overall amount of in- and out-commuting.

Employed residents are residents of Redwood City who have jobs, although those jobs may be outside the city, requiring commutes of varying distances.

U.S. Census Bureau, American Community Survey 1-Year Estimates (2010). Available at https://data.census.gov/cedsci/table?q=employed%20residents&g=0500000US06081\_1600000US0660102&tid=A CSDP1Y2010.DP03. Accessed December 8, 2021.

California Employment Development Department, Labor Force and Unemployment Rate for Cities and Census Designated Places, 2020. Available at https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html. Accessed December 8, 2021.

Association of Bay Area Governments, *Projections 2040*, 2017. Available at projections.planbayarea.org/. Accessed December 2, 2021.

Table 5-2

Jobs and Housing Balance in Redwood City and San Mateo County (2010 and 2020)

	Employed Residents		Jobs		Jobs-to-Employed- Residents Ratio <sup>b</sup>	
Year	Redwood City	San Mateo County	Redwood City	San Mateo County	Redwood City	San Mateo County
2010	36,896	335,340	59,290	337,785	1.6	1.0
2020	45,400°	404,100°	71,050	399,275	1.6	0.99

#### NOTES:

#### SOURCES

Association of Bay Area Governments, *Projections 2040*, 2017. Available at projections.planbayarea.org/. Accessed December 2, 2021. U.S. Census Bureau, American Community Survey 1-Year Estimates (2010). Available at https://data.census.gov/cedsci/table?q=employed%20residents&g=0500000US06081\_1600000US0660102&tid=ACSDP1Y2010.DP03. Accessed December 8, 2021. California Employment Development Department, Labor Force and Unemployment Rate for Cities and Census Designated Places, 2020. Available at https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html. Accessed December 8, 2021.

To provide context, many cities in Silicon Valley and throughout the Bay Area have more jobs than employed residents, including other nearby cities in San Mateo County and Santa Clara County such as Burlingame (2.18 jobs per employed resident), San Mateo (1.09 jobs per employed resident), Santa Clara (2.14 jobs per employed resident), Sunnyvale (1.19 jobs per employed resident), and Mountain View (1.08 jobs per employed resident). However, according to ABAG, San José, the largest city in Santa Clara County, as well as nearby cities in San Mateo County such as Atherton, San Carlos, Woodside, and Belmont, have more employed residents than jobs. When considering the larger geographical context, San Mateo County as a whole has a relatively balanced jobs and housing ratio (0.99 jobs per employed resident).

## 5.2 Regulatory Setting

The following section focuses on any changes to the regulatory setting that have occurred since certification of the DTPP Final EIR. Section 5.2 of DTPP Final EIR Chapter 5, *Population and Housing*, includes the regulatory setting for this topic and is still current for this SEIR. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

## 5.2.1 Regional Housing Needs Allocation 2023-2031

The regional housing needs allocation process is mandated by state housing law and is a precursor to the periodic process of updating local housing elements of general plans. The State of California determines what the region's total housing need will be for the planning period, and

a All data in this table are sourced from the Association of Bay Area Governments (ABAG) Plan Bay Area 2040 unless otherwise specified.

The jobs/housing balance is calculated by dividing the number of jobs by employed residents.

<sup>&</sup>lt;sup>C</sup> These data are sourced from the California Employment Development Department.

Association of Bay Area Governments, Projections 2040, 2018 (last updated in 2019). Available at https://data.bayareametro.gov/Demography/Projections-2040-by-Jurisdiction/grqz-amra. Accessed May 7, 2020.

ABAG distributes that need among local jurisdictions in the Bay Area, initiating each jurisdiction's housing element update.

**Table 5-3** shows the 2023–2031 Regional Housing Needs Allocation (RHNA) by income level for the City. Based on its allocation, the City is required to identify sites sufficient to accommodate a total of 4,588 new housing units at the specified levels of affordability. Given "no net loss" provisions in State law, local jurisdictions are advised to include a buffer of units in addition to their RHNA, and the City is currently planning for approximately 6,882 units, or 150 percent of its RHNA.<sup>15</sup>

Table 5-3
Final Regional Housing Needs Allocation, 2023–2031

Income Level	Redwood City	Bay Area	
Very Low (0–50% AMI)	1,115	114,442	
Low (51–80% AMI)	643	65,892	
Moderate (81–120% AMI)	789	72,712	
Above Moderate (+120% AMI)	2,041	188,130	
Total Housing Units	4,588	441,176	

NOTE: AMI = area median income

SOURCE: Association of Bay Area Governments, Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area: 2023–2031. Available at: https://abag.ca.gov/sites/default/files/documents/2021-11/proposed%20Final\_RHNA\_Allocation\_Report\_2023-2031.pdf. Accessed December 7, 2021.

## 5.2.2 City of Redwood City General Plan

The City of Redwood City General Plan (General Plan) establishes the key goals, policies, and programs for the physical development of the City through 2030. Goals and policies relevant to population, housing, and the jobs and housing balance include the following:

- *Policy BE-2.4*: Provide opportunities for housing development at a range of densities and housing types that provide various choices for current and future residents.
- Policy BE-11.3: Plan for and accommodate mixed-use projects along corridors, where a site or sites are developed in an integrated, compatible, and comprehensively planned manner involving two or more land uses. Combine residential and office uses with commercial development to reduce automobile trips and encourage walking, and facilitate compact, sustainable development.
- *Program BE-20*: Jobs:Housing Balance. Develop a system to periodically review total new commercial development square footage and new residential dwelling units. Track changes to the city's jobs:housing balance, and adjust the Zoning Code as appropriate to ensure adequate housing is developed to provide housing choice options for local businesses' employees.

City of Redwood City, March 2022, and Association of Bay Area Governments, Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area: 2023–2031. Available at: https://abag.ca.gov/sites/default/files/documents/2021-11/proposed%20Final\_RHNA\_Allocation\_Report\_2023-2031.pdf. Accessed December 7, 2021.

- *Policy BE-20.7*: Encourage high-quality residential development in mixed-use areas within Gateway Centers.
- *Policy BE-23.7*: Promote higher residential densities at locations near or within commercial, financial, and compatible employment centers, and also transportation corridors where neighborhood services are available.
- *Policy BE-33.1*: Encourage and facilitate the development of new commercial office space Downtown to provide opportunities to recruit large and mid-sized businesses and to retain expanding firms.
- Policy BE-33.3: Pursue mixed-use housing and commercial development Downtown with a range of affordability options.
- *Policy BE-34.6*: Promote a mix of housing types at a range of affordability options.
- Policy BE-34.7: Strive to increase the number of Redwood City residents who work in Redwood City; people who work in Redwood City should be able to find housing options in Redwood City.

The General Plan anticipates an increase of 28,002 jobs by 2030 in the Redwood City Planning Area, which includes the city limits and the Redwood City Sphere of Influence. 16,17

## 5.2.3 City of Redwood City 2015–2023 Housing Element

The City of Redwood City 2015-2023 Housing Element (Housing Element)<sup>18</sup> identifies the existing and projected need for housing in the community in terms of affordability, availability, adequacy, and accessibility. The Housing Element is intended to regulate available housing supply through planning and zoning. Relevant policies from the Housing Element include the following:

- *Policy H-3.1*: Ensure adequate housing sites through appropriate land use, zoning, and precise plan designations to accommodate the city's share of regional housing needs.
- *Policy H-3.2*: Facilitate a variety of housing choices, offering diversity in types, ownership, and sizes, including options for mixed-use housing, transit-oriented developments, and livework housing.
- *Policy H-3.5*: Promote the development of higher-density housing proximate to jobs, shopping, services, schools, transportation, and recreation opportunities.

The City of Redwood City, Final Environmental Impact Report for the Redwood City Downtown Precise Plan, State Clearinghouse No. 2006052027, certified January 2011, p. 17-5 of the Draft EIR.

A Sphere of Influence is designated by a county Local Agency Formation Commission and indicates an area adjacent to but outside a city's boundary and that represent the probable, future physical boundary or service area of the city. Redwood City's sphere of influence includes the Emerald Hills, Selby, and North Fair Oaks neighborhoods, as well as portions of the Canyon neighborhood west of Alameda de las Pulgas that are outside the city limits. Redwood City has no regulatory jurisdiction over lands in the sphere of influence lands, which are governed by San Mateo County. However, the City provides certain services (water, sewer) to parts of the sphere of influence and lands in the sphere of influence may have Redwood City postal addresses. Planning decisions made by the City may, therefore, have some bearing on development in these unincorporated adjacent areas.

Redwood City, 2015-2023 Housing Element, City of Redwood City, October 20, 2014. Available at https://www.redwoodcity.org/home/showpublisheddocument/5127/635782757008700000. Accessed December 7, 2021.

• *Policy H-3.6*: Provide zoning provisions that further facilitate the development of second units, while considering and retaining neighborhood character.

The Housing Element anticipates construction of 9,103 new housing units by 2030. <sup>19</sup> The Housing Element identifies the DTPP area as being able to accommodate 2,500 new housing units through January 31, 2023, consistent with the Maximum Allowable Development of residential units in the existing DTPP. <sup>20</sup>

As stated above, the City received its final RHNA for the period 2023–2030 in mid-2021. Issuance of the final RHNA necessitates local governments to update their housing elements and zoning to show how they plan to accommodate their RHNA units. The City published a Public Review Draft of the 2023–2031 Housing Element in February 2022 and plans to adopt a new housing element by January 2023.<sup>21</sup>

## 5.3 Impacts and Mitigation Measures

## 5.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe population and housing impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the certified DTPP Final EIR.

## 5.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or
- b) displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Since certification of the DTPP Final EIR, criterion "a" in Appendix G the CEQA Guidelines has been modified to clarify that significant population growth impacts would only occur if substantial population growth were *unplanned*. While the DTPP Final EIR analyzed whether population growth pursuant to the plan would be within planning projections for the City, or *planned* growth, this requirement was not explicitly stated in the CEQA Guidelines significance criteria at the time.

<sup>20</sup> Ibid., p. H-76

<sup>&</sup>lt;sup>19</sup> Ibid.

<sup>21</sup> Redwood City, Welcome Home, Redwood City: The Redwood City Housing Element. Available at https://www.welcomehomerwc.org/#housing-element. Accessed December 7, 2021.

## 5.3.3 Impacts and Mitigation Measures

Overall impacts from the proposed Transit District DTPP Amendments on population and housing would be reduced compared to those analyzed in the DTPP Final EIR. Like the DTPP, the proposed Transit District DTPP Amendments would not result in growth that exceeds regional growth projections, however the DTPP Final EIR stated the DTPP could result in the demolition of 84 housing units and the associated displacement of 84 to 185 persons. The proposed Transit District DTPP Amendments would not result in any direct displacement; thus, the proposed Transit District DTPP Amendments' impacts related to population and housing would be reduced compared to the DTPP Final EIR, as discussed further below.

Impact PH-1: Implementation of the proposed Transit District DTPP Amendments would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). (Less than Significant)

Population and housing impacts of the proposed DTPP are analyzed on pp. 5-7 to 5-10 of the DTPP Final EIR. The DTPP Final EIR determined that implementation of the DTPP would result in 2,500 additional housing units, 401,000 square feet of net new non-residential development, and 5,500 new residents. The DTPP Final EIR determined this growth would not exceed growth projections for the City, and impacts related to growth inducement would be less than significant.<sup>22</sup>

#### **Direct Population Growth**

Implementation of the proposed Transit District DTPP Amendments would allow for an increased number of residential units and amount of office space in the Transit District area. Specifically, the proposed Transit District DTPP Amendments would allow for 1,100 new residential units and 1,630,000 net new square feet of office space. As shown in **Table 5-4**, the City estimates that the proposed Transit District DTPP Amendments would result in approximately 2,510 new residents and approximately 7,080 new employees from the increase in office space. <sup>23</sup> The 2,510 residents and 7,080 employees would represent approximately 17 percent of the residential growth and approximately 45 percent of the job growth ABAG anticipates will occur in Redwood City from 2020 to 2040. This relatively large percentage of overall City growth would be in support of the primary project objective, to focus growth in proximity to transit, consistent with the City's greenhouse gas reduction goals.

The City of Redwood City, Final Environmental Impact Report for the Redwood City Downtown Precise Plan, State Clearinghouse No. 2006052027, certified January 2011, pp. 5-7 to 5-8 of the Draft EIR.

Fehr & Peers, 2022. Total Project Site Population, Housing, and Employment Spreadsheet. These numbers were derived based on the population and employment generation rates consistent with those from the Transportation Analysis Zones (TAZs) surrounding the Transit District within the C/CAG-VTA Travel Demand Model. The C/CAG-VTA Travel Demand Model rates are developed based on several socio-economic data sources and projections from MTC and ABAG. Specifically, generation rates of 2.28 persons per household (1,100 housing units \* 2.2818 = 2,510 residents) and one employee per 231 square feet of office space (1,630,000 square feet of office/230.226 = 7,080 employees) were used in the analysis.

TABLE 5-4
EXISTING AND PLANNED REDWOOD CITY POPULATION, HOUSING, AND EMPLOYMENT GROWTH COMPARED TO
GROWTH WITH THE PROPOSED TRANSIT DISTRICT DTPP AMENDMENTS

	Population	Housing	Jobs
Redwood City Existing	84,292 <sup>a</sup>	31,536 <sup>b</sup>	71,050 <sup>c</sup>
Redwood City Net New Growth Planned between 2010-2030 (General Plan) <sup>d</sup>	16,819	9,103	28,002
Redwood City Net New Growth Planned between 2020-2040 (ABAG) <sup>c</sup>	19,648	6,549	15,670
Anticipated Growth with Proposed Transit District DTPP Amendments <sup>e</sup>	2,510	1,100	7,080

#### NOTE: AMI = area median income

- <sup>a</sup> These data are sourced from the U.S. Census Bureau, 2020 Census.
- b These data are sourced from the California Department of Finance
- C These data are sourced from the Association of Bay Area Governments (ABAG) Plan Bay Area 2040
- d These data are sourced from the Final Environmental Impact Report for the Redwood City Downtown Precise Plan
- e These data are source from Fehr & Peers, 2022

#### SOURCES:

U.S. Census Bureau, 2010 Census. Available at https://data.census.gov/cedsci/. Accessed December 2, 2021. California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State—January 1, 2010–2021, Association of Bay Area Governments, *Projections 2040*, 2017. Available at projections.planbayarea.org/. Accessed December 2, 2021. The City of Redwood City, *Final Environmental Impact Report for the Redwood City Downtown Precise Plan*, State Clearinghouse No. 2006052027, certified January 2011, p. 17-5 of the Draft EIR.

Fehr & Peers, 2022. Total Project Site Population, Housing, and Employment Spreadsheet.

In addition, as noted above, the City's 2015-2023 Housing Element plans for 9,103 new housing units and the General Plan anticipates up to 28,002 new jobs by 2030, not including the DTPP. Also, the ongoing Housing Element update (for 2023-2030) is planning for 6,880 units.

Between 2010 and 2021, 2,037 housing units were developed in Downtown, with 463 housing units remaining in the development cap under the DTPP.<sup>24</sup> As such, the proposed Transit District DTPP Amendments' 1,100 residential units would exceed the remaining capacity in the DTPP (463 units). However, the future DTPP amendments would remove the DTPP's residential cap, and the residential and job growth envisioned for the proposed Transit District DTPP Amendments would not exceed direct planned growth anticipated to occur by 2040 in Redwood City under ABAG's projections or under the General Plan.

Further, the proposed increase in residential units, residents, and jobs would not be considered a substantial adverse impact because the DTPP is:

- Located near a major transit hub (Redwood City Transit Center) and highways (U.S. Route 101, Interstate 280, and State Route 84), and served by existing transportation infrastructure such as streets, local and express bus service);
- A major employment center; and
- Would include infill development in an area served by existing and planned utilities infrastructure.

<sup>&</sup>lt;sup>24</sup> McGill, Anna, Principal Planner, City of Redwood City, email communication, February 10, 2022.

These locational characteristics make the Transit District area a desirable location for planned growth from an environmental perspective. The physical effects of the proposed development are analyzed in detail elsewhere in this SEIR.

The project would also conform with *Plan Bay Area 2050*, as the project site is within the "Redwood City Downtown" Priority Development Area (PDA). This means the Transit District area is located within an existing community, within one-half mile of frequent transit, and in an area planned for future housing and job growth by the City and the regional agencies. This area is intended to accommodate a substantial proportion of future growth in Redwood City and is the City's primary location for advancing regional environmental goals. For example, focusing job growth within walking distance of the City's most significant transit hub would best support non-car commuting, compared to job growth in other parts of the region.

Although the proposed Transit District DTPP Amendments would cause the population of the DTPP to increase, this growth would be consistent with City and regional plans for growth and would not represent substantial unplanned growth. Furthermore, the proposed project would help the City meet its regional housing needs goal and would advance the City's long-term vision for the DTPP as a priority area for accommodating planned growth. The proposed Transit District DTPP Amendments is by definition an amendment of the DTTP and the General Plan to allow for more jobs and housing growth in Downtown; therefore, direct population growth associated with the proposed Transit District DTPP Amendments would represent planned growth, and this impact would be *less than significant*.

#### Induced Unplanned Population Growth

Indirect or secondary unplanned growth generally refers to the population associated with development that could occur when infrastructure is expanded to previously unserved or underserved areas. The term can also refer to unplanned growth resulting from unmet housing demand associated with new job growth, which may include new job growth induced by the project, often thought of in terms of an economic multiplier of new jobs or housing in an area. Secondary growth associated with utility/infrastructure investments typically occurs in suburban and rural areas adjacent to or near undeveloped lands and is not applicable to the Transit District area and DTPP area, which is in a built-up urban environment that is already largely served by existing infrastructure. Any necessary infrastructure improvements would be sized to serve proposed development within the Transit District area, and not to make adjacent areas available for additional development. The discussion below thus considers whether the proposed Transit District DTPP Amendments would result in induced unplanned growth as a result of unmet housing demand.

The proposed Transit District DTPP Amendments would increase development capacity in the DTPP to allow for 1,630,000 net new square feet of office space and would also anticipate 1,100 new residential units, specifically allocated to the Transit District area. This growth in office

This refers to the potential for a project to cause increased activity in the local or regional economy. Economic effects can include such effects as the multiplier effect. A "multiplier" is an economic term used to describe interrelationships among various sectors of the economy. The multiplier effect recognizes that the on-site employment and population growth of each project may not be the complete picture of growth caused by the project.

space would result in approximately 7,080 new employees by 2040, which would result in a demand for approximately 3,106 residential units. Some of these employees would be able to reside in the 1,100 residential units that could be constructed, but others may not. However, the new housing demand that is not met on-site would likely be met in other parts of the city and the region, particularly given the Transit District area's transit accessibility, which would allow new employees to access transit-served areas throughout the region. As stated above, the Transit District area's locational characteristics make the site a desirable location for planned growth from an environmental perspective, primarily because of its proximity to transit and urban services. The physical effects of the proposed development are analyzed in detail elsewhere in this SEIR.

As described under "Direct Population Growth" above, the proposed Transit District DTPP Amendments conforms with *Plan Bay Area 2050*, as the project site is within the "Redwood City Downtown" PDA. This area is intended to accommodate a substantial proportion of future growth in Redwood City and is the City's primary location for advancing regional environmental goals. *Plan Bay Area* projects growth based on regional economic trends and accounts for induced job growth resulting from new development. In addition, local governments throughout the region are planning for additional residential and employment-generating land uses, some of which could meet the demands created indirectly by the proposed Transit District DTPP Amendments. In particular, as stated above under "Regional Housing Needs Allocation 2023-2031," Redwood City plans to accommodate 150 percent of its RHNA, or 6,882 net new residential units by 2031. This growth in housing supply would accommodate the demand for housing created by the proposed Transit District DTPP Amendments' employment growth.

Therefore, the proposed Transit District DTPP Amendments would be consistent with projected growth in *Plan Bay Area 2040*, the planning principals in *Plan Bay Area 2050*, <sup>26</sup> and the associated visions to concentrate new growth around transit. For these reasons, the impact of any potential induced population growth associated with the proposed Transit District DTPP Amendments would not result in new or more severe impacts than those identified the DTPP Final EIR. Therefore, this impact would be *less than significant*.

#### **Proposed Street Network Changes**

The street network changes that would be implemented as part of the proposed Transit District DTPP Amendments would not have any impacts on population growth because they would include closures or extensions to existing streets. In particular, the proposed Transit District DTPP Amendments' changes maintain the street grid and creates new open space, but would not increase the amount of developable area Downtown. The DTPP regulations would continue to

It is noted that, while ABAG and MTC in October 2021, jointly adopted an updated regional plan, *Plan Bay Area 2050*, growth projections arising from that most recent planning effort are not yet available at the level of detail that includes local jurisdictions such as Redwood City; that is, the available *Plan Bay Area 2050* projections are at the county and sub-county level (Redwood City is included in the "South San Mateo County" subregion, which includes communities for which anticipated growth is considerably different than is Redwood City's. Moreover, regional transportation models, such as that used by the City/County Association of Governments of San Mateo County, are based on the growth projections from the *Plan Bay Area 2040*, and it routinely takes a year or more for these models to be updated to incorporate the most recent round of ABAG/MTC projections, once those projections are released at the census tract level of detail.

promote breaking up mega-blocks (no block face exceeding 400 ft. in length) even with street closures to allow for bike and pedestrian access and reduce building massing. Therefore, the proposed street network changes included in the Transit District DTPP Amendments would not result in new residential units or office uses, and thus would not result in direct or indirect population, housing, or employment growth.

Overall, while the proposed Transit District DTPP Amendments would result in planned, direct population growth and may result in some indirect induced growth, the growth would be consistent with regional plans and for this reason population and housing impacts from the proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. Therefore, impacts would be *less than significant*.

Witigation: None required.	

Impact PH-2: Implementation of the proposed Transit District DTPP Amendments would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. (*Less than Significant*)

#### **Direct Displacement**

The proposed Transit District DTPP Amendments does not currently contain any dwelling units. Thus, the proposed Transit District DTPP Amendments would not cause direct displacement of a residential population.

Several existing businesses could be temporarily displaced during construction. However, the existing retail space is anticipated to be redeveloped in a denser, more transit-friendly pattern than under existing conditions, as the proposed Transit District DTPP Amendments would provide for mixed-use development, in multi-story buildings with ground-floor retail below and office and/or residential uses above and structured parking. For this reason, there is no evidence that the proposed Transit District DTPP Amendments would directly displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing elsewhere and would not result in new or more severe impacts than those identified in the DTPP Final EIR. Therefore, this impact would be *less than significant*.

#### Indirect Displacement

Several comments on the NOP acknowledged the jobs/housing imbalance that exists in Redwood City. A jobs/housing imbalance could indirectly cause involuntary displacement of housing and residents resulting from increased housing costs in Redwood City.

In general, CEQA does not require an analysis of socioeconomic issues such as gentrification, cost of living, or effects on "community character." The CEQA Guidelines state, however, that while the economic or social effects of a project are not appropriately treated as significant effects

on the environment, it is proper for an EIR to examine potential links from a project to physical effects as a result of anticipated economic or social changes.

For the purposes of this EIR, indirect displacement is defined as the process that occurs "when any household is forced to move from its residence by conditions that affect the dwelling or immediate surroundings, and which:

- 1. Are beyond the household's reasonable ability to control or prevent;
- 2. Occur despite the household's having met all previously imposed conditions of occupancy; and
- 3. Make continued occupancy by that household impossible, hazardous or unaffordable."27

Certain indirect displacement of residents is occurring as a result of regional housing and economic trends, and could result from additional development and infrastructure investments. However, predicting the extent to which displacement may occur as a result of planned growth is extremely difficult. Also, according to the University of California, Berkeley Displacement Project, there is not currently a credible methodology for attributing displacement to specific projects. 28 It would be speculative to determine with any specificity the amount of a housing price increase or indirect displacement that could be attributed to any single project aligned with planned growth, particularly as the region as a whole experiences a strengthening economy region-wide and increasing housing demand resulting from the inability of regional housing supply to keep pace with demand.

It is more appropriate to plan for new jobs and housing and address potential displacement at the citywide and regional levels, which enable consideration of induced housing demand and regional economic trends. As described above, the proposed Transit District DTPP Amendments would be consistent with planned growth under Plan Bay Area 2050 and the General Plan.

From a CEQA perspective, the relevant inquiry is whether there are reasonably foreseeable secondary, physical effects of indirect displacement, such as additional VMT, greenhouse gas (GHG) emissions, and air pollutant emissions as displaced residents are forced to locate replacement housing elsewhere and have longer commutes. However, as discussed above, attributing a certain amount of indirect displacement to a specific project, and then attributing secondary impacts of increased VMT, GHG, and air pollutant emissions, would be speculative and thus is beyond the requirements of CEQA. The impacts of the proposed Transit District DTPP Amendments on these resource areas are analyzed in Chapter 12, Air Quality; Chapter 13, Climate Change; and Chapter 9, Transportation.

Also, as stated above, the Transit District area would be developed in a way that is consistent with City expectations and desires for growth and new development and would comply with the DTPP's

<sup>&</sup>lt;sup>27</sup> Zuk, M., A. H. Bierbaum, K. Chapple, K. Gorska, and A. Loukaitou-Sideris. Gentrification, Displacement, and the Role of Public Investment. Journal of Planning Literature, 33(I), 2018. Available at https://journals.sagepub.com/ doi/abs/10.1177/0885412217716439.

Chapple, K., and M. Zuk, Miriam. Forewarned: The Use of Neighborhood Early Warning Systems for Gentrification and Displacement. Cityscape: A Journal of Policy Development and Research 18(3), 2016. Available at https://www.huduser.gov/portal/periodicals/cityscpe/vol18num3/ch5.pdf.

standards and guidelines, including maximum building height. It would provide a mix of housing and employment, and is intended to take full advantage of the high level of transit connectivity that the Transit District area affords, responding to plans like *Plan Bay Area 2050* and the General Plan, which call for transit-oriented development. Secondary environmental effects associated with cumulative citywide and regional growth are addressed in Impact C-PH-1 in Chapter 17, *Cumulative Impacts*. For these reasons, the environmental impacts of indirect displacement are speculative and not discussed further.

For these reasons, the impact related to potential indirect displacement would not result in new or more severe impacts than the DTPP Final EIR. Therefore, this impact would be *less than significant*.

#### **Proposed Street Network Changes**

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The proposed street network changes that would be implemented as part of the proposed Transit District DTPP Amendments would not have any impacts on displacement of people or housing.

Impacts from the proposed Transit District DTPP Amendments related to direct and indirect displacement would be the same as the DTPP Final EIR and would not result in new or more severe impacts. This impact would be *less than significant*.


## 5.4 References

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5. Population and Housing

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## **CHAPTER 6**

## **Aesthetics and Shadows**

This SEIR chapter analyzes the effects of the proposed Transit District DTPP Amendments on aesthetics and shadows, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

#### Findings of the DTPP Final EIR

The DTPP Final EIR found impacts on scenic vistas, scenic resources, visual character or quality, light and glare, and shadow to be less than Significant. No mitigation measures were necessary.

## 6.1 Environmental Setting

#### 6.1.1 Visual Resources

Visual resources typically involve prominent, unique, and identifiable natural features in the environment (e.g., trees, rock outcroppings, islands, ridgelines, and aesthetically appealing open spaces) and cultural features or resources (e.g., regional or architecturally distinctive buildings or structures that serve as focal points of interest). Visual resources in the immediate vicinity of the Transit District area include the City's western hills, Redwood Shores lagoons, city and regional parks such as Edgewood Park and Natural Preserve, and the San Francisco Bay.

#### 6.1.2 Scenic Vistas

Scenic vistas may be generally described as panoramic views of a large geographic area for which the field of view can be wide and extend into the distance. Under CEQA, scenic vistas are those that are experienced from publicly accessible locations and include urban skylines, valleys, mountain ranges, or large bodies of water. Publicly accessible viewpoints are commonly city streets, bridges, freeways, parks, and other public spaces.

Views from the vicinity of the Transit District area are limited due to the flat terrain in and around Downtown Redwood City. However, views of portions of the western hills are available from vantage points within and around the Transit District area. In addition, scenic views of Downtown Redwood City and the San Francisco Bay are available from four vantage points in the western hills: Easter Cross, Easter Bowl, Cañada College, and Edgewood County Park.

#### 6.1.3 Visual Character of the Transit District area

"Visual character" is an impartial description of the defining physical features, landscape patterns, and distinctive physical qualities within a landscape. Visual character is informed by the composition of land, vegetation, water, and structures and their relationship to one another and their relative predominance, and by prominent elements of form, line, color, and texture that combine to define the composition of views. Visual character—defining resources and features within a landscape—may derive from notable landforms, vegetation, land uses, building design and façade treatments, transportation facilities, overhead utility structures and lighting, historic structures or districts, or panoramic open space.

The Transit District area is located in an urban and built-out area of Redwood City. The underlying street grid is made up of an irregular block pattern because the surrounding neighborhood streets intersect the Transit District area and run in a south-north direction, while the Downtown blocks intersect the Transit District area and run in an east-west direction. The varying angles of streets intersecting within the Transit District area results in irregular block shapes and roadway patterns. In general, the development pattern in this area is less uniform than that found to the north across the train tracks in the Downtown core, or to the south in residential neighborhoods.

The visual character of the Transit District area is described below for three sub-areas, the Perry Parcel, the Transit Center, and Sequoia Station.

#### **Perry Parcel**

The Perry Parcel is the northernmost portion of the Transit District area and contains a surface parking lot, Caltrain right-of-way, and train tracks. The sub-area is bordered on the east (across the train tracks) by one five-story commercial building and one six-story residential building. To the west, there is one four-story residential building, one- to two-story commercial buildings, and surface parking lots. Since the train tracks runs along the length of this sub-area, and because surrounding buildings vary in size, design, and age, this sub-area is not visually cohesive.

#### **Transit Center**

The Transit Center contains the Redwood City Caltrain Station, SamTrans bus depot, a vacant retail building fronting Broadway, and a surface parking lot. This sub-area is surrounded by one to two story commercial buildings with varying architectural styles. The visual character of this sub-area is largely that of a suburban transit center which links rail, bus, automobile, bicycle, and pedestrian modes of travel.

## **Sequoia Station**

The Sequoia Station is the southernmost portion of the Transit District area and contains a large open-air shopping center and surface parking lot. This sub-area has a high level of visual cohesion because the shopping center, which was constructed circa 1992, comprises the entire sub-area. While the shopping center is visually cohesive, it's not particularly distinctive because

it represents a shopping center concept that became ubiquitous in suburbs throughout the United States after World War II.

## 6.1.4 Light and Glare

There are two types of artificial, or man-made, light sources: (1) direct sources (e.g., illuminated signage, street light poles, vehicle headlights); and (2) indirect sources of reflected light (e.g., reflective or light-colored surfaces). The effect produced by direct and indirect light sources that is perceived as excessive brightness is commonly referred to as "glare." The effect of direct and indirect sources of light during the night is referred to as spill light.

Direct sources of light in the Transit District area are generally limited to light posts in the Sequoia Station and Transit Center surface parking lots, overhead street lights on streets surrounding the Transit District area, such as El Camino Real, and interior lighting sources used in commercial and residential buildings surrounding the Transit District area. Street lighting sources are responsible for nighttime spill light.

#### 6.1.5 Shadow

Shadows cast by structures vary in length and direction throughout the day and from season to season. In the summer, the sun is highest in the sky and shadows are the shortest at any given time of day); in the spring/autumn the sun's position is nearly identical to the opposite equinox and represent the midway point between the winter and summer solstices; and in the winter, the sun is lowest in the sky and shadows are the longest at any given time of day. The winter solstice, therefore, represents the "worst-case" shadow condition and the time when the potential for loss of access to sunlight due to an adjacent structure is the greatest.

The DTPP identifies 10 open spaces in the DTPP area as being "shadow-sensitive public open spaces." Pursuant to the DTPP, shadow-sensitive open spaces are owned or operated by the City of Redwood City; not planned to be removed in the future; 1/10 of an acre or more in size; and no located in the interior of a block. The 10 shadow-sensitive open spaces identified in the DTPP are Courthouse Square, Theatre Way, City Hall courtyard, Roselli Garden and Mini-Park, Library Plaza, Hamilton Green (planned), Depot Circle (planned at the time of DTPP adoption; now developed), Little River Park, Redwood Creek Park (then planned and now developed), and City Center Plaza. None of the existing open spaces is within the Transit District area; of the 10 shadow-sensitive open spaces, the proposed Transit District includes only the planned Hamilton Green. However, as described in Chapter 3, Project Description, the proposed Transit District DTPP Amendments would alter the plans for the Hamilton Street right-of-way within the Transit District area. Specifically, the planned but unbuilt segment of Hamilton Street between Franklin Street and the Caltrain tracks would instead be identified as a potential privately owned, publicly accessible open space; the planned but unbuilt Hamilton Street between Franklin Street and El Camino Real would not include open space. However, the proposed Transit District Amendments would remove Hamilton Green (now the potential privately owned, publicly accessible open space between Franklin Street and the Caltrain tracks) as a shadow-sensitive open space because it would not be publicly owned, as was anticipated to be the case in the adopted DTPP, when Hamilton Green was to be within a City street.

Other shadow-sensitive uses and spaces analyzed in the DTPP Final EIR and herein include representative residential properties outside but adjacent to the DTPP area, <sup>1</sup> light-sensitive historic building features, <sup>2</sup> and historic building facades. <sup>3</sup>

## 6.2 Regulatory Setting

Section 6.2 of DTPP Final EIR Chapter 6, *Aesthetics*, includes the regulatory setting for this topic and is still current for this SEIR. It should be noted that the DTPP Final EIR included both the 1990 General Plan and 2010 General Plan policies, but the 2010 General Plan was referred to as the "Draft New General Plan" in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.

## 6.2.1 City of Redwood City General Plan

The City of Redwood City General Plan (General Plan) establishes the key goals, policies, and programs for the physical development of the City through 2030. Goals and policies relevant to land use and planning include the following:

- *Policy BE-1.1*: Maintain and enhance the beneficial and unique character of the different neighborhoods, corridors, and centers, and open spaces that define Redwood City.
- Policy BE-1.2: Promote the identity of Redwood City as a special place within the Bay Area.
- *Policy BE-1.3*: Provide attractive entrance designs at city gateways that welcome visitors and promote memorable characteristics of Redwood City.
- *Policy BE-3.1*: Provide high-quality public streetscapes in all neighborhoods, particularly in locations where new investment in historic property renovation and infill development are desired.
- *Policy BE-3.4*: Encourage building forms that create coherent and consistent street frontages on blocks that emphasize the visibility of entrance doors, porches, stoops and/or entrance patios.
- *Policy BE-11.3*: Plan for and accommodate mixed-use projects along corridors, where a site or sites are developed in an integrated, compatible, and comprehensively planned manner involving two or more land uses. Combine residential and office uses with commercial

The representative residential properties outside but adjacent to the DTPP area include residential properties at the following locations: Brewster Avenue at Allerton Street, Brewster Avenue at Broadway, Jefferson Avenue at Adams Street, Madison Avenue at Adams Street, Maple Street at Middlefield Road, Maple Street at Hilton Street, and Maple Street at Broadway.

This analysis considers the same light-sensitive building features considered in the DTPP Final EIR: the dome/rotunda of the historic San Mateo County Courthouse.

The 46 historic facades considered in the DTPP Final EIR and in this analysis are listed in Appendix 21.3.2 of the DTPP Final EIR.

- development to reduce automobile trips and encourage walking, and facilitate compact, sustainable development.
- *Policy BE-12.1*: Integrate land use and transportation planning and development to transform El Camino Real to an urban, pedestrian-friendly, and transit-oriented boulevard for residents to live, work, shop and play.
- *Policy BE-12.2*: Encourage the replacement of older low-scale, auto-oriented development with well-designed new projects that offer pedestrian orientation, higher densities with more efficient use of land, and continued productive economic value.
- Policy BE-12.5: Provide vibrant public spaces and gathering places along the El Camino Real Corridor.
- Goal BE-18: Make Downtown the premier urban location on the Peninsula for business, government functions, shopping, dining, living, and entertainment, with attractive buildings and streetscapes that respect and respond to Redwood City's history.
- *Policy BE-18.2*: Allow for a range of uses, building types, and building heights, to promote diverse mixed-use development, pedestrian activity, and a vibrant city center.
- *Policy BE-18.4*: Require residential, office, and governmental agency buildings and sites to be designed to encourage pedestrian activity, through street character, plazas, and other features and amenities that enhance Downtown's viability.
- Policy BE-18.6: Continue to foster pedestrian-oriented redevelopment in areas surrounding the Caltrain Station. Prioritize redevelopment of the Middlefield Parking Lot and other public owned land in the vicinity to support Downtown activity.

## 6.2.2 Redwood City Zoning Code

The Redwood City Zoning Code (Zoning Code) implements the General Plan. The Zoning Code establishes specific standards for the use and development of properties and regulates development intensity using methods such as minimum lot size and setbacks, maximum lot coverage, height, and floor area ratio. In the Transit District area, the DTPP rather than the Zoning Code provides applicable land use controls and development standards.

## 6.2.3 Redwood City Architectural Review Committee

The Redwood City Architectural Review Committee addresses architectural design and form of structures in the City and implements Article 45 of the Zoning Code.

## 6.2.4 Redwood City Downtown Precise Plan (DTPP)

The DTPP controls land use and development regulations in Downtown Redwood City. The DTPP imposes "standards" (mandatory) and "guidelines" (permissive) to guide new development, including permitted land uses; building heights and disposition; architectural character (including façade design and composition); site design and planning (including building placement, parking, and landscaping); signage; public frontages, streets, and streetscapes; and preservation and maintenance of historic resources.

The DTPP defines the Perry Parcel as Downtown General and Downtown Core with active ground-floor uses required along Broadway; the Transit Center as Downtown General and Downtown Core with active ground-floor uses required along Broadway; and the Sequoia Station as Downtown Core with active ground-floor uses required adjacent to the proposed Hamilton Green and along El Camino Real.

## **6.3 Impacts and Mitigation Measures**

## 6.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe aesthetics impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the certified DTPP Final EIR.

## 6.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines indicate that a significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) have a substantial adverse effect on a scenic vista; or
- b) substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or
- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area,<sup>4</sup> would the project conflict with applicable zoning and other regulations governing scenic quality?; or
- d) create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The DTPP Final EIR also included a threshold of significance related to shadow impacts. That threshold states that a significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

e) Cast shadow that substantially impairs the beneficial use, important values, or livability of any shadow-sensitive use, including public parks, plazas or open space areas; buildings using passive solar heat collection or solar collectors; historic resources with a shadow-sensitive character-defining feature; or shadow-sensitive portions of residential parcels.

Consistent with the shadow impact threshold in the DTPP Final EIR, criterion (e), concerning shadow, is evaluated as follows: a significant impact would occur due to substantial impairment of a shadow-sensitive use if any new structure permitted pursuant to proposed Transit District DTPP Amendments would cause more than 50 percent of the following shadow-sensitive uses and spaces to be shaded at 12:00 noon on the Spring Equinox: ten designated public parks, plazas,

The Transit District qualifies as an "urban area" as defined in CEQA Guidelines section 21094.5 because it is located in an incorporated city.

and open spaces within the Downtown area; Downtown parcels with lower maximum permitted building heights adjacent to parcels with higher maximum permitted heights; residential properties located outside but adjacent to the DTPP area; light-sensitive historic building features; and historic building facades. The DTPP Final EIR concluded that a threshold of 50 percent shadow at noon on the spring equinox (essentially mirrored by shadows at noon on the fall equinox) represents a reasonable balance between sun and shade, recognizing that shade may also be desirable during hotter times of the day and year.

At the time the DTPP Final EIR was prepared, Appendix G of the CEQA Guidelines did not specify a different significance criterion for projects in urban urbanized areas from those located in rural areas. Thus, the DTPP Final EIR evaluated whether the DTPP would substantially degrade the existing visual character or quality of the area and its surroundings. However, in December 2018, Appendix G of the CEQA Guidelines was modified to reflect recent changes to the CEQA statutes and court decisions. Specifically, the discussion of visual character and quality in topic "c" pertains to public views in non-urbanized areas, whereas for projects in urbanized areas, Appendix G suggests that the analysis consider whether the project would conflict with applicable zoning and other regulations governing scenic quality.

Appendix G of the CEQA Guidelines does not contain a criterion related to shading, and thus criterion (e) above derives from the DTPP Final EIR, and allows city decision-makers to consider whether the proposed project would result in shadow that could have significant effects on shadow-sensitive uses as defined.

Finally, it should also be noted that CEQA Section 21099(d), which was added to the statute in 2019, states that "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment."

## 6.3.3 Impacts and Mitigation Measures

The Transit District area is comprised of a smaller overall area than the original DTPP and would allow for a similar mix of development, resulting in similar impacts as those identified in the DTPP Final EIR, as described further below.

The representative residential properties outside but adjacent to the DTPP area include residential properties at the following locations: Brewster Avenue at Allerton Street, Brewster Avenue at Broadway, Jefferson Avenue at Adams Street, Madison Avenue at Adams Street, Maple Street at Middlefield Road, Maple Street at Hilton Street, and Maple Street at Broadway.

<sup>6</sup> This analysis considers the same light-sensitive building features considered in the DTPP Final EIR: the dome/rotunda of the historic San Mateo County Courthouse.

The 46 historic facades considered in the DTPP Final EIR and in this analysis are listed in Appendix 21.3.2 of the DTPP Final EIR. The historic facades that were not completely shaded at noon on the Spring Equinox under thenexisting conditions were mapped for this analysis using Google Maps in 2022.

## Impact AE-1: Implementation of the proposed Transit District DTPP Amendments would not have a substantial adverse effect on a scenic vista. (Less than Significant)

The DTPP Final EIR found that the DTPP would promote a more discernable and distinctive Downtown form and skyline, and that impacts on scenic vistas would be less than significant. No mitigation measures were necessary.

The proposed Transit District DTPP Amendments would not make any changes in allowable maximum building heights; however, the proposed Transit District DTPP Amendments would introduce some development flexibility by permitting limited exceptions to building placement requirements (i.e., build-to-corner, building setback, and frontage coverage requirements) to allow corner setbacks, other setbacks from the street, and lesser lot coverage than is currently required; and lowering the required minimum heights from 35 feet to 25 feet, or less with a potential exception. The exceptions would allow for reduced massing and shadows, an enhanced pedestrian experience, and provide support for ground floor retail.; none of these changes would result in adverse physical effects, because the changes would allow for the potential to reduce building massing, compared to what is currently permitted.

The modifications to the DTPP allow for an increased development capacity in the Transit District area by 1,100 dwelling units and 1.63 million square feet of office space, resulting in a more densely developed Transit District area. Because the Transit District area and DTPP area are relatively flat, and since the overall maximum building heights in the Transit District area would not change, the proposed Transit District DTPP Amendments would not substantially obstruct or degrade scenic vistas. Views of the Redwood Shores lagoons would not be affected due to the distance between the DTPP and the lagoons. Views of the western hills would still be available from multiple publicly accessible vantage points within or adjacent to the Transit District area, including from James Avenue and Brewster Avenue, Broadway and Arguello Street, and Jefferson Avenue and El Camino Real when looking west. In addition, as stated in the DTPP Final EIR, views of the Downtown Redwood City skyline and the San Francisco Bay from four vantage points in the western hills: Easter Cross, Easter Bowl, Cañada College, and Edgewood County Park, would generally be improved. This is because the proposed Transit District DTPP Amendments and DTPP would create a more discernable Downtown when viewed from long distance and higher elevations. The DTPP Final EIR concluded the DTPP would contribute to a "mounding" of buildings concentrated near the center of Downtown, thus resulting in a more discernable and distinctive Downtown form and skyline. Implementation of the proposed Transit District DTPP Amendments would maintain this condition. Therefore, impacts from the proposed Transit District DTPP Amendments on scenic vistas would be the same as conclusion reached in the DTPP Final EIR and would not result in new or more severe impacts than were identified in the Final EIR. This impact would be *less than significant*.

Mitigation: None required.	

# Impact AE-2: Implementation of the proposed Transit District DTPP Amendments would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. (Less than Significant)

The DTPP Final EIR found that the changes resulting from the DTPP would not be visible from Interstate 280 due to the varied topography and intervening vegetation. Interstate 280 is the only designated scenic highway in Redwood City. Thus, the DTPP Final EIR concluded that impacts to state scenic highways would be less than significant. No mitigation measures were necessary.

Among other things, the proposed Transit District DTPP Amendments would add contemporary architectural style as a permitted design character, would provide some flexibility with regard to identified sites constrained by proposed open space or the anticipated Caltrain tracks, but would not otherwise increase maximum allowed building height within the proposed Transit District. Because the Transit District area contains no historic or architecturally distinctive structures, and because the area is, for the most part, separated from other parts of Downtown by the Caltrain tracks and the four to six-lane-wide El Camino Real, the introduction of Contemporary architecture would not adversely affect scenic resources. The other proposed Transit District DTPP Amendments would tend to reduce the massing of new buildings, compared to what is permitted under the DTPP at present, and, therefore, would not adversely affect scenic resources to any greater degree than identified in the DTPP Final EIR.

And given that the proposed Transit District DTPP Amendments would not make any changes in allowable maximum building heights, the Transit District area would likewise not be visible from Interstate 280 due to the varied topography and intervening vegetation, and would not result in impacts to state scenic highways. This impact would be the same as the conclusion reached in the DTPP Final EIR and would not result in new or more severe impacts. Therefore, this impact would be *less than significant*.

Mitigation: None required.

# Impact AE-3: Implementation of the proposed Transit District DTPP Amendments would not conflict with applicable zoning and other regulations governing scenic quality. (*Less than Significant*)

The DTPP Final EIR found that implementation of the DTPP would promote a more appealing and coherent visual character in Downtown, when considering that it would provide a discernible and distinctive downtown form; substantially improve building height scale relationships at sensitive transitions to adjacent low-rise neighborhoods; and enhance downtown historic

North of Broadway, where the Transit District area is separated from other parts of the El Camino corridor to the west by the relatively narrow Perry Street, the proposed Transit District DTPP Amendments envision no commercial or residential development, but rather a new Transit Center, which would be subject to separate environmental review.

As explained in Chapter 3, Project Description, the proposed Transit District DTPP Amendments would not increase allowed maximum heights, compared to existing conditions.

character. Thus, the DTPP Final EIR concluded that impacts on visual character would be less than significant. No mitigation measures were necessary.

Applicable zoning and other regulations governing scenic quality are listed in the DTPP Final EIR (see pp. 6-5 to 6-12) and include the 2010 General Plan, Zoning Code, and the Redwood City Architectural Review Committee (Resolution 11497).

#### 2010 General Plan

The 2010 General Plan goals and policies related to scenic quality include integrating buildings into the surrounding environment; shaping identity and pursuing "place-making" along major corridors and in centers through re-use and intensification, mixed-use development, and streetscape enhancements; and creating complete residential neighborhoods whereby residents can walk or bike to leisure or civic activities in 20 minutes or less.

The proposed Transit District DTPP Amendments would consist of amendments to the Redwood City General Plan and DTPP to establish a new sub-area within the DTPP focused on transitoriented development with a new hub of office, residential and retail uses adjacent to the Redwood City Transit Center. The proposed Transit District DTPP Amendments would not conflict with the 2010 General Plan because it would involve pedestrian-oriented improvements such as the conversion of the planned but unbuilt portion of Hamilton Street between Franklin Street and the Caltrain right-of-way from a Downtown Core Street to instead be identified as a potential privately owned, publicly accessible open space that could allow pedestrian and bicycle travel only, with non-emergency motor vehicles prohibited. These pedestrian-oriented improvements would support General Plan policies BE-12.1, BE-12.2, BE-18.2, and BE-18.6, which call for the development of pedestrian-friendly streetscapes.

In addition, the proposed Transit District DTPP Amendments would be consistent with goals related to "place-making" along major corridors and in centers through mixed-use development because it would allow for new mixed-use office, residential and retail uses along two major corridors, El Camino Real and Broadway, supporting policies BE-12.5 and BE-12.6. The increased development intensity would integrate into the larger DTPP consistent with general plan goals related to integrating buildings into the surrounding environment. Finally, the proposed Transit District DTPP Amendments would allow for the development of housing in close proximity to transit, which would be consistent with Policy BE-11.3 related to encouraging dense development whereby residents are within a 20-minute walk or bike ride from leisure or civic activities. Therefore, the proposed Transit District DTPP Amendments would not conflict with the 2010 General Plan as it relates to scenic quality.

#### Redwood City Zoning Code

The Redwood City Zoning Code pertains to scenic quality because it includes regulations related to building coverage, building height, and building setbacks, although in the DTPP area, these issues are addressed by development standards included in the plan. To allow for greater design flexibility, both horizontally and vertically, the proposed Transit District DTPP Amendments would include minor amendments to the allowable minimum height and massing regulations in

the DTPP, but no changes to the maximum allowable height. The proposed Transit District DTPP Amendments would also: allow contemporary architectural design as a permitted design; include revisions to the DTPP Public Frontages and Use Regulations; allowance for exceptions to mandatory Standards in the DTPP Development Regulations for sites identified as potentially providing privately owned publicly accessible open space as identified in the DTPP; <sup>10</sup> and change the DTPP maps to reflect the amended DTPP. These changes are intended to promote more flexibility and variety in building designs and articulation, both horizontally and vertically, and to improve aesthetics and visual character Downtown. Moreover, because the proposed Transit District DTPP Amendments would amend the DTPP figures for changes related to building height and massing, the Transit District area would be brought into conformance with applicable design standards and the proposed Transit District DTPP Amendments would be consistent with the Zoning Code and the City's desired vision for a densely developed, Downtown urban core visual character.

#### DTPP and Redwood City Architectural Review Committee

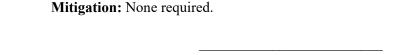
The DTPP applies in the Downtown area and the DTPP development regulations address the availability of sunlight (and shadow), building massing, building setbacks, and landscape requirements. Sunlight (and shadow) are discussed below under Impact AE-4. The Redwood City Architectural Review Committee addresses architectural design and form of structures in the City based on the DTPP development regulations. As stated above, the proposed Transit District DTPP Amendments would include minor amendments to the minimum height and massing regulations approved in the DTPP, but no changes are proposed to the maximum allowable height. The changes under the proposed Transit District DTPP Amendments would allow for exceptions, at certain sites, to requirements concerning building placement and required minimum heights in a manner that would allow for reduced building massing. Therefore, no conflict would arise with respect to plans adopted for the purpose of avoiding environmental effects. The Redwood City Architectural Review Committee would review these amendments as part of their review of the proposed Transit District DTPP Amendments and would recommend whether the changes pursued by the proposed Transit District DTPP Amendments are in keeping with the City's desired scenic quality of the area.

As stated earlier, the DTPP Final EIR found that implementation of the DTPP would promote a more appealing and coherent visual character in Downtown, and that impacts on visual character would be less than significant. Because the allowable maximum building heights would not change, the proposed Transit District DTPP Amendments would similarly promote a more appealing and coherent visual character in Downtown. Moreover, the proposed Transit District DTPP Amendments would seek to amend the DTPP to resolve any conflicts with these regulations, including amendments for DTPP Public Frontages and Use Regulations; allowance for exceptions to mandatory Standards in the DTPP Development Regulations for sites identified as potentially providing privately owned publicly accessible open space as identified in the DTPP; and changes to the DTPP figures to reflect the amended DTPP. Thus, through

6-11

These changes could include, but not necessarily be limited to, permitting limited exceptions to building placement requirements and lowering the required minimum heights, which would allow for reduced massing and shadows, an enhanced pedestrian experience, and provide support for ground floor retail.

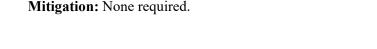
amendments to the DTPP, the proposed Transit District DTPP Amendments would not conflict with regulations governing scenic quality, and would not result in new or more severe impacts than those identified in the DTPP Final EIR. Therefore, this impact would be *less than significant*.



Impact AE-4: Implementation of the proposed Transit District DTPP Amendments would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (*Less than Significant*)

The DTPP Final EIR concluded that, because projects built pursuant to the DTPP would meet Title 24 standards, light and glare impacts would be less than significant. No mitigation measures were necessary.

The proposed Transit District DTPP Amendments would allow for increased potential development capacity in the Transit District area, which would result in additional spill light and glare in the area. Exterior lighting would be provided to illuminate different areas of the Transit District area and surrounding plazas, and would include street lighting, sidewalk lighting, building perimeter lighting, emergency lighting, and outdoor security lighting along walkways, driveways, and plaza areas. New sources of light would be required to meet the LZ3 (medium) lighting power allowances in the California Building Standards Code Title 24 (Parts 1 and 6 – Outdoor Lighting Zones). Compliance with Title 24 standards would improve the quality of outdoor lighting and reduce the impacts of light pollution, light trespass and glare to less than significant levels. Therefore, the impact from the proposed Transit District DTPP Amendments on light and glare would be the same as the impact in the DTPP Final EIR and would not result in new or more severe impacts than identified in the Final EIR. This impact would be *less than significant*.



Impact AE-5: Implementation of the proposed Transit District DTPP Amendments would not cast shadow that would substantially impair the beneficial use, important values, or livability of any shadow-sensitive use, including public parks, plazas or open space areas; buildings using passive solar heat collection or solar collectors; historic resources with a shadow-sensitive character-defining feature; or shadow-sensitive portions of residential parcels. (*Less than Significant*)

While shadows are not generally considered a CEQA impact, the DTPP Final EIR analyzed shadow effects of the Plan following a Superior Court decision on this subject, and addressed concerns raised by the plaintiffs regarding the impact of shadows cast by development under the

plan on: public parks, plazas, and open space areas within Downtown; <sup>11</sup> Downtown parcels with lower maximum permitted building heights adjacent to parcels with higher maximum permitted heights; residential properties located outside but adjacent to the DTPP area; light-sensitive features on historic resources; and historic facades. The DTPP Final EIR concluded that the DTPP would not cause any shadow-sensitive uses or spaces to be more than 50 percent shaded at noon on the Spring Equinox. Thus, the DTPP Final EIR concluded that impacts on shadow would be less than significant. No mitigation measures were necessary.

As discussed above, the proposed Transit District DTPP Amendments would not make any changes in allowable maximum building heights; however, the proposed Transit District DTPP Amendments would introduce some development flexibility by permitting limited exceptions to building placement requirements (i.e., build-to-corner, building setback, and frontage coverage requirements) to allow corner setbacks, other setbacks from the street, and lesser lot coverage than is currently required; and lowering the required minimum heights from 35 feet to 25 feet, or less with a potential exception. The exceptions would allow for reduced massing and shadows, an enhanced pedestrian experience, and provide support for ground floor retail. These changes would allow for reduced building massing than is currently permissible, which would not increase shadow and could reduce shadow from new buildings, compared to shadow that could be permitted under the current DTPP regulations.

The exceptions contained in the proposed Transit District DTPP Amendments are optional and would apply only to a limited number of identified sites that are constrained by certain physical impediments to development (e.g., proposed privately owned publicly accessible open space as identified in the DTPP, anticipated Caltrain track placement). At this time, it is not known whether any such sites would use the exceptions to alter the applicable regulations, and thus this SEIR does not speculate as to any potential shadow impacts that may occur at the individual project level. However, as explained above, the exceptions proposed in the Transit District DTPP Amendments would have the potential to reduce, not increase shadow cast by subsequent development projects.

Accordingly, the potential development allowed for with the proposed Transit District DTPP Amendments would not result in new or more severe shadow impacts than the impact identified in the DTPP Final EIR. Therefore, this impact would be *less than significant*.

Mitigation: None required.

<sup>11</sup> 

Consistent with the DTPP Final EIR, public parks, plazas, and open spaces considered in this analysis include Courthouse Square, Theater Way, City Hall courtyard, Roselli Garden and Mini-Park, Library Plaza, Hamilton Green (planned), Depot Circle (planned at the time of DTPP adoption; now developed), Little River Park, Redwood Creek Park (then planned and now developed), and City Center Plaza. None of the existing open spaces is within the Transit District area, which includes only the planned Hamilton Green. Under the proposed Transit District DTPP Amendments, the planned but unbuilt segment of Hamilton Street between Franklin Street and the Caltrain tracks would instead be identified as a potential privately owned, publicly accessible open space, while the planned Hamilton Street between Franklin Street and El Camino Real would not include open space. However, the proposed Transit District Amendments would remove Hamilton Green as a shadow-sensitive open space because it would not be publicly owned. Therefore, Hamilton Green is not analyzed here.

6. Aesthetics and Shadows

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## **CHAPTER 7**

# Cultural and Historic Resources and Tribal Cultural Resources

This SEIR chapter analyzes the potential for the implementation of the proposed Transit District DTPP Amendments to result in substantial adverse effects on cultural resources and tribal cultural resources, including historic architectural resources, historic-age and pre-contact archaeological resources, and human remains. This section focuses on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts and describes any new or expanded mitigation measures needed to address any such impacts.

#### Findings of the DTPP Final EIR

The DTPP Final EIR found that there would be a potentially significant impact to archaeological resources. <sup>1</sup> Mitigation 7-1, which established an inadvertent discovery protocol for cultural resources identified during project construction, reduced potential impacts to archaeological resources to a less-than-significant level.

The DTPP Final EIR also found that development on properties that contain historic architectural resources would constitute a significant impact. Mitigation 7-2 required that the City make a preliminary determination as to whether any discretionary projects would have a potentially significant adverse effect on historic resources. However, this mitigation was not considered sufficient to address project impacts, and the impact was found to be significant and unavoidable.

The DTPP Final EIR also found that historic districts could be significantly impacted by development and proposed Mitigation Measure 7-3 required that development within or adjacent to historic districts that require discretionary approval be reviewed by an architect or architectural historian to avoid a substantial adverse change to the historic district. This mitigation measure was found to reduce the impact of the DTPP on historic districts to a less-than-significant level.

The DTPP also considered potential impacts due to development on properties adjacent to historic resources, and Mitigation Measure 7-4 required that proposed development adjacent to historic resources that require discretionary approval be reviewed by an architect or architectural historian to avoid a substantial adverse change to the historic resource. This mitigation measure reduced the impact of the DTPP on historic resources to a less-than-significant level.

<sup>&</sup>lt;sup>1</sup> The City of Redwood City, *Draft Environmental Impact Report for the Redwood City Downtown Precise Plan*, State Clearinghouse No. 2006052027, August 2010.

## 7.1 Environmental Setting

## 7.1.1 Archaeological Setting

Categorizing the pre-contact period into broad cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given time frame, thereby creating a regional chronology. This section provides a brief discussion of the pre-contact chronology for the area known now as the Redwood City.

Archaeologists developed individual cultural chronological sequences tailored to the archaeology and material culture of each sub-region of California. Each of these sequences is based principally on the presence of distinctive cultural traits and stratigraphic separation of deposits. Milliken *et al.* provide a framework for the interpretation of the San Francisco Bay Area. The authors divided human history in California into three periods: the *Early Period*, the *Middle Period*, and the *Late Period*. In many parts of California four periods are defined; the fourth being the *Paleoindian Period* (11500–8000 B.C.), characterized by big-game hunters occupying broad geographic areas. Evidence of human habitation during the Paleoindian Period has not yet been discovered in the San Francisco Bay Area. Economic patterns, stylistic aspects, and regional phases further subdivide cultural periods into shorter phases. This scheme uses economic and technological types, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods.

During the Early Period (Lower Archaic, 8000–3500 B.C.), geographic mobility continued from the Paleoindian Period and is characterized by the millingslab and handstone as well as large wide-stemmed and leaf-shaped projectile points. The first cut shell beads and the mortar and pestle are first documented in burials during the Early Period (Middle Archaic, 3500–500 B.C.), indicating the beginning of a shift to sedentism. During the Middle Period, which includes the Lower Middle Period (Initial Upper Archaic, 500 B.C.-A.D. 430), and Upper Middle Period (Late Upper Archaic, A.D. 430–1050), geographic mobility may have continued, although groups began to establish longer term base camps in localities from which a more diverse range of resources could be exploited. The first rich black middens are recorded from this period. The addition of milling tools, obsidian, and chert concave-base projectile points, as well as the occurrence of sites in a wider range of environments, suggest that the economic base was more diverse. By the Upper Middle Period, mobility was being replaced by the development of numerous small villages. Around A.D. 430, a dramatic cultural disruption occurred as evidenced by the sudden collapse of the Olivella saucer bead trade network. During the Initial Late Period (Lower Emergent, A.D. 1050–1550), social complexity developed toward lifeways of large, central villages with resident political leaders and specialized activity sites. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a diversity of beads and ornaments.

Milliken, Randall, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottsfield, Donna Gillette, Viviana Bellifemine, Eric Strother, Robert Cartier, and David A. Fredrickson, "Punctuated Cultural Change in the San Francisco Bay Area", In California Prehistory: Colonization, Culture, and Complexity, edited by Terry L. Jones and Kathryn A. Klar, pp. 99-124, AltaMira Press, Lanham, MD, 2007.

## 7.1.2 Ethnographic Setting

A compilation of ethnohistorical, historical, and archeological data indicates that the San Francisco Bay Area was inhabited by a cultural group known as the Ohlone before the arrival of Europeans.<sup>3</sup> While traditional anthropological literature portrayed the Ohlone peoples as having a static culture, today it is better understood that many variations of culture and ideology existed within and between villages. While these static descriptions of separations between native cultures of California make it an easier task for ethnographers to describe past behaviors, this approach masks Native adaptability and self-identity. California's Native Americans never saw themselves as members of larger cultural groups, as described by anthropologists. Instead, they saw themselves as members of specific village communities, perhaps related to others by marriage or kinship ties, but viewing the village as the primary identifier of their origins.

Levy describes the language group spoken by the Ohlone (often referred to as "Costanoan" in the literature). This term is originally derived from a Spanish word designating the coastal peoples of Central California. Today Costanoan is used as a linguistic term that refers to a larger language family that included distinct sociopolitical groups that spoke at least eight languages of the Penutian language group. The Ohlone once occupied a large territory from San Francisco Bay in the north to the Big Sur and Salinas Rivers in the south. The Redwood City area was occupied by Ramaytush dialect of Ohlone speakers.

Economically, the Ohlone engaged in hunting and gathering. Their territory encompassed both coastal and open valley environments that contained a wide variety of resources, including grass seeds, acorns, bulbs and tubers, bear, deer, elk, antelope, a variety of bird species, and rabbit and other small mammals. The Ohlone acknowledged private ownership of goods and songs, and village ownership of rights to land and/or natural resources; they appear to have aggressively protected their village territories, requiring monetary payment for access rights in the form of clam shell beads, and even shooting trespassers if caught.

In 1770, the Ohlone lived in approximately 50 separate and politically autonomous nations, and the number of Ramaytush speakers reached 1,400, substantially more than the typical size of a village, which ranged from 40 to 200 members. During the Mission Period (1770 to 1835), native populations, especially along the California coast, were brought—usually by force—to the missions by the Spanish missionaries to provide labor. The missionization caused the Ohlone people to experience cataclysmic changes in almost all areas of their life, particularly a massive decline in population caused by introduced diseases and declining birth rate, resulting in large part from colonization by the Spanish missionaries. Following the secularization of the missions by the Mexican government in the 1830s, most Native Americans gradually left the missions and established rancherias in the surrounding areas.<sup>5</sup>

Milliken, Randall, A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810, Ballena Press, Menlo Park, CA, 1995.

Levy, Richard, "Costanoan", In *California*, edited by Robert F. Heizer, pp. 485-495, Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C., 1978.

<sup>5</sup> Ibid.

After European contact, Ohlone ways of life were severely disrupted by missionization, disease, and displacement. Today the Ohlone still have a strong presence in the San Francisco Bay Area and are very interested in their historic-age and pre-contact past. There are currently five Ohlone groups listed on the Native American Heritage Commission (NAHC) contact list for the Redwood City area.

## 7.1.3 Historic Setting

Spanish exploration and colonization of Alta California began in the mid-18th century. Under Mexican rule, the 69,120-acre Rancho de las Pulgas was granted to the Arguello family in 1835, and the rancho included the majority of present-day Redwood City. A local economy grew out of the rancho's goods and services, namely livestock, hides and tallow, and redwood logging, and a townsite developed in the vicinity of the wharf that provided access to a deep-water channel in San Francisco Bay.<sup>6</sup>

In the 1850s, the Arguellos transferred a portion of this land to Simon Mezes, who surveyed and subdivided the townsite that he named "Mezesville." The Town of Mezesville was located in the vicinity of the Embarcadero and northeast of El Camino Real, and the arrangement of its streets determined the present layout of downtown Redwood City. Redwood City was named the San Mateo County seat in 1856, and Mezes donated the land for the new courthouse.<sup>7</sup>

The San Francisco and San Jose Railroad Company introduced the San Francisco Peninsula's first passenger train service in 1863. The present Caltrain tracks, which are adjacent to the east boundary of the Transit District area, follow the original alignment of the earliest regional railroad. The arrival of the railroad attracted new residents, increased land values, and brought new development to Redwood City, and the growing municipality became San Mateo County's first incorporated city in 1868. The area's shipping and lumber industries continued to thrive in the late 19th century.<sup>8</sup>

A major earthquake on April 18, 1906, caused widespread regional devastation, and many important buildings in Redwood City, including the county courthouse, were damaged beyond repair. A construction boom swept through the city's downtown in the following years, and many examples of early 20th-century architecture remain along Broadway and Main Street. During this period, roads were improved as automobile use increased, the city's police and fire departments were established, and the Port of Redwood City was relocated from the downtown area to its present location near the mouth of Redwood Creek.<sup>9</sup>

Many people found employment in Redwood City during the Great Depression. Under the Works Progress Administration (WPA) and Public Works Administration (PWA), a library, a city hall, and several county buildings were constructed. A municipal marina and an international deepwater port served by new road and rail connections supported waterfront industries including the

The City of Redwood City, Draft Environmental Impact Report for the Redwood City Downtown Precise Plan, State Clearinghouse No. 2006052027, August 2010, pp. 7-1 to 7-2.

<sup>&</sup>lt;sup>7</sup> Ibid., p. 7-2.

<sup>8</sup> Ibid., pp. 7-3 to 7-4.

<sup>&</sup>lt;sup>9</sup> Ibid., pp. 7-4 to 7-5.

Leslie Salt Company, a cement plant, and several fishing companies. During World War II, the U.S. Navy leased two berths at the city's port. 10

Beginning in the mid-20th century, the San Francisco Peninsula attracted numerous technology companies, and this led to a thriving technology industry in the greater San Francisco Bay Area that continues to the present day. This is reflected in a population boom in Redwood City, where the pre-war population was 12,400 in 1940, and it more than tripled to 46,300 by 1960. Redwood City annexed 25 square miles of tidelands and salt ponds located between U.S. 101 and San Francisco Bay; lands adjacent to Menlo Park, Atherton, and San Carlos; and unincorporated territory toward the Santa Cruz Mountains. National trends in suburbanization focused residential, commercial, and industrial development outside of downtown areas, and downtown Redwood City experienced a period of economic decline during the 1950s and 1960s. The city's 1964 Downtown Development Plan, which proposed the demolition of numerous historic buildings in an attempt to revitalize the downtown area, was met with a lack of funding and was therefore not enacted.<sup>11</sup>

In 1977, community efforts in support of historic preservation resulted in the listing of the Redwood City Commercial Buildings Historic District in the National Register of Historic Places. This was followed by the adoption of the city's historic preservation ordinance and establishment of the Historic Resources Advisory Committee in 1980. Other civic improvements and successful historic preservation efforts during the 1980s slowly reversed the formerly deteriorated condition of the downtown area. Redwood City's 1990 General Plan included a comprehensive historic resources element, and the city attained Certified Local Government (CLG) accreditation in 1992. 12

In the early years of the 21st century, the Main Street Historic District was approved by the city council, the historic county courthouse was restored, and Courthouse Square was constructed on the site of Redwood City's original town square. <sup>13</sup> Since the launch of the DTPP planning process in 2007, Mezes Park was renovated, and the John Offerman House and the John Dielmann House were listed on the National Register. <sup>14</sup>

## 7.1.4 Previously Identified Cultural Resources

For the purposes of this section, cultural resources are defined as physical evidence or a place of past human activity, including sites, objects, landscapes, or structures of significance to a group of people traditionally associated with it. Archaeological resources can be both pre-contact and historic-age and consist of cultural resources which are on the surface or in the subsurface. Historic resources are age-eligible (i.e., 50 years old or older) buildings, structures, objects, sites, or districts that have been determined as significant and eligible for, or listed in, the National Register of Historic Places (National Register) and/or California Register of Historical Resources (California Register) and/or City of Redwood City Historic Inventory of Structures of Historic and Architectural Merit (local register).

<sup>&</sup>lt;sup>10</sup> Ibid., p. 7-5.

<sup>&</sup>lt;sup>11</sup> Ibid., p. 7-6.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14 &</sup>quot;Timeline," *Redwood City History*, http://www.redwoodcityhistory.org/timeline, accessed January 31, 2022.

ESA completed a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System on November 23, 2021 (File No. 21-0821). The review included the entire DTPP area. Previous surveys, studies, and site records were accessed. Records were also reviewed in the Built Environment Resources Directory for San Mateo County, which contains information on places of recognized historical significance including those evaluated for listing in the National Register of Historic Places, the California Register of Historical Resources, the California Inventory of Historical Resources, California Historical Landmarks, and California Points of Historical Interest. The purpose of the records search was to (1) determine whether known cultural resources have been recorded within the Transit District area; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources.

#### **Identified Historic Resources**

The DTPP Final EIR identified 47 individual historic resources and two historic districts recorded within the DTPP area, and these are listed in **Table 7-1**. None are located within the Transit District area boundary. Three historic resources are located adjacent to the Transit District area boundary, and these are highlighted in gray.

The NWIC records search conducted for this SEIR included documentation of one potential historic resource within the Transit District area boundary. The Redwood City Culverts Mile Posts 24.27–26.07 (P-41-002462) pass under the former Southern Pacific Railroad mainline tracks (now used by the Union Pacific Railroad and Caltrain). The culverts were evaluated in 2001 and found ineligible for listing in the National Register and California Register.

Additionally, the following six potential historic resources adjacent to the Transit District area boundary were identified in either the NWIC records search or the DTPP Final EIR. The Andrew Building at 2603 Broadway (P-41-002282), 53–55 Perry Street (P-41-0002494), and Roy's Drive-In Cleaners at 1100 El Camino Real are listed in Table 7-1 and are considered historic resources. The buildings at 2600 Broadway (P-41-0002492) and 947 El Camino Real (P-41-002497) were evaluated in 2010 and found ineligible for listing in the National Register and California Register because they lacked significance under any criteria. These buildings were not re-evaluated for this SEIR because it is unlikely that they have achieved significance in intervening years. The building at 701–713 Arguello Street, which is located directly across Brewster Avenue from the Transit District area and outside the DTPP area, was identified in the DTPP Final EIR as a potential historic resource because it was at least 50 years old at that time. <sup>16</sup> For the purposes of this SEIR, this building is conservatively presumed to be eligible for listing in the California Register.

The City of Redwood City, Draft Environmental Impact Report for the Redwood City Downtown Precise Plan, State Clearinghouse No. 2006052027, August 2010.

The City of Redwood City, Draft Environmental Impact Report for the Redwood City Downtown Precise Plan, p. 7-27.

TABLE 7-1
CEQA-DEFINED HISTORIC RESOURCES WITHIN THE DTPP AREA

Address	Assessor Parcel Number(s)	Name/Description	Primary Number	Note
	Multiple	Main Street Historic District		City-designated and eligible for listing in the National Register
_	Multiple	Historic Commercial Buildings District	P-41-000178	Contained within the Main Street Historic District and listed in the National Register
201 Arch Street	052195100, 052195090	Old Safeway Market		
2000 Broadway	052374180	Bank of San Mateo County	P-41-000800	Contributor to Historic Commercial Buildings District
2020 Broadway	052374100	Fitzpatrick Building	P-41-000801	Contributor to Historic Commercial Buildings District
2022–2024 Broadway	052374100	San Mateo County Building and Loan Association	P-41-000802	Contributor to Historic Commercial Buildings District
2200 Broadway	052367010	San Mateo County Courthouse	P-41-000174	
2201 Broadway	052365040	Art Deco-style building abutting east side of Fox Theater		
2215 Broadway	052365090	Fox Theater	P-41-000748	
2227 Broadway	052365020	Art Deco-style building abutting west side of Fox Theater		
2301–2303 Broadway	052362090	Mayers Building		
2317 Broadway	052362080	Sequoia Building		
2603 Broadway	052322070	Andrew Building	P-41-002282	Adjacent to the Transit District area boundary
2620 Broadway	052321080	Currently City Pub		
2650 Broadway	052321120	Originally Redwood Pastry Shop		
2726–2744 Broadway	052195070, 052195080	"One commercial building, Art Deco, tiled"		
28 Diller	053176150	_	P-41-000504	
753 El Camino Real	052321160			
1100 El Camino Real	053045230	Roy's Drive-In Cleaners		Adjacent to the Transit District area boundary
1322 El Camino Real	053063090	_		
127 Franklin	053173090	Holmquist House	P-41-000503	
301 Fuller	052331130	House		
321 Fuller	052331080	House		
627 Hamilton	052344140	Lathrop House	P-41-000187	

## TABLE 7-1 (CONTINUED) CEQA-DEFINED HISTORIC RESOURCES WITHIN THE DTPP AREA

Address	Assessor Parcel Number(s)	Name/Description	Primary Number	Note
620 Jefferson	052347090	Originally Hanson Lumber Co. employee housing		
855 Jefferson	053131190	Redwood City Post Office		
1217 Jefferson	053045230	Commercial		
726 Main	052374140	Diller-Chamberlain Store/Quong Lee Laundry	P-41-000799	Contributor to Historic Commercial Buildings District
800 Main, 2001–2013 Broadway	05131050	Sequoia Hotel	P-41-000742	
831-835 Main	053233230	Alhambra Theater/ Masonic Temple		
839 Main	053233130	IOOF Building		
847-849 Main	053233120	Originally Clifton Motor Co.		
901 Main	053135010	William P. Jamieson Building	P-41-000758	
917–921 Main	053135120	Pseudo-Gothic commercial building		
929 Main	053135260	Originally Sunshine Grocery Store		
935 Main	053135270	Originally Flynn's Ford Agency		
1018 Main	053137020	John Offerman House		
1020 Main	053137020	John Dielmann House		
605 Middlefield	052347060			
611 Middlefield	052347050	Queen Anne-style cottage		
727 Middlefield	052368030	Pacific Telephone and Telegraph Building		
1044 Middlefield	053134060	Old Fire Station No. 1/Main Library	P-41-000759	
53–55 Perry	052321270, 052321260	Elgin's Auto Supply and Machine Shop Service	P-41-002494	Adjacent to the Transit District area boundary
114 Stambaugh	053135020	Holmquist Hardware		_
116 Stambaugh	053135040	Eugene Mourot House	P-41-000789	
142 Stambaugh	053135050	Fred and Hannah Kirste House	P-41-000773	
530 Warren	052332010	House		
103 Wilson	053171040	House	P-41-000501	
700-710 Winslow	052361030	Falcone Building		

#### NOTES

<sup>&</sup>lt;sup>a</sup> Historic resources located adjacent to the Transit District area boundary are highlighted in gray. SOURCE: DTPP Draft EIR, 2010, pp. 7-9–7-11.

#### **Identified Archaeological Resources**

The NWIC records search indicated that one potential historic-age archaeological resource is recorded within the DTPP area. The Mezes Plaza, P-41-000461, are a series of foundations and trash scatters within a block in downtown Redwood City associated with the historic-age Mezesville. This resource has not been formally evaluated for the California Register or National Register. The record search did not identify any archaeological resources within the Transit District area boundary. The nearest pre-contact archaeological resource is approximately 550 feet southeast of the DTPP area.

#### Identified Tribal Cultural Resources

#### **Native American Consultation**

In accordance with the requirements of Senate Bill 18 (SB 18) and AB 52 (Public Resources Code Section 21074(a)), City staff conducted Native American outreach and consultation efforts. ESA sent a Sacred Lands File and Native American Contacts List Request to the NAHC on October 20, 2021. The request included a request for a search of the NAHC Sacred Lands File and a list of contacts for tribes with traditional lands or cultural places within or near the DTPP. On November 2, 2021, the City sent tribal outreach letters to six Native American representatives from five tribes that were identified by the City based on prior consultation. The NAHC responded on November 29, 2021, with a letter that indicated the results of the search of the Sacred Lands File were negative. The letter also included a list of Native American contacts, and on November 30, the City sent tribal outreach letters to the four additional Native American representatives that were identified by the NAHC that were not on the City's original list. No responses were received within 90 days of receipt of the consultation letters, and no responses have been received as of April 27, 2022.

# Identification of Tribal Cultural Resources and Indigenous Cultural Resources

The results of the records search undertaken at the NWIC is detailed above. No pre-contact resources have been identified within the DTPP. The nearest resource with a pre-contact component is approximately 550 feet outside of the DTPP area and 1,400 feet from the proposed Transit District boundary. No additional cultural resources or tribal cultural resources were identified as a result of tribal consultation.

# 7.2 Regulatory Setting

Section 7.2 of DTPP Final EIR Chapter 7, *Cultural and Historic Resources*, includes the regulatory setting for this topic and is still current for this SEIR, except as noted below. This section also includes the regulatory setting for tribal cultural resources, which were not separately analyzed in the DTPP Final EIR. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

#### 7.2.1 Federal

#### American Indian Religious Freedom Act

The American Indian Religious Freedom Act of 1978 protects the rights of Native Americans to freedom of expression of traditional religions (24 U.S.C. Section 1996). This act established "the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions... including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites."

#### **Native American Graves Protection and Repatriation Act**

The Native American Graves Protection and Repatriation Act provides for increased involvement of Native Americans in archaeology and historic preservation. The Native American Graves Protection and Repatriation Act addresses the rights of lineal descendants and Indian tribes to recover Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony that are held by the federal government (25 U.S.C. Section 3001). These parties are to be consulted when such items are inadvertently discovered or intentionally excavated on federal or tribal lands.

#### 7.2.2 State

The State of California implements the National Historic Preservation Act (NHPA) of 1966, as amended, through its statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation, as an office of the California Department of Parks and Recreation, implements the policies of the preservation act on a statewide level. The Office of Historic Preservation also maintains the California Historical Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the state's jurisdictions.

#### **Public Resources Code**

Assembly Bill 52 (AB 52), enacted in September 2014, amended CEQA to explicitly recognize that California Native American tribes have expertise with regard to their tribal history and practices. AB 52 established a new category of cultural resources known as tribal cultural resources in order to consider tribal cultural values when determining impacts on cultural resources. Public Resources Code Section 21074(a) defines a tribal cultural resource as any of the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - included or determined to be eligible for inclusion in the California Register; or

- included in a local register of historical resources, as defined in Public Resources Code Section 5020.1(k).<sup>17</sup>
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c). 18 In applying these criteria, the lead agency would consider the significance of the resource to a California Native American tribe.
- A cultural landscape that meets the criteria of CEQA Section 21074(a)<sup>19</sup> also is a tribal cultural resource if the landscape is geographically defined in terms of the size and scope.
- An historical resource as described in CEQA Section 21084.1,<sup>20</sup> a unique archaeological resource as defined in CEQA Section 21083.2,<sup>21</sup> or a non-unique archaeological resource as defined in CEQA Section 21083.2<sup>22</sup> may also be a tribal cultural resource if it meets the criteria of CEQA Section 21074(a).

AB 52 requires lead agencies to analyze project impacts on "tribal cultural resources" separately from archaeological resources (Public Resources Code Sections 21074, 21083.09), in recognition that archaeological resources have cultural values beyond their ability to yield data important to prehistory or history. AB 52 also defines "tribal cultural resources" in Public Resources Code Section 21074 (see above), and requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (Public Resources Code Sections 21080.3.1, 21080.3.2, 21082.3).

# Assembly Bill 168 – Tribal Consultation under Streamlined Ministerial Approval Process (SB 35)

Assembly Bill 168 (AB 168), enacted in September 2020, amended the Government Code Sections 65400, 65913.4, and 65941.1, to add tribal consultation requirements to housing projects which would otherwise qualify for a streamlined ministerial approval process which was mandated by Senate Bill 35 (SB 35) in 2017. SB 35 requires cities who are not meeting their

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Public Resources Code Section 5020.1(k) defines "local register of historical resources" as "a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution."

The criteria set forth in Public Resources Code Section 5024.1(c) include whether a resource: "(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage. (2) Is associated with the lives of persons important in our past. (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values. (4) Has yielded, or may be likely to yield, information important in prehistory or history."

A cultural landscape meets the criteria of Public Resources Code Section 21074(a) if it either is "included or determined to be eligible for inclusion in the California Register of Historical Resources" or is "included in a local register of historical resources" pursuant to Section 5020.1(k).

Public Resources Code Section 21084.1 defines an "historical resource" as "a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources."

Public Resources Code Section 21083.2(g) defines "unique archaeological resource" as "an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person."

Public Resources Code Section 21083.2(h) defines "nonunique archaeological resource" as "an archaeological artifact, object, or site which does not meet the criteria in subdivision (g)."

demand for housing (as per the Regional Housing Needs Assessments) to allow developers to avoid the requirement of a CEQA document if the proposed housing meeting specific requirements, such as the number of units, zoning, affordability, and avoidance of specific environmental impacts. AB 168 added a requirement to SB 35 prescribes that developers must submit a preliminary application with information about the project and the local government must conduct tribal consultation with tribes, similar to what is required by CEQA and AB 52, to identify if there are tribal cultural resources that may be impacted by the project. If impacts to tribal cultural resources are identified, the project is ineligible for SB 35 streamlining and is subject to CEQA.

#### Senate Bill 18

Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code section 65300 et seq.) and specific plans (defined in Government Code section 65450 et seq.). The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.

#### **Native American Heritage Commission**

The NAHC identifies and manages a catalog of places of special religious or social significance to Native Americans. This database, known as the Sacred Lands File, is a compilation of information on known graves and cemeteries of Native Americans on private lands and other places of cultural or religious significance to the Native American community. The NAHC also performs other duties regarding the preservation and accessibility of sacred sites and burials and the disposition of Native American human remains and burial items.

Public Resources Code sections 5097.9 through 5097.991 describe the duties and role of the NAHC and requires the cooperation of State and local agencies in carrying out their duties with respect to Native American resources.

#### **Certified Local Government**

The Certified Local Government (CLG) Program was established in 1980 to facilitate cooperation between governments at the local, state, and federal levels to promote historic preservation initiatives. The program is jointly administered by the National Park Service and each State Historic Preservation Office.<sup>23</sup> There are currently 2,074 CLGs in the United States, including 69 in California.<sup>24</sup> To become certified, a local government must meet the following requirements:

<sup>23 &</sup>quot;About Certified Local Governments," National Park Service, November 9, 2021, https://www.nps.gov/subjects/clg/about.htm, accessed January 28, 2022.

<sup>24 &</sup>quot;Certified Local Government Program," National Park Service, https://grantsdev.cr.nps.gov/CLG\_Review/Get\_All\_CLG.cfm, accessed January 28, 2022.

- Establish a qualified historic preservation commission;
- Enforce appropriate State or local legislation for the designation and protection of historic properties (in most cases this is done in the form of a local ordinance);
- Maintain a system for the survey and inventory of local historic resources;
- Facilitate public participation in the local preservation, including participation in the National Register listing process; and
- Follow additional requirements outlined in the State's CLG Procedures. Each state
  has Procedures for Certification that may establish additional requirements for becoming a
  CLG in that State.<sup>25</sup>

Redwood City attained CLG status on November 20, 1992.

#### 7.2.3 Local

As a CLG, Redwood City, has a series of policies, plans, and programs to support preservation of cultural resources. This includes a General Plan with a Historic Resources section, a Cultural Resources Management Plan (CRMP), a Historic Preservation Ordinance, and a Historic Resources Advisory Committee (HRAC) to oversee and implement the management CRMP and Historic Preservation Ordinance.

#### **Cultural Resources Management Plan**

The HRAC developed and oversees the implementation of the CRMP. The CRMP requires that project developers prepare a cultural resources plan for, "all historic site or sites which have a potential for the on-site discovery, reconnaissance and identification of cultural resources." The cultural resources plan must include: a records search completed at the NWIC, the interview of persons knowledgeable about the history of the site, and a review of maps archived at the history room of the Main Library of Redwood City and other historical data contained in the Redwood City Inventory. The cultural resources plan must also include sections on: Redwood City's historic context and the context of the project site, a history of the site's land uses, a description and photographs of all potentially significant historic structures on the site, an analysis of the potential impacts of the projects to the site, and preservation measures which address building preservation needs and methods, archaeological monitoring during ground-disturbing activities associated with the project, and that all resources identified during the project are recorded and any artifacts are donated to the City for public display. The CRMP also has standard procedures in the event of the discovery of human remains which require: work to immediately stop, the San Mateo County Coroner to be contacted, and for the NAHC to be contacted, if the human remains are found to be indigenous, to determine the most-likely-descendant (MLD) for tribal consultation. The CRMP also establishes security measures for when cultural resources are identified.

<sup>&</sup>lt;sup>25</sup> "About Certified Local Governments."

#### **Historic Preservation Ordinance**

The purpose of Redwood City's historic preservation ordinance (Chapter 40 of the Redwood City Municipal Code) is to, "provid[e] for the identification, protection, enhancement, perpetuation, and use of improvements, buildings, structures, signs, objects, features, sites, places, and areas within the City that reflect special elements of the City's historic, architectural, cultural, aesthetic, and other heritage". The ordinance establishes the HRAC and outlines its procedures and duties. It also outlines the City's Planning Commission's procedures for historic landmark designation and gives the Planning Commission oversight over Historic Preservation Permit approvals which are needed to demolish, construct, alter, remove, or relocate City-designated historic landmarks or structures within City-designated historic districts.

#### **Redwood City General Plan**

The Redwood City General Plan is a comprehensive long-range general plan for the physical development of Redwood City. <sup>26</sup> The General Plan includes goals and policies for the physical development of the City, including a section on Historic Resources. Goals and policies related to cultural resources and tribal cultural resources are listed below. These policies were developed to implement the following Guiding Principles: "ensure that change harmonizes with existing development to preserve our historic and neighborhood character" and "preserve and generate awareness of our cultural, educational, economic, recreational diversity, and historic heritage". <sup>27</sup>

- Goal BE-36: Identify, study, and document historic resources.
- *Policy BE-36.1*: Develop a detailed strategy for ongoing survey and identification of historic resources.
- *Policy BE-36.2*: Develop a citywide narrative context for historic resources.
- *Policy BE-36-3*: Continue to maintain the Historic Resources Inventory in a digital format that can be easily updated and tracked.
- Goal BE-37: Protect, preserve, restore, rehabilitate, and/or enhance historic resources.
- *Policy BE-37.1*: Enhance, restore, preserve, and protect, as appropriate, historic resources throughout the city.
- *Policy BE-37.2*: Preserve historic landmark structures, landscapes (including trees), trails, and sites that serve additional community needs, such as recreational open space and/or cultural needs.
- *Policy BE-37.3*: Encourage the retention and/or adaptive reuse of historic residential, commercial, and industrial buildings.

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The City of Redwood City, City of Redwood City General Plan, October 13, 2010, amended June 11, 2018 and January 27, 2020, https://www.redwoodcity.org/departments/community-development-department/planning-housing/planning-services/general-plan-precise-plans/general-planv, accessed January 28, 2022.

<sup>&</sup>lt;sup>27</sup> Ibid, p. BE-211.

- *Policy BE-37.4*: Consider relocation of landmark structures to vacant sites within established landmark districts when no other alternative exists for their preservation, or if a particular structure is not protected by ordinance.
- *Policy BE-37.5*: Provide incentives, support, and guidance to the owners of designated historic landmark sites to preserve and rehabilitate structures.
- *Policy BE-37.6*: Allow only compatible, historically appropriate development on vacant parcels within or adjacent to designated historic areas, neighborhoods, and/or sites in compliance with the Secretary of the Interior's Standards.
- *Policy BE-37.7*: Strive for compatibility with existing historic resources when planning for infrastructure improvements, restorations, new construction, alterations, or similar projects in designated historic districts.
- *Policy 37.8*: Permit removal of non-contributing elements of structures in or adjacent to designated historic resources to allow replacement by compatible, historically appropriate structures.
- Goal BE-38: Establish robust programs and activities that educate the public about the history and historic resources of Redwood City
- *Policy BE-38.1*: Encourage public knowledge, understanding, and appreciation of Redwood City's role in local and regional history.
- *Policy BE-38.2*: Foster civic and neighborhood pride and a sense of identity based on the recognition and use of historical and cultural resources.
- *Policy BE-38.3*: Advocate for the preservation and appropriate rehabilitation of historically significant properties and structures.
- *Policy BE-38.4*: Support and consult with private associations, groups, nonprofit organizations, corporations, school districts, and public agencies with an interest in historic preservation of significant historic resources.
- *Policy BE-38.5*: Continue to offer educational benefits on local history through National Historic Preservation Month activities.
- *Policy BE-38.6*: Develop historical walking programs using historical markers, plaques, and maps for public benefit.
- *Goal BE-39*: Emphasize and showcase the historic resources and unique character of Downtown Redwood City.
- *Policy BE-39.1*: Encourage historical resources and sites to be rehabilitated or reused in historically compatible manner.
- *Policy BE-39.2*: Encourage uses that generate pedestrian activity within the designated Downtown historic commercial districts and landmarks.
- *Policy BE-39.3*: Ensure that infrastructure, streetscape, signage, and other improvements and amenities respect the historic character of Downtown.
- *Policy BE-39.4*: Reestablish public awareness, where appropriate, of the historical significance of Redwood Creek within Downtown.

#### **DTPP**

The DTPP, as articulated in the Planning, Housing, and Economic Development Department Downtown Precise Plan (July 15, 2010), is intended to implement a contemporary vision for the City's approximately 183-acre downtown area by establishing new land use, development, and urban design regulations for a 20-year planning period.<sup>28</sup>

One of the primary objectives of the DTPP is to establish new land use and development regulations that will produce a unique and robust downtown within the context of a rich, historic, and valued built environment. These regulations would be imposed as "standards" and "guidelines." Standards would be mandatory development regulations, while guidelines would not be mandatory, but rather would be recommendations that would be used to guide new development. These standards and guidelines would address all aspects of potential development in the DTPP area, including: (1) permitted uses of property (land uses); (2) area-wide density of buildings and structures; (3) building heights and disposition (including massing and shadows); (4) architectural character (including facade design and composition); (5) site design and planning (including building placement, parking, and landscaping); (6) signage; (7) public frontages, streets, and streetscapes; and (8) preservation and maintenance of historic resources.<sup>29</sup>

# 7.3 Impacts and Mitigation Measures

# 7.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe cultural and historic resources and tribal cultural resources impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the certified DTPP Final EIR.

# 7.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5; or
- b) cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; or
- c) disturb any human remains, including those interred outside of formal cemeteries; or
- d) cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically

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The City of Redwood City, Draft Environmental Impact Report for the Redwood City Downtown Precise Plan, State Clearinghouse No. 2006052027, August 2010., p. 2-1.

<sup>&</sup>lt;sup>29</sup> Ibid.

defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Significance criteria related to tribal cultural resources was added to CEQA in 2014 with the passage of AB 52 (see Public Resources Code above). Therefore, tribal cultural resources impacts were not previously addressed, and no tribal consultation was completed for the DTPP Final EIR. Tribal Cultural Resources impact analysis, based on the 2014 significance criteria, have been combined with the Cultural Resources section to keep the analysis chapters consistently numbered with the DTPP Final EIR, since this document tiers off of the DTPP Final EIR. Impacts to paleontological resources, which were addressed in the cultural and historic resources section of the DTPP Final EIR, are addressed in section 16, Geology and Soils, of this EIR per the Governor's Office of Planning and Research's revisions to the CEQA Guidelines of 2018. Additionally, impacts to human remains were not specifically addressed in the DTPP Final EIR. Instead, they were part of the analysis for impacts to archaeological resources. Since the CEQA checklist has changed since the DTPP Final EIR, this impact is addressed separately below.

## 7.3.3 Impacts and Mitigation Measures

Overall impacts to cultural resources in the Transit District area would be reduced compared to the DTPP Final EIR because there are no known historic resources located within the Transit District area, and implementation of the proposed Transit District DTPP Amendments would not cause significant and unavoidable impacts to historic resources. Impacts on tribal cultural resources were not analyzed in the DTPP EIR and, therefore, cannot be compared.

Mitigation measure language from the DTPP Final EIR has been revised to add clarification and to improve their applicability and implementation.

Impact CR-1: Implementation of the proposed Transit District DTPP Amendments would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. (Less than Significant with Mitigation)

The DTPP Final EIR found that implementation of the DTPP would result in a *significant impact* to historic resources because future development within the DTPP area has the potential to demolish, destroy, or alter historic resources such that the significance of the resource is materially impaired. While the Transit District area is entirely within the DTPP boundaries, there are no historic resources located in the Transit District area, and implementation of the proposed Transit District DTPP Amendments would result in no direct impacts to historic resources. However, implementation of the proposed Transit District DTPP Amendments could result in indirect impacts

from construction vibration to three historic resources that are located directly across the street from the Transit District area and within the DTPP boundaries (i.e., 2603 Broadway, 53–55 Perry Street, and 1100 El Camino Real) and one previously identified potential historic resource that is located directly across Brewster Avenue from the Transit District area and outside of the DTPP boundaries (i.e., 701–713 Arguello Street). DTPP Final EIR Mitigation Measure 7-4 requires that proposed development adjacent to historic resources requiring discretionary approval be reviewed by an architect or architectural historian and be conditioned to avoid any substantial adverse changes on adjacent historic resources. DTPP Final EIR Mitigation Measure NO-3 imposes conditions of approval on all future projects involving demolition and construction activities in order to reduce ground-borne vibration levels. As a result, these two mitigation measures are sufficient to address impacts from the proposed Transit District DTPP Amendments to adjacent historic resources.

The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impact identified in the DTPP Final EIR. Mitigation Measures CR-1 and NO-3 (formerly Mitigation Measures 7-4 and 11-3 from the DTPP Final EIR with clarifying amendments) are applicable to the proposed Transit District DTPP Amendments and are sufficient to reduce this impact to a *less-than-significant* level.

Mitigation Measure CR-1 (formerly Mitigation Measure 7-4 from the DTPP Final EIR with clarifying amendments): The Project Applicant for each subsequent development project that requires a discretionary approval and that is adjacent to a historic resource shall engage a qualified architect or architectural historian approved by the City and meeting the Secretary of the Interior's Professional Qualifications Standards (36 CFR part 61) and by the City's Historic Resources Advisory Committee to review the proposed development for its potential impacts on the adjacent historic resource. Any site and architectural design modifications identified through this review process as necessary to avoid a "substantial adverse change" in the significance of the adjacent historic resource and protect its continued eligibility for listing on the California Register, as determined by the City, shall be required of the Project Applicant as conditions of project approval.

**Mitigation Measure NO-3** (formerly Mitigation Measure 11-3 from the DTPP Final EIR with clarifying amendments): The City shall reduce ground-borne vibration levels that may be generated by future site-specific demolition and construction activities by imposing conditions of approval on all future projects involving demolition and construction activities, which conditions shall require the Project Applicant to ensure the following ground-borne vibration abatement measures are implemented by the construction contractor:

- Restrict vibration-generating activity to between the hours of 7:00 AM and 5:00 PM, Monday through Friday. Prohibit such activity on weekends and holidays.
- Notify occupants of land uses located within 200 feet of pile-driving activities of the project construction schedule in writing.
- Investigate in consultation with City staff possible pre-drilling of pile holes as a means of minimizing the number of percussions required to seat the pile.
- Conduct a pre-construction site survey documenting the condition of any historic structure located within 200 feet of pile driving activities.

Monitor pile driving vibration levels to ensure vibration does not exceed appropriate
thresholds for the building (5 mm/sec [0.20 inches/sec]) peak particle velocity (ppv)
for structurally sound buildings and 2 mm/sec (0.08 inches/sec) ppv for historic
buildings.

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Significance after Mitigation: Less than Significant

Impact CR-2: Implementation of the proposed Transit District DTPP Amendments would not cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. (Less than Significant with Mitigation)

The DTPP Final EIR found that the DTPP represents a *potentially significant impact* to archaeological resources because there is a high potential for new development facilitated by the DTPP to disturb unrecorded archaeological resources. Implementation of the proposed Transit District DTPP Amendments would not change this conclusion because the boundaries of the DTPP would not change, and the Transit District area is within the DTPP boundaries and would represent a similar level of potential impact as the DTPP. DTPP Final EIR Mitigation Measure 7-1 establishes protocol to identify, evaluate, and treat any archaeological resources in the event archaeological resources are encountered during ground-disturbing activities. The CRMP also requires that a standard condition of project approval requiring preparation of a cultural resources plan be imposed on all development projects in the Transit District area.

The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impact identified in the DTPP Final EIR Mitigation Measure CR-2 (formerly Mitigation Measure 7-1 from the DTPP Final EIR with clarifying amendments), and the City's CRMP requirement, are sufficient to reduce this impact to a *less-than-significant* level.

**Mitigation Measure CR-2** (formerly Mitigation Measure 7-1 from the DTPP Final EIR, with clarifying amendments): Implementation of the following mitigation measures would reduce the potential impacts of new development facilitated by the proposed Transit District DTPP Amendments on undiscovered archeological resources to a *less-than-significant level*:

a) In the event that any deposit of prehistoric or historic archaeological materials is encountered during project construction activities, the construction contractor shall ensure that all work within an appropriate buffer area around the discovery, but not less than 50 feet, shall be stopped and a qualified archaeologist meeting federal criteria under 36 CFR 61 shall be contacted to assess the find(s) and make recommendations. The project applicant(s) shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.

In the event prehistoric or historic archaeological materials cannot be avoided by project activities, the City Community Development and Transportation Department shall confirm that the project applicant has retained a qualified archaeologist to evaluate the potential historic significance of the find(s). All archaeological material

unearthed by project construction activities shall be evaluated by the qualified archaeologist. If the find(s) are determined to not be a historical resource pursuant to CEQA Guidelines Section 15064.5(a) or a unique archaeological resource pursuant to Public Resources Code Section 21083.2(g) by the qualified archaeologist, and was not identified as a tribal cultural resource by a Native American representative, avoidance is not necessary. If the find(s) are determined by the qualified archaeologist to be a historical resource or a unique archaeological resource, the resource shall be avoided if feasible. If the City determines that avoidance is not feasible, project impacts shall be mitigated in accordance with the recommendations of the qualified archaeologist, in coordination with the City Community Development and Transportation Department, the project applicant, and in accordance with CEQA Guidelines Section 15126.4 (b)(3)(C), which requires the preparation and implementation of a data recovery plan.

The data recovery plan shall include provisions for adequately recovering all scientifically consequential information from and about any discovered archaeological materials and include recommendations for the treatment of these resources. In-place preservation of the archaeological resource is the preferred manner of mitigating potential impacts, as it maintains the relationship between the resource and the archaeological context. In-place preservation also reduces the potential for conflicts with the religious or cultural values of groups associated with the resource. Other mitigation options include, but are not limited to, the full or partial removal and curation of the resource.

The City Community Development and Transportation Department shall confirm that the project applicant has retained a qualified archaeologist for the preparation and implementation of the data recovery plan, which shall be conducted prior to any additional earth-moving activities in the area of the resource. The recovery plan shall be submitted to the project applicant, the City Community Development and Transportation Department. Once the recovery plan is reviewed and approved by the City Community Development and Transportation Department and any appropriate resource recovery completed, project construction activity within the area of the find may resume. A data recovery plan shall not be required for resources that have been deemed by the qualified archaeologist, in coordination with the City, as adequately recorded and recovered by studies already completed as per CEQA Guidelines Section 15126.4 (b)(3)(D). The qualified archaeologist shall determine the need for archaeological construction monitoring in the vicinity of the find thereafter.

b) Prior to the issuance of grading permits within the Transit District area, the City Community Development and Transportation Department shall confirm that any development applicant has required all construction crews to undergo training for the identified of federal or state-eligible cultural resources, and that the construction crews are aware of the potential for previously undiscovered archaeological resources within the plan area, of the laws protecting these resources and associated penalties, and of the procedures to follow should they discover cultural resources during project-related work. All future individual development projects proposed in the Transit District area will be subject to applicable CEQA review and evaluation requirements, and to the extent that such projects are found to have the potential to disturb or destroy archaeological resources, appropriate mitigation measures would be required to address any identified significant impacts.

# Impact CR-3: Implementation of the proposed Transit District DTPP Amendments would not disturb any human remains, including those interred outside of formal cemeteries. (*Less than Significant*)

Through a records search and background research, no human remains are known to exist in the Transit District area. Therefore, the proposed Transit District DTPP Amendments are not anticipated to impact human remains, including those interred outside of formal cemeteries. While unlikely, if any previously unknown human remains were encountered during ground disturbing activities facilitated by the proposed Transit District DTPP Amendments, any impacts to the human remains could be potentially significant. However, any potentially significant impact would be reduced to a less than significant level with implementation of PRC Section 5097.98 and Health and Safety Code Section 7050.5. This requires that if human remains are identified, the County Coroner will be contacted and who will determine if the human remains are historical, prehistoric, or a crime scene. If the coroner determines the remains are Native American, the coroner will contact the NAHC. As provided in PRC Section 5097.98, the NAHC will identify the person or persons believed most likely to be descended from the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains, and any associated grave goods as provided in PRC Section 5097.98.

The DTPP Final EIR did not specifically address impacts associated with human remains, including those interred outside of formal cemeteries. The proposed Transit District DTPP Amendments would not result in new or more severe impacts than identified in the Final EIR because the requirements of PRC Section 5097.98 and Health and Safety Code Section 7050.5 are sufficient to reduce this impact to a *less-than-significant* level.

Impact CR-4: Implementation of the proposed Transit District DTPP Amendments would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. (Less than Significant with Mitigation)

As described above in the *Environmental Setting*, there are no pre-contact indigenous resources known in the DTPP or Transit District areas, although there is an indigenous resource within 550 feet of the DTPP and 1,400 feet from the proposed Transit District boundary. Additionally, there may be previously unknown buried archaeological resources and/or tribal cultural resources that have not been recorded. No tribal cultural resources have been identified during tribal consultation. And the NAHC SLF search did not identify sacred lands within the DTPP.

While the City is largely a built-up urban environment, implementation of the proposed Transit District DTPP Amendments would result in gradual physical changes within this portion of the City, including an increase of development with a focus on transit-oriented commercial and residential spaces. While these changes would be distributed across the approximately 16.6-acre Transit District area and would comprise a substantial intensification or concentration of physical

development, physical development under the proposed Transit District DTPP Amendments could lead to the demolition of indigenous archaeological resources and/or tribal cultural resources. Additionally, infrastructure or other public works improvements could result in damage to or demolition of these kinds of resources.

As detailed in the *Regulatory Setting* above, there are federal, state, and local regulations in place to protect tribal cultural resources, including archaeological resources and human remains. CEQA requires lead agencies to determine, prior to approval, if a project would have a significant adverse effect on historical resources, tribal cultural resources, or unique archaeological resources and requires the lead agency to make provisions for the inadvertent discovery of historical or unique archaeological resources during construction, including tribal cultural resources.

As described previously in this section, SB 18 requires local governments to consult with tribes prior to making certain planning decisions and provides California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to cultural places. In accordance with the requirements of SB 18, City staff conducted Native American outreach and consultation efforts. As a part the SB 18 process for the proposed Transit District DTPP Amendments, City staff sent tribal outreach letters to the ten Native American representatives from eight tribes that were identified by the NAHC to consult on the proposed Transit District DTPP Amendments. No responses were received within 90 days of receipt of the consultation letters, and no responses have been received as of April 27, 2022.

Locally, the City's Historic Preservation Ordinance established a historic landmark designation governing body, the HRAC, criteria for designation, and regulations for modifications to designated landmarks. In addition, the CRMP requires that developers prepare a cultural resources plan, conduct a records search at the NWIC, conduct ethnographic research with people who may be knowledgeable about the site, map research, and methods to address potential impacts to cultural resources from the project. Additionally, Mitigation Measure CR-2 (formerly Mitigation Measure 7-1 of the DTPP Final EIR with clarifying amendments) establishes protocol in the event of inadvertent discovery of cultural resources during project construction. Also, revisions to the Public Resources Code and the Government Code by AB 52 and AB 168 require local governments to consult with tribes during the review process for CEQA and for housing development projects that would otherwise be exempt from CEQA under changes made to the Government Code by SB 35.

The proposed Transit District DTPP Amendments would not result in new or more severe impacts on tribal cultural resources than the impacts identified in the DTPP Final EIR. Mitigation Measure CR-2 (formerly Mitigation Measure 7-1 from the DTPP Final EIR with clarifying amendments), in conjunction with the policies, laws, and procedures established by the City and the State of California, are sufficient to reduce this impact to a *less-than-significant* level because the combination of the mitigation measure, the CRMP, and existing laws establishes sufficient protocol to identify, evaluate, and treat any tribal cultural resources which may be impacted by ground-disturbing projects in the Transit District area.

Mitigation: Implement Mitigation Measure CR-2.

Significance After Mitigation: Less than Significant

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#### 7.4 References

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# **CHAPTER 8**

# **Public Services and Recreation**

This SEIR chapter analyzes the effects of the changes to public services and recreation proposed as part of the Transit District, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

#### Findings of the DTPP Final EIR

Topics related to public services and recreation were addressed in the Public Services chapter of the 2010 Final EIR. The DTPP Final EIR determined that impacts of the DTPP related to police service, fire and emergency medical service, parks and recreation, and schools would be less than significant. Regarding police service and fire and emergency medical service, an increase in calls for service as a result of the DTPP was found to require expanded police patrols and potentially a police sub-station, and additional fire and emergency medical service personnel and equipment in the future to maintain acceptable service ratios and response times. However, since specific needs in terms of size, staffing, equipment, and location were unknown, associated impacts were deemed speculative, and as a result, it was concluded impacts on police and fire and emergency medical service were less than significant. The DTPP proposed several public space and streetscape improvements, including a public park (in conjunction with the Redwood City School District), the construction of which were found to result in less than significant environmental impacts. Future development under the DTPP was described to also be subject to Parks, Recreation, and Community Services Department Strategic Plan policies and applicable parkland dedication or in-lieu fee requirements, and new parkland could be provided inside or outside of the DTPP area in the future. However, similar to police and fire service, specific parks and recreational facilities expansion needs under the DTPP were unknown and associated impacts were deemed speculative, and as a result, impacts on parks and recreational facilities were found to be less than significant. Although development under the DTPP would increase density and population in the DTPP area resulting in additional school-aged children, it was determined that the payment of required school impacts fees would address the DTPP impact on school services, and as a result, impacts of the DTPP on public schools were determined to be less than significant.

Analysis of DTPP impacts related to solid waste were included in Public Services chapter of the DTPP Final EIR. See Chapter 10, *Utilities and Infrastructure*, of this SEIR for the discussion of solid waste. The Public Services chapter of the DTPP Final EIR also included analysis of impacts related to impairment or interference with an adopted emergency response plan or emergency evacuation plan. This topic is discussed in Chapter 14, *Hazards and Hazardous Materials*, of this SEIR.

# 8.1 Environmental Setting

#### 8.1.1 Police Service

#### **Redwood City Police Department**

The Redwood City Police Department (RCPD) provides police services in the City including responding to emergency and non-emergency calls for service. The RCPD is comprised of a Patrol Division, an Investigations Division, and an Administrative Division. RCPD Headquarters is located at 1301 Maple Street, in the Bair Island neighborhood of the City, north of US Highway 101. A RCPD Substation is located Downtown within the DTPP area at 2223Broadway, within the larger Fox Theater building.

The RCPD Patrol Division also contains the Downtown Services Unit, created in 2016 as a policing adaptation designed to effectively address public safety needs in the Downtown core area. The Downtown Services Unit utilizes various modalities of patrol, including traditional foot patrols, bicycle patrols, and vehicle patrols. Downtown Services Unit members proactively interact with Downtown business owners and operators, as well as patrons and residents in order to maintain collaborative relationships that support the Downtown community. The Sequoia Station Shopping Center is also included in the areas patrolled by the Downtown Services Unit (Redwood City, 2022a).

RCPD staffing included 121 full-time equivalent employees in 2021, including sworn and non-sworn personnel (Redwood City, 2021a). As of January 2022, there were 83 sworn officers.<sup>1</sup> There are 96 sworn officers budgeted with 9 of those positions frozen by the City and unable to be filled. These staffing levels allow for what RCPD considers minimal, basic service levels, and patrol coverage is supplemented by overtime officers on almost every shift, every day.

RCPD has a response time service goal of 5 minutes for emergency calls. As of January 2022, RCPD is generally meeting City standards, with the first officer arriving on scene within 5 minutes. However, many of the most serious calls or potentially serious calls require a multi-unit response before officers can safely start to handle the call, so the first officer may arrive on the scene of a call within 5 minutes, but the second officer may not arrive for another 5 or 6 minutes so that actual action can be taken (RCPD, 2022). Redwood City is also participating in San Mateo County's two-year Community Wellness and Crisis Response Pilot Project that looks to deescalate 911 calls and provide care for those undergoing a mental health crisis. Emergency dispatchers deploy mental health clinicians along with police officers to calls regarding individuals suspected of experiencing mental or behavioral health crises (Climate Online, 2021).

Ongoing maintenance and upgrades to RCPD Headquarters building's roof, locker rooms, and the painting of its exterior walls and fence is included in the most recent Five-Year Capital Improvement Program (CIP) covering Fiscal Year (FY) 2021-22 through FY 2025-26 (Redwood City, 2021b).

<sup>8</sup> of these officers are unavailable due to long-term injury leave or long-term disability.

#### San Mateo County Sheriff's Office

The San Mateo County Sheriff's Office Transit Police Bureau is the contracted law enforcement provider on behalf of the San Mateo County Transit District (SamTrans) and the Peninsula Corridor Joint Powers Board (Caltrain). The bureau, which includes approximately 16 officers, is responsible for policing all SamTrans' buses, kiosks, vehicles and facilities, as well as all Caltrain rail equipment, stations, rights-of-way and facilities throughout San Francisco, San Mateo and Santa Clara counties. The Transit Police is also responsible for the investigation of crimes, collisions, accidents and deaths involving SamTrans buses and Caltrain passenger trains (San Mateo County Sheriff, 2021).

# 8.1.2 Fire and Emergency Medical Service

The Redwood City Fire Department (RCFD) is responsible for fire prevention and suppression, medical response, and property protection within the City. There are five RCFD fire stations (Stations 9, 10, 11, 12, and 20) in the City. The RCFD is headquartered at 755 Marshall Street (Station 9), which is located within the DTPP area. Station 9 houses the RCFD's Administrative Staff and Fire Prevention Bureau on the third floor. The first and second floors house the Suppression Crews: Engine 9, Truck 9, Reserve Truck 109, Breathing Support 9, and Battalion 3. Station 9 also houses the City's Alternate Emergency Operations Center and the County's Alternate Fire Dispatch Center. The next two closest fire stations to the DTPP area are Station 10 (2190 Jefferson Avenue) and Station 11 (1091 Second Avenue) (RCFD, 2022a). RCFD works on a daily basis with American Medical Response, a company providing paramedic ambulance service under a joint powers agreement. All fire units are equipped with advanced life support equipment and a paramedic (Redwood City, 2010).

As of April 2022, RCFD staffing included 58 full-time firefighting personnel, including 41 firefighters and 17 Fire Captains (RCFD, 2022b). The RCFD has a minimum daily staffing requirement of 20 on-duty staff per day, which allows them to reach their goal of responding to calls for service within five minutes at least 85 percent of the time (Redwood City, 2010). RCFD has indicated that current staffing levels are not meeting RCFD standards. There is one unfilled Fire Captain position budgeted that is vacant and the City has agreed to hire an additional 3 firefighters from the City budget on a 2 year pilot program. Additionally, RCFD is pursing grant opportunities to hire an additional 6 firefighters to more adequately staff the Department (RCFD, 2022b).

RCFD handled approximately 11,800 emergency response calls in 2021 (Redwood City, 2021). The average response time for RCFD in Fiscal Year 2020-21 was 5 minutes and 53 seconds. RCFD's response time target is 5 minutes, and the County's industry standard response time is 6 minutes and 59 seconds (RCFD, 2022b).

Two fire station-related projects are included in the most recent Five-Year Capital Improvement Program (CIP) covering FY 2021-22 through FY 2025-26: replacement of Station 12 to improve response capabilities for RCFD's oldest facility (budgeted for FY 2022-23 to 2024-25) and updating and expanding Station 9 to meet staffing needs (budgeted for FY 2022-23 to FY 2023-24) (Redwood City, 2021b).

#### 8.1.3 Parks and Recreation

# Redwood City Parks, Recreation and Community Services Department

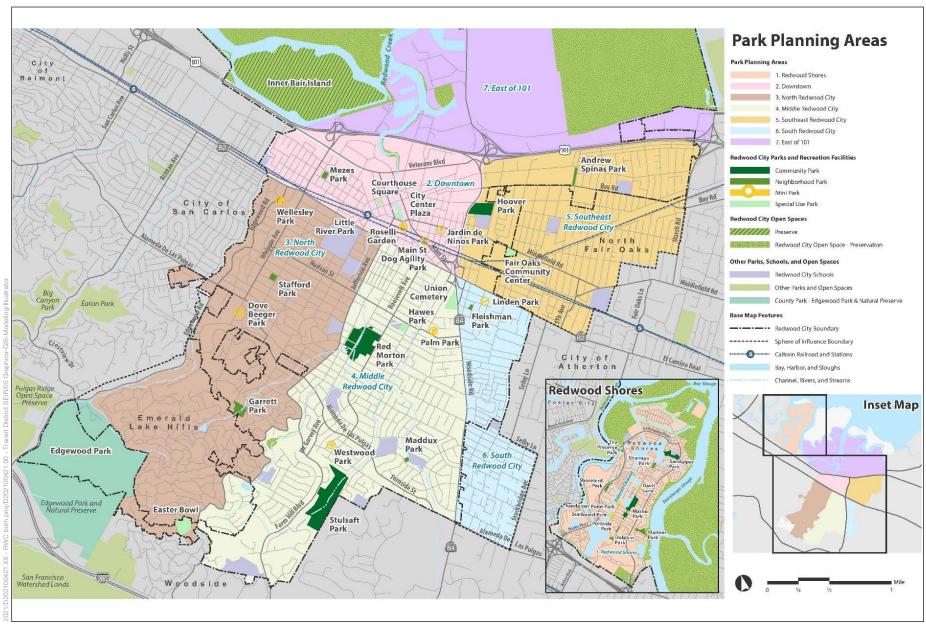
The Redwood City Parks, Recreation and Community Services Department manages parks and recreation facilities in the City, and is divided into two main divisions, consisting of the Parks and Facilities division and the Recreation and Community Services division.

Redwood City has approximately 230 total acres of active parkland across 52 parks. Active parkland is defined as land owned by Redwood City or another public agency, located within City limits and having active recreational value. The City owns and maintains 38 parks totaling approximately 186 acres. The remaining 14 parks and approximately 44 acres are "school parks," which include sports fields and play areas. The sports fields at school parks host sports leagues and recreational activities year-round in the afternoons, evenings, weekends and everyday over the summer vacation. However, school parks are not permanently dedicated to the public for recreational use and current public access is supported by joint use agreements.

The City classifies its parks as one of six park types, which allow the City to identify active recreation facilities and apply standards consistently across the system (Redwood City, 2019):

- **Mini Park.** Small, single-purpose improved area generally equipped for use by small children. Usually less than one acre.
- **Neighborhood Park.** Combined playground and park area generally for non-organized activities. May include a restroom.
- Community Park. Designed for organized activity with users traveling from some distance. Includes parking, sports fields and restrooms.
- **Special Use Park.** Specialized use recreational areas that do not fit another category, such as dog parks and skate parks.
- **School Park.** School-owned facilities with limited availability. Typically, only active sport and recreational use areas contribute to school park acreage.
- Open Space. Undeveloped, publicly-owned areas for rest, relaxation and contemplation.

The Redwood City Parks, Recreation and Community Services Department has divided the City's service area into seven recreational planning areas. The Downtown Recreational Planning Area, which includes the Transit District area and DTPP, contains seven City-owned parks totaling approximately 3.46 acres, and one school park totaling approximately 0.49 acres, as shown in **Table 8-1** and illustrated in **Figure 8-1**. The DTPP itself contains four City-owned parks, totaling approximately 1.52 acres: Little River Park, Roselli Garden, Courthouse Square, and City Center Plaza. Other City-owned open spaces in the DTPP include Theater Way, City Hall courtyard, Library Plaza, Depot Plaza, Broadway/Spring Parklet, Broadway/Arguello Parklet; Arguello Plaza (anticipated to be removed) and Spring/Marshall Parklet (anticipated to be removed).



SOURCE: Redwood City, 2020 Transit District DTPP Amendments SEIR



Table 8-1
Parks within the Downtown Recreational Planning Area

Park Classification	Acreage	
Neighborhood Park	1.39	
Mini Park	0.08	
Mini Park	0.64	
Mini Park	0.41	
Special Use Park	0.65	
Special Use Park	0.15	
Special Use Park	0.14	
Total	3.46	
School Park	0.49	
	Neighborhood Park Mini Park Mini Park Mini Park Special Use Park Special Use Park Special Use Park Total	

SOURCE: Redwood City, 2019.

The City has 10 sports fields for soccer, softball, baseball and flag football, although none are located within the DTPP area. These include major facilities such as The Red Morton Community Park, Hoover Park, Sandpiper Field, and Marlin Park. The closest athletic field to the proposed Transit District is the baseball diamond and soccer field at Hawes Park located approximately 0.7 mile to the south, although Mezes Park within the Downtown Recreational Planning Area does contain tennis courts, a half basketball court, and a handball court. The City also operates 5 community centers that host a variety of programs, services, classes, meetings, and events. These include the Red Morton Community Center, the Veterans Memorial Senior Center, the Community Activities Building, the Sandpiper Community Center, and the Fair Oaks Community Center (Redwood City, 2022b). The closest community center to the proposed Transit District is the Red Morton Community Center located approximately 0.8 mile to the south.

## Regional Recreational Resources

Bair Island, in northern Redwood City, is part of the Don Edwards San Francisco Bay National Wildlife Refuge managed by the U.S. Fish and Wildlife Service. Inner Bair Island, a salt marsh that is being restored, contains two trails and wildlife viewing platforms. The 1.7 and 0.3-mile one-way trails also comprise a segment of the San Francisco Bay Trail, providing hiking bicycling opportunities (USFWS, 2022).

Edgewood Park and Natural Preserve, located in southwestern Redwood City, is managed by the San Mateo County Parks Department. The serpentine grasslands of Edgewood Park and Natural Preserve are known for their displays of wildflowers each spring. The park's approximately 467 acres of woodlands and grasslands contain trails offering opportunities for hiking, trail running, and horseback riding. There are also several drop-in picnic sites and restrooms (San Mateo County Parks, 2022).

#### 8.1.4 Schools

#### **Redwood City School District**

The Redwood City School District (RCSD) is a Pre-K-8th grade district serving approximately 6,700 students in Redwood City and portions of Atherton, Menlo Park, San Carlos, and Woodside. RCSD 8th graders feed into the Sequoia Union High School District (SUHSD) (see below). The proposed Transit District is located within the attendance boundary for Clifford School that includes transitional kindergarten through the 8th grade. All of RCSD school facilities had a capacity of 8,300 as of 2018 (RCSD, 2018). Total RCSD student enrollment was approximately 8,086 in school year 2020/2021, meaning that enrollment did not exceed facilities capacity. Student enrollment at Clifford School was 608 in school year 2020/2021, which was an increase from the previous three school years, but lower than enrollment in school year 2014/2015 of 727 (CDE, 2022).

As authorized by California Government Code Sections 65995 and 65996, RCSD collects school impact fees from developers of new residential building space. The impact fee revenue is used together with other RCSD funds (e.g., State grants, general obligation bonds) to complete capital improvements. The amount of the current fee was established through RCSD's Developer Fee Justification Study (RCSD, 2018).

#### **Sequoia Union High School District**

The Sequoia Union High School District (SUHSD) provides education to students in grades 9 through 12 residing in the southern San Mateo County communities of Atherton, Belmont, East Palo Alto, Ladera, San Carlos, Menlo Park, Portola Valley, Redwood City, and Woodside. The DTPP and proposed Transit District lie within the attendance boundary for Sequoia High School within the SUHSD. Collectively, the SUHSD's school facilities in have a capacity of approximately 10,062 students (SUHSD, 2018). Student enrollment was 10,327 in school year 2020/2021, meaning that student enrollment exceeded facilities capacity in school year 2020/2021. Student enrollment has generally been increasing in the SUHSD since school year 2014/2015. Student enrollment for Sequoia High School was 2,019 in school year 2020/2021. Enrollment has been decreasing at Sequoia High School since school year 2016/2017 when student enrollment was 2,182 (CDE, 2022).

As authorized by California Government Code Sections 65995 and 65996, SUHSD collects school impact fees from developers of new residential and non-residential building space. The impact fee revenue is used together with other SUHSD funds (e.g., State grants, general obligation bonds) to complete capital improvements. The amount of the current fee was established through SUHSD's Developer Fee Study (SUHSD, 2018).

#### 8.1.5 Libraries

The Redwood City Public Library (RCPL) Department operates the Redwood City Downtown Library (1044 Middlefield Road), the Redwood Shores Branch Library (399 Marine Parkway), and the Schaberg Branch Library (2140 Euclid Avenue) within the City. The RCPL provides

book and other media lending, online resources, literacy programs, support for school-age children, access to technology, and other community programming (RCPL, 2022). In 2021, the Institute of Museum and Library Services announced RCPL as one of 30 finalists for the 2021 National Medal for Museum and Library Service. The National Medal is the nation's highest honor given to museums and libraries that demonstrate excellence in service to their communities (IMLS, 2021).

The population of Redwood City, particularly in the downtown area, has increased dramatically since the Downtown Library was built. Various modifications have been made to sections of the building to better address customer needs, but there is limited flexibility remaining in the existing space. The Downtown Library does not need additional space for library materials, as careful maintenance of the existing collection and the addition of eBooks and other online resources has provided some improvement, but existing spaces are needed for RCPL patrons. Event and activity spaces, seating, and community meeting rooms are all inadequate to meet current demand. A study to identify needs and opportunities for expansion of the current Downtown Library facility in FY 2022-23 is included in the most recent Five-Year Capital Improvement Program (CIP) covering Fiscal Year (FY) 2021-22 through FY 2025-26 (Redwood City, 2021b).

# 8.2 Regulatory Setting

The following section focuses on any changes to the regulatory setting that have occurred since certification of the DTPP Final EIR. Section 8.2 of DTPP Final EIR Chapter 8, *Public Services*, includes the regulatory setting for this topic and is still current for this SEIR, except where noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

#### 8.2.1 Parks and Facilities Needs Assessment

The 2019 Parks and Facilities Needs Assessment has superseded the 2008 Parks and Facilities Needs Assessment included in the DTPP Final EIR. The goal of the 2019 Parks and Recreation Facilities Needs Assessment was to evaluate the community's current and future needs with regards to parks and recreation services, and aimed to identify highly used services, service gaps and underserved areas, prioritize potential improvements, and provide strategic direction and actionable items for successful implementation (Redwood City, 2019).

# 8.2.2 Downtown Parks and Bay Connectivity Project

In 2017, the Redwood City Council established a goal to create a network of great open spaces throughout the City by connecting downtown, parks, open spaces, creeks, schools, and other points of interest such as Courthouse Square. The following year the Parks Department prepared the Downtown Parks Site Assessment and Feasibility Study for the selection of city-owned sites to transform for the purpose of open space in the downtown (Redwood City, 2018). As of January 2022, a vision plan is under development for three downtown parks that feed a green linear park that resonates with the existing open space and further connects downtown to Redwood Creek and the waterfront under a phased approach (Redwood City, 2022c). Two new park locations

have been identified in the Downtown Area as part of this project, one at Library Lot A that would connect to the existing Roselli Garden and Mini-Park, and one at the City Hall Parking Lot on Main Street.

# 8.2.3 Redwood City General Plan

The City of Redwood City General Plan (General Plan) establishes the key goals, policies, and programs for the physical development of the City through 2030. Goals and policies relevant to public services and recreation include the following:

- Goal BC-1: Provide 3.0 acres of park space for every 1,000 residents.
- *Policy BC-1.1*: Require parkland dedications and/or provision of on-site usable public space for significant development projects involving new residential construction.
- *Policy BC-1.2*: Maintain development fee programs to accumulate funds for the acquisition and improvement of parks and public/community places and facilities.
- *Policy BC-1.3*: Enhance street corridors, parkways, and public property between buildings to serve as functional recreation and green space.
- *Policy BC-1.4*: Develop guidelines for non-residential development projects to incorporate accessible plazas, paseos, and other public places.
- *Policy BC-1.5*: Consider all opportunities to create and acquire land for parks, community gardens, rooftop gardens, and community gathering places.
- *Policy BC-1.6*: Continue to consult with the school districts and Cañada College to supplement City park facilities with those of the districts and college.
- Goal BC-2: Create complete neighborhoods wherein every Redwood City resident lives within easy and safe walking distance of a park or community space.
- Policy BC-2.1: Develop some form of park or usable public green space within the following neighborhoods and centers: Downtown, Centennial, Stambaugh-Heller, Oak Knoll-Edgewood Park, Redwood Oaks, Friendly Acres, Redwood Village, Fair Oaks, and the Bayfront.
- *Policy BC-2.2*: Prioritize acquisition of land for active parks in areas where population is anticipated to grow and/or parkland is deficient.
- *Goal BC-3*: Ensure that public places evolve to meet the needs of changing city demographics and public interests and are accessible to all members of the community.
- *Policy BC-3.1*: Incorporate flexible design characteristics into the renovation of existing and development of new parks and community facilities. Consider incorporating education with recreation opportunities.
- *Policy BC-3.2*: Continue to build, renovate, and maintain parks and community facilities in a manner that is environmentally responsible.
- *Goal BC-4*: Provide state-of-the-art community facilities that support established programs, accommodate future needs, and are accessible to all members of the community.

- *Policy BC-4.3*: Include in the City's Capital Improvement Program programming and funds for timely community facility improvements.
- Goal BC-5: Create and maintain a system of trails, sidewalks, linear parks, and other connections that provide residents in all neighborhoods with opportunities to exercise, enjoy nature, and get to destinations without using a car.
- *Policy BC-5.3*: Provide connection between regional trails, county trails, and other jurisdictions' trail systems.
- *Policy BC-5.5*: Develop a strategy for the reclaiming of Redwood Creek as a functional natural waterway with recreation amenities along its banks.
- *Goal BC-6*: Provide recreation and human service programs and activities commensurate with identified community need.
- *Policy BC-7.1*: Provide convenient access to parks and other outdoor spaces for residents of all ages and income levels.
- Goal BC-8: Provide opportunities for residents of all ages and backgrounds to access high-quality education services that maximize each individual's potential.
- *Policy BC-8.7*: Continue to house libraries in attractive and inviting facilities capable of comfortably accommodating residents of all ages.
- *Policy BC-8.8*: Use development impact fees to fund library facilities, equipment, and programs that are needed as a result of new development projects.
- Goal PS-11: Provide a high level of public safety services.
- *Policy PS-11.1*: Work with the Police Department to determine and meet community needs for law enforcement services.
- *Policy PS-11.2*: Work with the Fire Department to determine and meet community needs for fire protection and related emergency services.

# 8.3 Impacts and Mitigation Measures

## 8.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe public services and recreation impacts that would result from implementation of the Transit District, in relation to the certified DTPP Final EIR.

# 8.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the Transit District would:

a) result in substantial adverse physical impacts associated with the provision of new or
physically altered governmental facilities, need for new or physically altered governmental
facilities, the construction of which could cause significant environmental impacts, in order to

maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- i. Fire protection
- ii. Police protection
- iii. Schools
- iv. Parks
- v. Other public facilities; or
- b) increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- c) include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

As discussed above, while analysis of impacts related to solid waste were included in Chapter 8, *Public Services*, of the DTPP Final EIR, topics related to solid waste are analyzed in Chapter 10, *Utilities and Infrastructure*, of this SEIR, to align with Appendix G of the CEQA Guidelines. Chapter 8 of the DTPP Final EIR also included analysis of impacts related to impairment or interference with an adopted emergency response plan or emergency evacuation plan. Similarly, this topic is discussed in Chapter 14, *Hazards and Hazardous Materials*, of this SEIR.

## 8.3.3 Impacts and Mitigation Measures

Overall impacts of the Transit District on public services and recreation would be generally the same as those identified in the DTPP Final EIR, as further described below.

Impact PS-1: Implementation of the Transit District would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection. (*Less than Significant*)

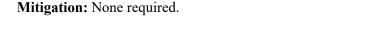
The DTPP Final EIR found that an increase in calls for service as a result of the DTPP would require expanded police patrols and potentially a police substation to maintain acceptable service ratios and response times. However, since specific needs in terms of size, staffing, equipment, and location were unknown, associated impacts were deemed speculative, and as a result, impacts on police service were found to be less than significant. Since adoption of the DTPP, a police substation has been established within the DTPP area located at 2223 Broadway as described above in Section 8.1.1, *Police Service*.

Development within the proposed Transit District would result in an increase in population and thus an increase in demand for police protection services from the RCPD. As discussed in Section 8.1.1, RCPD has 83 sworn officers as of January 2022. Based on the 2020 population of approximately 84,300 (see Chapter 5, *Population and Housing*), the existing officer to resident ratio is approximately 0.98 officers per 1,000 residents. With the addition of 2,510 potential

residents within the proposed Transit District (see Chapter 5), the ratio would be approximately 0.96 officers per 1,000 residents. While there is no adopted officer-to-resident service ratio in the City, the increase in population and associated increase in calls for service is likely to incrementally increase demand for additional police personnel. Additionally, the approximately 7,080 new employees from the increase in office space as a result of the proposed Transit District DTPP Amendments would contribute to an increase in demand for additional police personnel (mainly during daytime and early evening working hours).

Development within the Transit District area would increase overall demand on police services in the City and within the Downtown area. RCPD has indicated that the Transit District area and Sequoia Station is already an area that generates notable calls for service and quality of life calls, such as issues involving homelessness and metal health checks. The Sheriff's Office Transit Bureau is responsible for some aspects of policing transit hubs, but RCPD still responds to most in-progress calls in their area, although they may eventually take the report. As discussed in Section 8.1.3, *Environmental Setting*, while RCPD is currently meeting City response time service goals of responding to emergency calls within 5 minutes, this is measured by the first officer arriving on scene, and action on emergency calls may take longer if a multi-unit response is required. For this reason, the proposed Transit District is also likely to require additional police personnel within the Downtown area. Additional officers would be allocated over time through the City's annual budget process.

With the addition of approximately 1,100 residential units in the proposed Transit District, an area that is traditionally impacted disproportionally by calls for service and quality of life calls, it is reasonable to believe new facilities and equipment may be needed in the future, but cannot be specified by RCPD at this time (RCPD, 2022). Should RCPD determine that an additional police substation or community policing center is necessary within the DTPP area, the facility would likely be incorporated into an existing or otherwise-planned structure similar to the existing Downtown Substation, and would generate no new or more severe impacts on police services beyond those identified in the DTPP Final EIR. Therefore, the impact on police protection services would be *less than significant*.



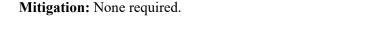
Impact PS-2: Implementation of the Transit District would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection and emergency medical response service. (*Less than Significant*)

The DTPP Final EIR found that an increase in calls for service as a result of the DTPP was found to require additional fire and emergency medical service personnel and equipment in the future to maintain acceptable service ratios and response times. However, since specific needs in terms of size, staffing, equipment, and location were unknown, associated impacts were deemed

speculative and as a result, impacts on fire and emergency medical service were found to be less than significant.

Development within the Transit District would result in an increase in population and thus an incremental increase in demand for fire protection and emergency medical response services from the RCFD. The average response time for RCFD in Fiscal Year 2020-21 was 5 minutes and 53 seconds, which did not meet RCFD's response time target of 5 minutes. However, this response time did meet the County's industry standard response time of 6 minutes and 59 seconds (RCFD, 2022b). The increase in population as a result of the Transit District would be expected to generate the typical range of service calls, including fire, emergency medical service, and other incidents and would contribute to the existing deficiency in response times. Additionally, RCFD has indicated that current staffing levels are not meeting RCFD standards (RCFD, 2022b). While efforts are underway to increase staffing (as discussed in Section 8.1.2), the increased demand for service as a result of the proposed Transit District DTPP Amendments would contribute to the need for more RCFD personnel. New fire personnel, vehicles, and equipment would be required to provide adequate response times to serve future development (RCFD, 2022b). Additional firefighters and fire personnel would be allocated over time through the City's annual budget process.

As updating and expanding Station 9 to meet staffing needs was included in the most recent Five-Year CIP covering FY 2021-22 through FY 2025-26, additional fire facilities are not expected to be required to serve the population that could result from the proposed Transit District DTPP Amendments.<sup>2</sup> However, if and when the construction or expansion of facilities to accommodate additional personnel or equipment becomes necessary, environmental review under CEQA, General Plan provisions, and City and Zoning Code regulations would all apply, and thereby avoid significant environmental impacts. The proposed Transit District DTPP Amendments would generate no new or more severe impacts related to fire protection or emergency medical services beyond those identified in the DTPP Final EIR. Therefore, the impact on fire protection and emergency medical response services would be *less than significant*.



Impact PS-3: Implementation of the Transit District would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. (*Less than Significant*)

The DTPP Final EIR found that impacts related to the increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated would be less than significant.

The Fire Station 9 expansion is still in the planning phase, but given its urban location and that it would involve expansion of the existing 2<sup>nd</sup> and 3<sup>rd</sup> floors, a categorical exemption or negative declaration would likely be prepared and the expansion would not result in significant impacts.

Development within the proposed Transit District would result in an increase in population and thus an increased use in existing parks and recreation facilities serving the City. The increase in residents as a result of the Transit District would result in an increase in use of existing Cityowned parks and recreational facilities, especially since the Downtown area does not contain athletic fields, community centers, or a large amount of park area. However, the population increase and resulting use of existing City park and recreation facilities would occur over time as individual projects are developed. Individual projects developed within the Transit District would be subject to the City's Parks Impact Fee and parkland dedication requirements (or Parkland In-Lieu Fee), which require either dedicating land to serve new residents, constructing new park amenities, and/or paying fees to offset the increased costs of providing new park facilities or park improvements for new development. The fees also allow the City to improve existing parkland and intensify the use of current recreational resources so that they can accommodate more users.

As discussed in Section 8.1.3, *Environmental Setting*, Redwood City residents also use nearby regional recreation facilities at Bair Island and Edgewood Park and Nature Preserve to meet their recreational needs. New residents within the proposed Transit District would be expected to use these facilities from time to time; however, given the vast size of the Edgewood Park and Nature Preserve facilities and the limited lengths of the Inner Bair Island trails, and the relatively infrequent usage that future residents would make of them, the proposed Transit District would not result in their substantial deterioration. A modest increase in usage of built facilities, such as picnic areas, restrooms, and parking facilities, could result from development within the proposed Transit District; however, this incremental growth would not be likely to trigger the construction of new built facilities over and above that already foreseen in the long-range planning documents for these regional park facilities.

Future development projects within the proposed Transit District would also be subject to the open space development requirements in the Redwood City Zoning Code. These may include portions of the sites being reserved for open space and landscaping, and ground-level private, quasi-public, or public open space. Open space in future development projects would be expected to absorb a small portion of the demand for parks and recreational facilities by new residents.

While the proposed Transit District DTPP Amendments would increase the use of existing City parks and recreational facilities, individual projects developed within the proposed Transit District would be subject to the City's Parks Impact Fee and parkland dedication requirements (or Parkland In-Lieu Fee), which would fund improvements to existing facilities as a result of increased demand. The increased demand on existing regional parks would also not substantially increase or accelerate the physical deterioration or degradation of existing parks and recreation facilities, as these areas are much larger in size and have planned for regional recreational use. In addition, open space developed as a result of requirements for individual projects within the proposed Transit District would also absorb a small portion of the demand for parks and recreational facilities by new residents. Therefore, there would be no new or more severe impacts from the accelerated physical deterioration of parks and recreation resources associated with the Transit District than the impact identified in the DTPP Final EIR. This impact would be *less than significant*.

Mitigation: None required.

Impact PS-4: Implementation of the Transit District would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (Less than Significant)

The DTPP proposed several public space and streetscape improvements, including a public park (in conjunction with the School District), the construction of which were found not to result in significant environmental impacts. Within what is now the Transit District area, the DTPP proposed Hamilton Green, a linear open space within the planned Hamilton Street between El Camino Real and the Caltrain tracks; the proposed Transit District DTPP Amendments would eliminate the planned Hamilton Green in favor of identifying the planned but unbuilt Hamilton Street between Franklin Street and the Caltrain tracks as a potential privately owned, publicly accessible open space, while there would be no open space between Franklin Street and El Camino Real. Future development under the DTPP was described in the DTPP Final EIR to also be subject to Parks, Recreation, and Community Services Department Strategic Plan policies and applicable parkland dedication or in-lieu fee requirements, and new parkland could be provided inside or outside of the DTPP area in the future. However, specific parks and recreational facilities expansion needs were unknown and associated impacts were deemed speculative and as a result, impacts on parks and recreational facilities were found to be less than significant.

Development within the Transit District would result in an increase in population and thus an increased demand for parks and recreation facilities. The City has a service-level objective for parkland of 3 acres of parkland per 1,000 residents. Based on the City's 2020 population of approximately 84,300 (see Chapter 5, *Population and Housing*), the existing parkland ratio is approximately 2.7 acres per 1,000 residents. With the addition of 2,510 potential residents within the proposed Transit District (see Chapter 5), the ratio would be approximately 2.6 per 1,000 residents. Therefore, development within the Transit District would worsen this existing deficiency. Based on the City's desired General Plan service levels, the additional residents would generate a demand for up to approximately 7.53 acres of additional parkland.

Individual projects within the Transit District would be subject to the City's Parks Impact Fee and parkland dedication requirements (or Parkland In-Lieu Fee), which require either dedicating land to serve new residents, constructing new park amenities, and/or paying fees to offset the increased costs of providing new park facilities or park improvements for new development. Although development within the proposed Transit District would incrementally worsen existing parkland deficiencies in the City, individual projects within the proposed Transit District would be subject to the City's Parks Impact Fee and parkland dedication requirements (or Parkland In-Lieu Fee) as they are developed. The City's Parks Impact Fee and Parkland In-Lieu Fee would allow the City to purchase parkland, make park improvements, and provide recreation facilities to meet the demand generated by new residential development.

As the residential population of Redwood City increases as a result of the proposed Transit District, the construction of new parks and recreational facilities in the City would occur. The

park projects developed as a result of the City's Parks Impact Fee and Parkland In-Lieu Fee would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities. Therefore, there would be no new or more severe impacts on recreational facilities than the impact identified in the DTPP Final EIR. This impact would be *less than significant*.

Mitigation: None required.

Impact PS-5: Implementation of the Transit District would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools. (*Less than Significant*)

The DTPP Final EIR found that the payment of required school impacts fees would address the DTPP impact on school services and impacts were determined to be less than significant. Since adoption of the DTPP, new school impact fee studies have been performed by RCSD and SUHSD to maintain levels of service.

Development within the proposed Transit District would result in an increase in population and thus an increase in school-aged children that could be enrolled in RCSD and SUHSD schools. As shown in **Table 8-2**, the Transit District is estimated to result in approximately 451 new schoolage children, consisting of 165 RCSD K-5th grade students, 66 RCSD 6th-8th grade students, and 220 SUHSD 9th-12th grade students.

Table 8-2
Estimated Student Generation

Grade Group	Students per Residential Unit <sup>a</sup>	Estimated Transit District School-Age Children <sup>b</sup>
Kindergarten – 5th Grade (RCSD)	0.15	165
6th – 8th Grade (RCSD)	0.06	66
9th – 12th Grade (SUHSD)	0.2	220
	Total	451

#### NOTES:

SOURCE: RCSD, 2018; SUHSD, 2018.

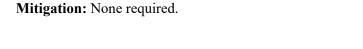
The new students generated within the proposed Transit District would be added to the applicable district-wide enrollment. As discussed in Section 8.1.4, RCSD student enrollment did not exceed facilities capacity at the elementary and middle school level in school year 2020/2021. However,

The student generation rates for RCSD are those contained in the 2018 Review of Fee Justification Documentation, for multi-family units (RCSD, 2018). The student generation rate for SUHSD is contained in the Level I Developer Fee Study for Sequoia Union High School District (SUHSD, 2018).

Assumes 1,100 multi-family units to capture the residential development potential specific to the proposed Transit District sub-area of the DTPP.

addition of elementary and middle school-aged students to RCSD due to development within the proposed Transit District would exceed the current capacity at the collective RCSD schools and at Clifford School.<sup>3</sup> Thus, facility updates to increase capacity would also likely be required for RCSD and particularly at Clifford School to accommodate the growth in elementary and middle school-aged students. The addition of high school-aged students to SUHSD due to development within the proposed Transit District would exceed the current capacity at the collective SUHSD high schools and at Sequoia High School.<sup>4</sup> Thus, facility updates to increase capacity would also likely be required for SUHSD and particularly at Sequoia High School to accommodate the growth in high school-aged students. Any expansion of school facilities would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities.

As described in Section 8.1.4, projects developed within the proposed Transit District would be required to comply with California Government Code Section 65996, which would mitigate the potential effect on public school facilities from the new student population that would be generated by the Transit District. California Government Code Section 65996 and Education Code Section 17620 authorize school districts to levy a development fee on new residential projects to offset the costs associated with new students present in the districts as a result of new development. Section 65996 states that the payment of school impact fees that may be required by a State or local agency constitutes full and complete mitigation of school impacts from development. There would be no new or more severe impacts on school services associated with the Transit District than the impact identified in the DTPP Final EIR. Therefore, this impact would be *less than significant*.



Impact PS-6: Implementation of the Transit District would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for libraries. (Less than Significant)

The DTPP Final EIR did not specifically identify impacts to public libraries. There are no specific service ratios or other performance objectives for RCPL libraries identified by the City; however, the population increase caused by the proposed Transit District would result in an increase in demand for services from RCPL libraries. RCPL libraries are primarily funded by the City. Development within the proposed Transit District would result in the generation of new property taxes and other revenues that go into the City's General Fund, and thus could provide more resources to cover the increased budget for library services. In addition, RCPL offers access to

As discussed in Section 8.1.4, RCSD facilities had an estimated excess capacity of 214 students in school year 2020/2021, and approximately 231 new students would be added as a result of the proposed Transit District.

<sup>&</sup>lt;sup>4</sup> As discussed in Section 8.1.4, SUHSD enrollment was over facilities capacity in school year 2020/2021 by an estimated 265 students. The proposed Transit District would add approximately 220 new students.

digital content such as eBooks, online learning tools, and online database services, which allow remote access to RCPL materials outside of physical facilities.

A study to identify needs and opportunities for expansion of the current Downtown Library facility in FY 2022-23 is included in the most recent Five-Year Capital Improvement Program (CIP) covering Fiscal Year (FY) 2021-22 through FY 2025-26, as event and activity spaces, seating, and community meeting rooms are all inadequate to meet current demand (Redwood City, 2021b). The projected increase in demand as a result of the proposed Transit District would be included in the scope of this study. Any Downtown Library facility expansion or improvements developed as a result of the RCPL's study would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities and the proposed Transit District DTPP Amendments would not result in new or more severe impacts than were identified in the DTPP Final EIR. Therefore, impacts related to libraries associated with the Transit District would be *less than significant*.

Witigation: None required.	

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8. Public Services and Recreation

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# **CHAPTER 9**

# Transportation and Circulation

This SEIR chapter analyzes the effects of the changes to transportation and circulation proposed as part of the proposed Transit District DTPP Amendments, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts. The information in this section is based primarily on the Transportation Analysis for the Transit District DTPP Amendments conducted by Fehr & Peers in April, 2022, provided in **Appendix B** of this SEIR.

In accordance with the Redwood City Transportation Analysis Manual (TAM), <sup>1</sup> a Local Transportation Analysis (LTA) was prepared in parallel with this Draft SEIR for the proposed Transit District DTPP Amendments; the LTA analyzes non-CEQA transportation issues for General Plan and Congestion Management Program consistency, and is separate from this Draft SEIR. Non-CEQA transportation issues included in the LTA include vehicle, transit, bicycle, and pedestrian network operations and constraints, as well as site access and circulation.

#### Findings of the DTPP Final EIR

The DTPP Final EIR identified a number of significant project impacts on transportation and circulation facilities, including impacts to intersection and freeway operations, and to transit service. The intersection and freeway segment impacts identified were based on the performance measures of vehicle delay and level of service (LOS). Since preparation of the DTPP Final EIR, the CEQA Guidelines have been revised (Public Resources Code, section 21099, subdivision [b][3]) and these performance measures can no longer be used to determine the significance of a transportation impact under CEQA.<sup>2</sup> Following this change, vehicle miles traveled (VMT) is now used by the City to assess vehicle related impacts and, for this reason, this SEIR evaluates impacts to passenger vehicle travel using VMT rather than vehicle delay and LOS. Additional detail on the State legislation that lead to this change in performance metrics, SB 743, is provided in Section 9.2, *Regulatory Setting*.

As background information, the significant intersection impacts identified in the DTPP Final EIR were located at the following seven study intersections during the PM peak hour within the Plan Area:

https://www.redwoodcity.org/home/showpublisheddocument?id=22106.

These transportation performance metrics are still considered by the City, and are documented in the LTA prepared for the Transit District. While relevant to the City's project approval process, the analyses contained within the LTA are not required under CEQA and, therefore, are not part of this Draft SEIR.

- El Camino Real and Whipple Avenue
- El Camino Real and Jefferson Avenue
- Main Street and Woodside Road
- Middlefield Road and Woodside Road
- Broadway and Woodside Road
- Veterans Boulevard and Whipple Avenue
- Veterans Boulevard and Woodside Road

The DTPP Final EIR identified mitigation measures to address these intersection impacts; however, only one of the study intersections where a significant impact was identified would be mitigated to a less-than-significant-level: Veterans Boulevard and Whipple Avenue. For the remaining six study intersections, a significant and unavoidable impact was identified due to the fact that the mitigation measures identified for those intersections would require approvals from an agency (Caltrans) other than the Lead Agency (Redwood City) that could not be guaranteed. Similarly, Redwood City's lack of authority to independently implement mitigation measures identified to address significant impacts on the following four study freeway segments also lead to a significant and unavoidable impact determination:

- Northbound US 101 between Marsh Road and Woodside Road (impact on mixed-flow lanes during both AM and PM peak hours; impact on HOV lane during the PM peak hour)
- Northbound US 101 between Whipple Avenue and Holly Street (impact on mixed-flow lanes during PM peak hour)
- Southbound US 101 between Holly Street and Whipple Avenue (impact on mixed-flow lanes during PM peak hour)
- Southbound US 101 between Woodside Road and Marsh Road (impact on mixed-flow and HOV lanes during both AM and PM peak hours)

The significant transit service impact identified in the DTPP Final EIR relates to additional transit demand that would be generated by development in the Plan Area, and whether existing and planned transit service would be adequate to serve this increased demand. Because of uncertainty related to the timing and execution of service enhancements planned by existing and future transit service providers in the Plan Area (e.g., California High Speed Rail Authority, Caltrain, SamTrans, etc.), the DTPP Final EIR identified a significant and unavoidable transit service impact.

Cumulative impacts identified in the DTPP Final EIR are discussed in Chapter 17 of this SEIR.

# 9.1 Environmental Setting

This section describes existing transportation conditions including the nearby land uses that affect travel demand and the transportation facilities—the roadway network, transit service, and pedestrian and bicycle facilities—in the vicinity of the Transit District area. Future planned facilities that would enhance the existing system are also described.

# 9.1.1 Roadway Network

As shown in Figure 3-2, *Proposed Transit District and Context* (Chapter 2, *Project Description*), the following roadways provide access to the Transit District area: El Camino Real (SR 82),

Woodside Road (SR 84), Alameda de las Pulgas, Arguello Street, Bradford Street, Brewster Avenue, Broadway, Hamilton Street, Hudson Street, Jefferson Avenue, Main Street, Maple Street, Marshall Street, Veterans Boulevard, and Whipple Avenue. Descriptions of these roadways are presented below.

El Camino Real (SR 82) is a four- to six-lane, north-south major arterial and serves as the western boundary of the Transit District area. El Camino Real extends from Santa Clara County through San Mateo County. El Camino Real provides direct access to the Transit District area.

**Woodside Road (SR 84)** is a four-lane, east-west major arterial located toward the southern edge of the City. Woodside Road extends from Redwood City through Woodside. Woodside Road provides regional access to the Transit District area, including access to I-280 and US 101.

**Alameda de las Pulgas** is a two-lane, north-south connector street located between San Carlos and Woodside and is lined with primarily residential uses. Alameda de las Pulgas provides regional access to the Transit District area.

**Arguello Street** is a two-lane, north-south neighborhood connector boulevard that provides access between Whipple Avenue and Broadway and primarily serves commercial and residential uses. Arguello Street partially borders the Transit District area to the east.

**Bradford Street** is a two-lane, east-west connector street that stretches from Arguello Street to Walnut Street, with a break at Winslow Street, and provides access to the northern-most parcels of the Transit District area and is lined with a mix of residential and commercial uses.

**Brewster Avenue** is a two- to four-lane, east-west local road bicycle boulevard that stretches from Main Street to Upland Road. Brewster Avenue provides direct access to the northern end of the Transit District area and is a mix of retail, office, school, and residential land uses.

**Broadway** is a two-lane, east-west transit street located between Elwood Street and Fifth Avenue. Broadway serves as one of the primary roadways connecting the downtown area with surrounding roadways in Redwood City. Broadway provides direct access to the Transit District area. Both sides of Broadway around the railroad tracks are lined with mix of restaurants, office, and retail uses.

**Hamilton Street** is a two-lane, north-south neighborhood connector street that extends between Winslow Street and Marshall Street and is lined with a mix of restaurants, commercial uses, and offices.

**Hudson Street** is a two-lane north-south connector street that extends from Whipple Avenue to Woodside Road and is lined with primarily residential uses.

**Jefferson Avenue** is a two- to four-lane, east-west connector street that extends from Cañada Road to Veterans Boulevard. Jefferson Avenue serves regional and local trips throughout Redwood City and provides regional access to the Transit District. East of El Camino Real,

Jefferson Avenue has primarily commercial land uses, whereas west of El Camino Real, the street is primarily residential.

Main Street is a two-lane, east-west neighborhood connector street that extends between Convention Way and El Camino Real. Main Street serves as one of the primary roadways connecting the downtown area with surrounding roadways in Redwood City. Railroad tracks divide the east and west sides, and the street is lined with a mix of restaurants, residential uses, office, and some small businesses.

**Maple Street** is a two-lane, east-west neighborhood connector street that provides access between El Camino Real and the industrial and public service uses east of US 101 including access to the bay. Maple Street is located to the south of the Transit District area and is lined with a mix of housing, restaurants, office, and local serving uses.

**Marshall Street** is a two-lane, north-south neighborhood connector street that extends between Arguello Street and Chestnut Street. Marshall Street provides direct access to the Transit District area and is lined with a mix of housing, offices, and commercial uses.

**Veterans Boulevard** is a six-lane, east-west neighborhood connector boulevard that extends between the US 101 southbound off-ramp and Woodside Road (SR 84) and provides regional as well as local access to the Bay Area and the Transit District area, and is lined with mix of housing, office, and commercial uses.

**Whipple Avenue** a four-lane, east-west connector street that extends from East Bayshore Road to Upland Road. Whipple Avenue connects various parts of Redwood City with US 101 including access to the greater Bay Area, and is lined with a mix of housing, offices, retail, restaurants, and local serving uses.

#### 9.1.2 Pedestrian Facilities

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. In the immediate vicinity of the Transit District area, pedestrian signals and sidewalks are provided on both sides of El Camino Real, Jefferson Avenue, Arguello Street, Whipple Avenue, Brewster Avenue, Veterans Boulevard, Broadway, Main Street, Marshall Street, Hamilton Street, and Maple Street. The following locations are missing pedestrian facilities:

- No sidewalk on the north side of Whipple Avenue, between Veterans Boulevard and E. Bayshore Road
- No crosswalk on west leg of Arguello Street and Broadway intersection
- No crosswalk on south leg of Whipple Street and El Camino Real intersection
- No crosswalk on east leg of Veterans Boulevard and Whipple Street intersection

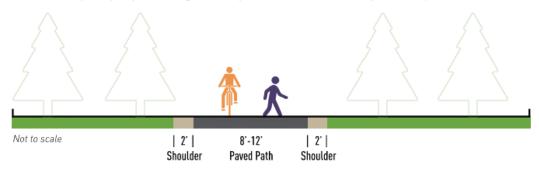
# 9.1.3 Bicycle Facilities

Bikeway planning and design in California typically relies upon guidelines and design standards established by California Department of Transportation (Caltrans) in the Highway Design Manual (Chapter 1000: Bikeway Planning and Design). The City uses these guidelines to define four general bikeway facility classifications, as outlined below.

Class I Paths (Shared-use Paths) provide a completely separate right-of-way and are designated only for bicycle and pedestrian use. Shared-use paths serve corridors where there is enough right-of-way, or space, to allow them to be constructed or where on-street facilities are not appropriate due to vehicular volumes, speeds, or other roadway characteristics. There are currently no Class I paths serving the Transit District.

# SHARED-USE PATH (CLASS I)

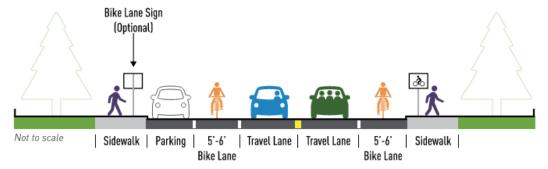
Completely separated right-of-way for exclusive use of bicycles and pedestrians



Class II Bikeways (Bicycle Lanes) are dedicated lanes for bicyclists, generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends and signage. Bicycle lanes are typically five- to six-feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-traffic are permitted. There are segments of Class II bike lanes along Whipple Avenue, Brewster Avenue, Marshall Street, Winslow Street, Arguello Street, Veterans Boulevard, Broadway, Main Street, Alameda de las Pulgas, Hudson Street, and Maple Street between El Camino Real and the Caltrain railroad tracks.

# **BICYCLE LANE (CLASS II)**

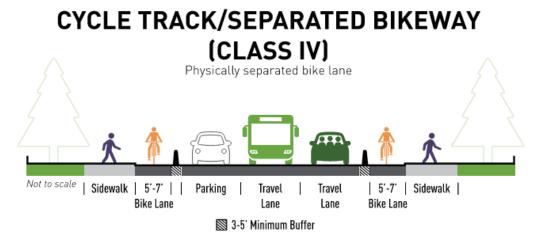
On-street striped lane for one-way bike travel



Class III Bikeways (Bicycle Boulevards/Bicycle Routes) are designated by signs or pavement markings for shared use with pedestrians or motor vehicles but have no separated bike right-of-way or lane striping. Bike routes serve either to a) provide a connection to other bicycle facilities where dedicated facilities are infeasible, or b) designate preferred routes through high-demand corridors. There are Class III bikeways along segments of Broadway, Brewster Avenue, Jefferson Avenue, and Whipple Avenue that provide access to the Transit District area. Redwood City Moves: Transportation Plan (RWCmoves)<sup>3</sup> includes additional planned Class III bikeways that would provide bicycle access to the Transit District area along Arguello Street, from outside of the downtown.

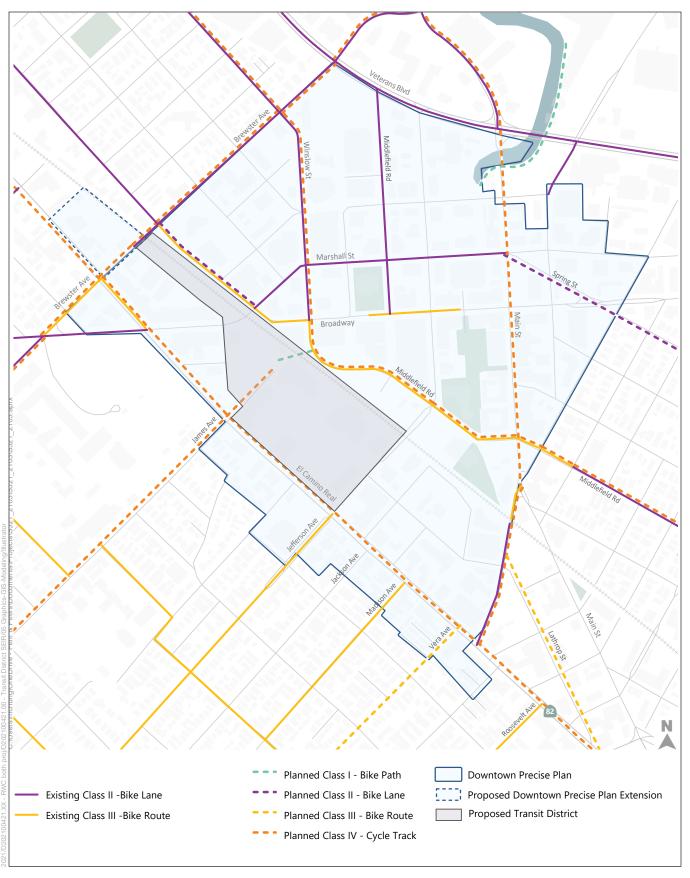
# BICYCLE ROUTE (CLASS III) Shared on-street facility Bicycle Route Signs Not to scale Sidewalk | Parking | Travel Lane | Sidewalk |

Class IV Bikeways (Separated Bikeways) provide a right-of-way designated exclusively for bicycle travel within a street and are protected from other vehicle traffic by physical barriers, including, but not limited to, grade separation, flexible posts, inflexible vertical barriers such as raised curbs, or parked cars. There are Class IV bicycle facilities on Middlefield Road between Woodside Road and Maple Street. RWCmoves includes additional planned Class IV facilities along El Camino Real, Brewster Avenue, Winslow Street, Maple Street south of Main Street, and Main Street north of Maple Street.



**Figure 9-1** illustrates the existing bicycle facilities near the Transit District area.

<sup>3</sup> http://rwcmoves.com/wp-content/uploads/2018/07/RWCmoves-Transportation-Plan July16.pdf.



SOURCE: Fehr & Peers, 2022

Transit District DTPP Amendments SEIR

Figure 9-1 Existing Bicycle Facilities



#### 9.1.4 Transit Service

This section summarizes local and regional transit connectivity in the Transit District area, including bus and commuter rail. **Figure 9-2** illustrates the existing transit facilities and routes in the Transit District area.

#### SamTrans Bus Service

Bus service is provided by the San Mateo County Transit District (SamTrans). Eight SamTrans routes (95 [school days only]), 270, 275, 278, 295, 296, 397, 398) and the El Camino Real (ECR) bus route run along El Camino Real and stops north of the Jefferson Avenue intersection, Winklebleck Street, Brewster Avenue, and the Redwood City Transit Center. The Redwood City Transit Center directly serves the Transit District area and the adjacent downtown area. El Camino Real, with SamTrans' ECR service, qualifies as a high-quality transit corridor since the frequency of service is 15 minutes or less during the morning and evening peak commute periods. **Table 9-1** summarizes the transit service operating characteristics in the immediate vicinity of the Transit District area.

TABLE 9-1
EXISTING TRANSIT SERVICE

			Weekday		Weekends	
Route	From	То	Operating Hours	Peak Headway (minutes)	Operating Hours	Peak Headway (minutes)
SamTrans L	ocal Bus Routes					
95	Redwood City Transit Center	Alameda/Ralston	7:45–8:00am, 1:20–3:40pm	- One morning run - Two afternoon runs	N/	A
270	Redwood City Transit Center	Redwood City Transit Center	6:30am-7:10pm	60	7:30am- 7:10pm	60
275	Woodside/ Fernside	Redwood City Transit Center	7:30–7:45am, 2:20–3:40pm	- One morning run	N/	A
278	Redwood City Transit Center	Cañada College	6:20am-8:20pm	- Two afternoon runs	7:20am– 7:20pm	60
295	San Mateo Caltrain	Redwood City Transit Center	6:20am-6:45pm	60	N/A	
296	Redwood City Transit Center	Palo Alto Transit Center	3:40am-2:10am	120	3:45am– 2:20am	30
SamTrans E	xpress Bus Route	es				
ECR	Palo Alto Transit Center	Daly City BART	24 hours	15	24 hours	15
397	San Francisco	Palo Alto Transit Center	12:45am-6:30am	60	12:45am– 6:30am	60
398	San Francisco	Redwood City Transit Center	5:10am-11:30pm	60	5:50am– 11:20pm	60
Caltrain						
All Routes	Gilroy/San José	San Francisco	4:20am-1:45am	10	7:10am– 1:50am	60

SOURCE: Redwood City Transit District DTPP Amendments Transportation Analysis (Appendix B), 2022.



SOURCE: Fehr & Peers, 2022

Transit District DTPP Amendments SEIR

Figure 9-2 Existing Transit Service



#### **Commuter Rail Service**

Caltrain is a commuter heavy rail service that runs from downtown San Francisco (4th and King Streets) to downtown San José (Diridon Station), with a limited number of commute period trains running farther south to Gilroy. The Redwood City Transit Center, located within the boundaries of the Transit District area, serves Caltrain and multiple SamTrans bus and local commuter shuttle routes and is considered a major transit stop. As discussed in Chapter 3, *Project Description*, separate from the project being evaluated in this SEIR, it is anticipated that the Redwood City Transit Center will be relocated to the north of the existing location to provide space for an enlarged four-track Caltrain station. This relocation would allow for expanded service with completion of Caltrain's electrification program (currently under construction) and for long-term implementation of the Caltrain 2040 Business Plan, which calls for substantially increased frequency of service and the use of the Redwood City Transit Center as a transfer point between local and express trains.

During commute periods, Caltrain offers express service ("Baby Bullet") between downtown San José and San Francisco, which allows the trip between San Francisco and San José to be made in one hour. This service stops at a limited number of stations, including Redwood City. Caltrain also offers local service, which serves all stations and limited-stop service, which serves more stations than the Baby Bullet but not all stations. All trains stop at the Redwood City Transit Center. In 2019, the average mid-weekday ridership at the Redwood City Transit Center was approximately 4,220 passengers, with system-wide ridership off approximately 64,000 passengers, making it the fifth busiest in the Caltrain system. The system-wide average weekday ridership in 2020 was approximately 25,000 passengers; 2020 ridership information for the Redwood City Transit Center is not available. The decrease in system-wide ridership in 2020 is due to COVID-19 and the corresponding stay-at-home orders.

# 9.2 Regulatory Setting

Section 9.2 of DTPP Final EIR Chapter 9, *Transportation and Circulation*, includes the regulatory setting for this topic and is still current for this SEIR, except as noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

#### 9.2.1 Senate Bill 743

The operations of transportation facilities have traditionally been described with the term LOS. LOS describes traffic flow from the driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. SB 743 was adopted in 2013 and directed the State of California's Office of Planning and Research (OPR) to look at different metrics for identifying transportation impacts and make corresponding revisions to the CEQA Guidelines. Following several years of draft proposals and related public comments, OPR settled upon daily VMT as the preferred metric for assessing passenger vehicle related impacts. OPR issued revised CEQA Guidelines in

<sup>4</sup> https://www.caltrain.com/Assets/Stats+and+Reports/2019+Annual+Key+Findings+Report.pdf.

https://www.transit.dot.gov/sites/fta.dot.gov/files/transit\_agency\_profile\_doc/2020/90134.pdf.

December 2018 along with a Technical Advisory on Evaluating Transportation Impacts in CEQA<sup>6</sup> to assist practitioners in implementing the CEOA Guidelines to use VMT as the new metric. Under the revised Guidelines Public Resources Code, section 21099, subdivision (b)(3), vehicle LOS can no longer be used as a determinant of significant environmental impacts.

# 9.2.2 Plan Bay Area

Plan Bay Area is overseen by the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). It serves as the region's Sustainable Communities Strategy (SCS) pursuant to SB 375 and the 2050 Regional Transportation Plan (RTP), integrating transportation and land use strategies to manage greenhouse gas (GHG) emissions and plan for future population growth. The RTP and SCS include policies that call for shifting more travel demand to transit and accommodating growth along transit corridors in "Priority Development Areas." ABAG and the MTC adopted *Plan Bay Area 2050* in October 2021<sup>7</sup> although it will be several years before the regional transportation model and county transportation models are updated to reflect Plan Bay Area 2050 (the models currently incorporate data from Plan Bay Area 2040 because Plan Bay Area 2050 growth projections are not yet available at the level of detail that includes local jurisdictions such as Redwood City).

Major regional transportation projects in the vicinity of the Transit District area included in *Plan* Bay Area 2050 include pricing strategies on US 101 (i.e., per-mile tolling), new high-speed rail service, new ferry service between Redwood City and San Francisco's Ferry Terminal, Caltrain electrification and increased service frequency, and improvements to local and express bus services.

# 9.2.3 San Mateo County Comprehensive Bicycle and Pedestrian Plan

The City/County Association of Governments of San Mateo County (C/CAG), with support from the San Mateo County Transportation Authority, has developed the 2021 San Mateo County Comprehensive Bicycle and Pedestrian Plan (CBPP)<sup>8</sup> to improve walking and bicycling conditions in San Mateo County. By recommending a connected network of biking and walking facilities based on the best practices in the field, the CBPP strives to make biking and walking safer and more comfortable for all, and improve health, accessibility, and livability throughout the county. The six goals of the CBPP are:

- **Connectivity.** Establish a connected network of facilities for bicyclists and pedestrians.
- **Mode Shift.** Promote more people bicycling and walking for transportation and recreation.
- Safety. Improve safety for walking, bicycling, and accessing transit.

https://opr.ca.gov/docs/20190122-743 Technical Advisory.pdf.

https://www.planbayarea.org/sites/default/files/documents/Plan Bay Area 2050 October 2021.pdf.

Update-Final-Plan.pdf.

- Complete Streets for All. Advance Complete Streets principles and the accommodation of all roadway users.
- Equity. Develop, prioritize, and fund projects to advance equity.
- Regional Collaboration. Promote collaboration and technical support.

# 9.2.4 City of Redwood City General Plan

According to the City's TAM, projects must demonstrate consistency with the Redwood City General Plan to address cumulative impacts. Relative to transportation, the determination of consistency is based on conformance to the goals and policies set forth in the Circulation Element of the General Plan. The transportation goals in the General Plan aim to maintain a multimodal transportation system that encourages active transportation, transit use, and appropriate curb management/parking implementation. Policies relevant to the specific context of the proposed Transit District DTPP Amendments are as follows:

- Goal BE-25: Maintain a local transportation system that balances the needs of bicyclists, pedestrians, and public transit with those of private cars.
- Goal BE-26: Improve walking, bicycling, and electric bicycle/scooter facilities to be more
  convenient, comfortable, and safe, and therefore more common transportation modes in
  Redwood City
- Goal BE-27: Create conditions to improve utilization of existing public transportation services to increase ridership.
- Goal BE-28: Provide maximum opportunities for upgrading passenger rail service for faster and more frequent trains, while making this improved service a positive asset to Redwood City that is attractive, accessible, and safe.
- Goal BE-29: Maintain the city's street network to promote the safe and efficient movement of people.
- *Goal BE-31*: Encourage developments and implementation of strategies that minimize vehicle trips and vehicle miles traveled.

# 9.2.5 Redwood City Moves

Redwood City Moves (RWCmoves) is a Citywide Transportation Plan finalized in July 2018, intended to serve as a guiding document for the City as it seeks to improve transportation. <sup>10</sup> The plan is a supplement to the Circulation Element of the City's 2010 General Plan that emphasizes the importance of improving transportation options in the City beyond automobile travel.

The goals of RWCmoves are:

• Eliminate traffic fatalities and severe injuries for all modes by 2030.

<sup>9</sup> https://www.redwoodcity.org/home/showpublisheddocument/5099/635782756590100000.

<sup>10</sup> http://rwcmoves.com/wp-content/uploads/2018/07/RWCmoves-Transportation-Plan July16.pdf.

- Create a walking- and bicycling-friendly community that provides a safe, balanced, and convenient transportation system.
- Provide seamless connections and improved street access to all areas within the City, but especially along mixed-use corridors designated in the General Plan and Citywide Transportation Plan.
- Embrace innovation in all forms of emerging technologies, especially in ways to creatively manage congestion and the transportation system.
- Reach over 50 percent of all trips being by non-driving modes by 2040; remaining automobile trips should be shared rides and/or zero emission trips.
- Invest in projects that support a resilient, equitable, and sustainable transportation system.

The Redwood City Transportation Analysis Manual (TAM)<sup>11</sup> is an appendix to RWCmoves. The TAM provides a clear and consistent technical approach for evaluating projects that could have transportation effects (adverse or beneficial) on the City's transportation system and services. For environmental analysis, the TAM outlines the required methodology and thresholds with which to evaluate VMT impacts, consistent with the latest CEQA Guidelines.

# 9.2.6 Redwood City Downtown Precise Plan (DTPP)

The DTPP was adopted by the City Council on January 24, 2011 and was amended most recently on June 11, 2018. The DTPP describes the vision for the future of Downtown, regulates private development, and recommends potential future City projects. Transportation Goals and Principals relevant to the specific context of the proposed Transit District DTPP Amendments are as follows:

- **A**: Revive Downtown by creating a beautiful and memorable urban district interwoven with the City's identity.
- **D**: Provide the choice of "convenience living".
- F: Create a strong employment district and "vital center".
- **G**: Make pedestrians the priority.
- H: Integrate transit and bicycle use.
- I: Provide "just enough" parking and create a "park-once and walk" district.

# 9.3 Impacts and Mitigation Measures

# 9.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe transportation and circulation impacts that would result from implementation of the proposed

<sup>11</sup> https://www.redwoodcity.org/home/showpublisheddocument?id=22106.

https://www.redwoodcity.org/home/showpublisheddocument/10001/636673547793200000.

Transit District DTPP Amendments, in relation to the certified DTPP Final EIR. As discussed previously at the beginning of this chapter in *Findings of the DTPP Final EIR*, due to adoption of SB 743 (see *Section 9.2.1*, above), unlike the DTPP Final EIR, the analysis in this SEIR uses VMT and not intersection delay/LOS to assess these impacts.

#### **Proposed Land Uses**

As described in detail in Chapter 3, *Project Description*, the proposed Transit District DTPP Amendments would establish development potential for office and residential uses for this new sub-area of the DTPP. The development potential for office would represent an increase of approximately 1,630,000 square feet as compared to the amount of office development evaluated in the DTPP Final EIR. For residential, this SEIR evaluates an increase of 1,100 units as compared to the number of residential units evaluated in the DTPP Final EIR. The Transit District DTPP Amendments office cap and residential development potential are distinct from the office caps and residential development potential that apply elsewhere in the DTPP. There are currently no office or residential uses on the parcels that comprise the Transit District area; therefore, the new office and residential development that the proposed Transit District DTPP Amendments would allow for represents all new development potential.

There are currently retail uses in the area that are conditionally permitted, and no change is proposed to retail development potential. Replacement of existing retail space with new retail uses would not necessitate an increase in the retail development cap; and because no change in the retail cap is proposed, it is not analyzed in this Draft SEIR.

### **Proposed Transportation Changes**

This section discusses the Transit District DTPP Amendments proposed transportation changes to the General Plan and DTPP. These proposed changes are shown graphically in Figure 3-3 (see Chapter 3, *Project Description*).

#### Roadway Network

The roadway network is defined in the *Public Frontage Regulation* section of the DTPP, including street typology, as well as the *New Streets* section of the DTPP, that ensures new streets are created where they are needed. This section describes the changes to the *New Streets* section of the DTPP that would be implemented as part of the proposed Transit District DTPP Amendments.

As shown in Figure 3-3 in Chapter 3, *Project Description*, the requirement for the following new roadways would be eliminated from the City's General Plan and DTPP:

• Lane from Broadway to Jefferson Avenue, between the Caltrain right-of-way and the Transit Center and the Sequoia Station Shopping Center site to allow for widening of the Caltrain right-of-way in connection with potential future relocation and expansion of the Transit Center; and

• Harrison Avenue, a designated City Street, between Franklin Street and the Caltrain right-ofway. (Harrison would be a "recommended" new street between El Camino Real and Franklin Street only.)

In addition, the following planned but unbuilt streets would be reclassified/converted in the City's General Plan and DTPP:

- Hamilton Street between El Camino Real and Franklin would be reclassified from a "Downtown Core Street" to a "City Street"; and
- Hamilton Street between Franklin Street and Caltrain right-of-way would be changed from a
  "Downtown Core Street" and would instead be identified as a potential privately owned,
  publicly accessible open space that could allow pedestrian and bicycle travel only, with nonemergency motor vehicles prohibited.

The streets proposed for elimination and/or reclassification were proposed in the DTPP as New Streets but, to date, have not been constructed. These proposed amendments factor in changed conditions, such as anticipated relocation of the Transit Center to the north.

#### Pedestrian, Bicycle, and Transit Improvements

The Transit District DTPP Amendments also proposes pedestrian, bicycle, and transit enhancements to increase safety and to improve connectivity to and from the relocated Transit Center, including an expanded Caltrain Station, and the greater Downtown and surrounding neighborhoods. Among these would be a requirement for protected bike lanes and potential improvements to bus loading along El Camino Real. These pedestrian, bicycle, and transit improvements would be consistent with the circulation plan set forth in the DTPP.

# 9.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter and differ somewhat from the criteria used in the DTPP Final EIR. For this analysis, a significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities; (*new criterion but similar to DTPP Final EIR criteria a and e*) or
- b) conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (i.e., VMT impact assessment consistent with the City's TAM) (*new criterion*); or
- c) substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (same criterion as **DTPP Final EIR criterion c**); or
- d) result in inadequate emergency access (same criterion as DTPP Final EIR criterion d).

The main difference between the significance criteria used to evaluate transportation impacts for the Transit District DTPP Amendments from the significance criteria used to evaluate transportation

impacts for the DTPP Final EIR is that criteria related to traffic capacity and LOS (i.e., DTPP Final EIR criteria a and b) are no longer used as measures in the determination of a transportation impact under CEQA. <sup>13</sup> This is the direct result of implementation of SB 743 (see Section 9.2, *Regulatory Setting*) and the move from delay/capacity-based performance metrics to VMT; the impact evaluation related to VMT is provided in the "new" criterion b and is consistent with CEQA Guidelines section 15064.3(b). The other minor difference is that the impact evaluation of plan consistency is now consolidated for all travel modes under one criterion, criterion a.

#### **VMT**

The City's specific VMT impact criteria, as outlined in the TAM, are summarized below and are used to evaluate program-level impacts of the proposed Transit District DTPP Amendments.

#### CEQA Analysis Screening Criteria

In the first step, the TAM applies specific screening criteria for projects presumed to have a less-than-significant impact, eliminating the need to conduct a VMT analysis for CEQA transportation purposes. The TAM includes detailed screening criteria related to affordable housing, small projects, local serving public facilities, neighborhood serving retail, and child care projects, as well as projects that are in a Transit Priority Area (TPA). Each component of a mixed-use project is considered separately and each of the project's individual land uses is compared to the screening criteria.

#### Project-Generated VMT Impact Criteria

Per the City's TAM, a significant project-generated VMT impact would occur if a project meets any of the following criteria:

- **Residential land uses.** The daily project-generated VMT per service population for the residential portion of the Project is above the countywide home-based VMT per capita threshold of 10.5 miles, which is 15 percent below the countywide home-based VMT of 12.3 miles.
- Office land uses. The daily project-generated VMT per service population for the office portion of the Project is above the countywide home-based work VMT per employee threshold of 15.0 miles, which is 15 percent below the countywide home-based work VMT per employee of 17.6 miles.
- Retail land uses. The daily project-generated VMT per service population for the retail, entertainment, and childcare portions of a project is above the countywide total VMT per service population threshold of 32.0 miles, i.e., no change from countywide VMT per service population.

The VMT criteria described above were selected by the City to be consistent with OPR's Technical Advisory (see *Section 9.2.1*, above), which are tied to the State's GHG reduction goals.

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These transportation performance metrics are still considered by the City, and are documented in the LTA prepared for the Transit District. While relevant to the City's project approval process, the analyses contained within the LTA are not required under CEQA and, therefore, are not part of this Draft SEIR.

For mixed-use development, each individual land use component must be evaluated independently, taking credit for internal capture, and applying the significance criteria for each land use type. The VMT estimates for the proposed Transit District DTPP Amendments, which would allow for additional office development capacity and also anticipate additional residential use, were compared to this threshold to evaluate impacts of the proposed amendments. Project-generated VMT below this local threshold indicates that a project is not likely to rely on vehicle travel as much as other developments in the City.

#### Project Effects on VMT Impact Criterion

Per the City's TAM, a significant VMT impact would also occur if the City's per capita VMT under cumulative conditions (Year 2040) applying the boundary method would increase with the project.

#### **Pedestrian and Bicycle Facilities**

RWCmoves and the San Mateo County CBPP describe related policies and programs necessary to ensure pedestrian and bicycle facilities are safe and effective for City residents. Using these plans as a guide, significant impacts to these facilities would occur if the proposed Transit District DTPP Amendments meets any of the following criteria:

- Creates a hazardous condition that does not currently exist for pedestrians and bicyclists, or otherwise interferes with pedestrian accessibility to the site and adjoining areas; or
- Conflicts with an existing or planned pedestrian or bicycle facility; or
- Conflicts with policies related to bicycle and pedestrian activity adopted by the City of Redwood City, San Mateo County, or Caltrans for their respective facilities in the study area.

# Safety and Hazards

The proposed Transit District DTPP Amendments would cause a significant impact related to safety and hazards if it would increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. Applicable design standards for the proposed Transit District DTPP Amendments are those contained within the DTPP, the RWCmoves street typologies, and the Street Design Criteria included in the City's 2019 Engineering Standards, all of which include design specifications to ensure safe and efficient travel of vehicles, bicycles, pedestrians, and transit vehicles. Using these plans as a guide, significant impacts related to safety and hazards would occur if development within the Transit District area would conflict with policies related to street design adopted by the City.

# **Emergency Access**

An emergency access impact would be considered significant if implementation of the proposed Transit District DTPP Amendments would result in inadequate access to accommodate emergency vehicles. Specifically, the assessment determines if the project has the potential to impact emergency vehicle access by creating conditions that would substantially affect the ability

of drivers to yield the right-of-way to emergency vehicles or preclude the ability of emergency vehicles to access streets within the study area.

# 9.3.3 Impacts and Mitigation Measures

Given the amendments to CEQA requiring use of VMT rather than LOS, transportation impacts of the proposed Transit District DTPP Amendments would be less severe than those identified in the DTPP Final EIR. Specific impacts are analyzed below.

Impact TR-1: Implementation of the proposed Transit District DTPP Amendments would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. (Less than Significant)

#### **DTPP Impact Summary**

As noted earlier, the DTPP Final EIR identified a number of significant impacts related to intersection and freeway operations. The significant intersection impacts were identified at seven study intersections during the PM peak hour within the Plan Area, and significant freeway segment impacts were identified for four segments on US 101.

The DTPP Final EIR identified mitigation measures (Mitigation Measures 9-1 through 9-7) to address the intersection impacts; however, only one of the study intersections where a significant impact was identified would be mitigated to a less-than-significant-level. For the remaining six study intersections, a significant and unavoidable impact was identified due to the fact that the mitigation measures identified for those intersections would require approvals from an agency (Caltrans) other than the Lead Agency (Redwood City) that could not be guaranteed. Similarly, Redwood City's lack of authority to independently implement the mitigation measure identified (Mitigation Measure 9-8) to address significant impacts on the four study freeway segments also lead to a significant and unavoidable impact determination.

The significant intersection and freeway segment impacts listed above were determined using the performance metric of delay/LOS. As noted under Section 9.2, *Regulatory Setting*, SB 743 and the resulting change to the CEQA Guidelines in section 15064.3, subdivision (b), vehicle LOS can no longer be used as a determinant of significant environmental impacts. VMT is now used as the primary performance metric to establish the significance of a transportation impact, and that impact analysis is provided under Impact TR-2 below.

The DTPP Final EIR also identified a significant impact to transit. This significant impact relates to additional transit demand that would be generated by development in the Plan Area, and whether existing and planned transit service would be adequate to serve this increased demand. Mitigation Measure 9-9 was identified to address this significant impact, requiring coordination between the City and all relevant transit service providers to facilitate expanded transit services to match increased demand in the Plan Area. However, because of uncertainty related to the timing and execution of service enhancements planned by existing and future transit service providers in the Plan Area (e.g., California High Speed Rail Authority, Caltrain, SamTrans, etc.), the DTPP Final EIR identified a significant and unavoidable transit service impact.

The DTPP Final EIR did not identify any significant impacts related to bicycle or pedestrian facilities.

#### **Project Impacts**

This section discusses the proposed Transit District Amendment's conformance with the City's General Plan, as well as relevant pedestrian, bikeway, traffic calming, or regional transit plans.

#### **Redwood City General Plan**

The proposed Transit District DTPP Amendments is consistent with the General Plan transportation goals by maintaining and enhancing bicycle and pedestrian friendly facilities within the Project. Specifically, the Transit District DTPP Amendments proposes pedestrian, bicycle, and transit enhancements to improve safety and connectivity to and from the relocated Redwood City Transit Center, including an expanded Caltrain Station, and the greater Downtown and surrounding neighborhoods. Among these would be a requirement for protected bike lanes and potential improvements to bus loading along El Camino Real. These pedestrian, bicycle, and transit improvements would be consistent with the circulation plan set forth in the DTPP area and are consistent with the City's General Plan goals. A consistency determination for each relevant General Plan transportation goal is provided below in **Table 9-2**.

Table 9-2
General Plan Transportation Goals

Transportation Goals		Project Consistency Examples	
Goal BE-25	Maintain a local transportation system that balances the needs of bicyclists, pedestrians, and public transit with those of private cars.	The Transit District DTPP Amendments proposes pedestrian, bicycle, and transit enhancements to increase safety and connectivity to and from the relocated Redwood City Transit Center while providing adequate vehicle access and circulation.	
Goal BE-26	Improve walking, bicycling, and electric bicycle/scooter facilities to be more convenient, comfortable, and safe, and therefore more common transportation modes in Redwood City	Hamilton Street between Franklin Street and the Caltrain right-of-way would be changed from a Downtown Core Street requirement to instead be identified as a potential privately owned, publicly accessible open space with a safe path-of-travel for pedestrians and bicyclists between the Transit District area and downtown.	
Goal BE-27	Create conditions to improve utilization of existing public transportation services to increase ridership.	The Project could increase the number of people living and working within a short walking distance of the Transit Center, which would increase transit ridership.	
Goal BE-28	Provide maximum opportunities for upgrading passenger rail service for faster and more frequent trains, while making this improved service a positive asset to Redwood City that is attractive, accessible, and safe.	The Project would eliminate the requirement for a new lane from Broadway to Jefferson Avenue, between the Caltrain right-of-way and the Redwood City Transit Center and the Sequoia Station Shopping Center site to allow for widening of the Caltrain right-of-way in connection with potential future relocation and expansion of the Transit Center, which are necessary to increase the amount of train service.	
Goal BE-29	Maintain the city's street network to promote the safe and efficient movement of people.	The Project would require a grid street network that allows for safe and efficient movement of people, regardless of mode of access.	
Goal BE-31	Encourage developments and implementation of strategies that minimize vehicle trips and vehicle miles traveled.	The Project's location directly adjacent to the Redwood City Transit Center minimizes vehicle trips and vehicle miles traveled (see Impact TR-2).	

SOURCES: Redwood City General Plan, 2010; Redwood City Transit District DTPP Amendments Transportation Analysis (Appendix B), 2022.

It should be noted that the proposed Transit District DTPP Amendments is uniquely positioned to directly support Goal BE-28 to maximize opportunities for upgrading passenger rail service. By eliminating the Lane between the Caltrain right-of-way and the Redwood City Transit Center and the Sequoia Station Shopping Center site, the proposed Transit District DTPP Amendments allows for widening of the Caltrain right-of-way in connection with potential future relocation and expansion of the Redwood City Transit Center.

#### Redwood City Downtown Precise Plan (DTPP)

The Transit District DTPP Amendments would not conflict with any of the overarching transportation goals of the DTPP, as it prioritizes pedestrians and creates additional office space and residential units for a vibrant mixed-use downtown. The proposed Transit District DTPP Amendments would also promote transit use given its proximity to the Redwood City Transit Center. A consistency determination for each relevant DTPP goal and guiding principle is provided below in **Table 9-3**.

TABLE 9-3
DTPP GOALS AND GUIDING PRINCIPLES

Trar	nsportation Goals and Principles	Project Consistency Examples	
A	Revive Downtown by creating a beautiful and memorable urban district interwoven with the City's identity.	The Project would require a grid street network that allows for safe and efficient movement of people, encouraging non-motorized modes of travel. The Project also includes a mix of office, retail, and residential land uses with enhanced streetscapes to promote a walkable and bikeable environment.	
D	Provide the choice of "convenience living".	See project consistency example for Goal A. The Project is situated in Downtown Redwood City and provides convenient access to the services, amenities, and regional transit connections provided in Downtown.	
F	Create a strong employment district and "vital center".	The Project would allow an additional 1,630,000 square feet of office development with services and amenities that would enhance the vibrant downtown area.	
G	Make pedestrians the priority.	The Project would provide for a grid network that allows for safe and efficient movement of people, regardless of mode of access.	
Н	Integrate transit and bicycle use.	The Transit District DTPP Amendments proposes pedestrian, bicycle, and transit enhancements to increase safety and connectivity to and from the relocated Transit Center.	
ı	Provide "just enough" parking and create a "park-once and walk" district.	The Project would incentivize shared parking and allow project applicants to pay a fee to the City in lieu of providing new parking spaces. The Project's location in Downtown Redwood City would also encourage non-vehicle modes of transportation. High-quality connections across the railroad tracks and with the broader downtown area would encourage people to walk between multiple nearby destinations.	

SOURCES: Redwood City Downtown Precise Plan, 2018; Redwood City Transit District DTPP Amendments Transportation Analysis (Appendix B), 2022.

#### **RWCmoves**

The proposed Transit District DTPP Amendments would not conflict with any of the RWCmoves transportation goals because it prioritizes pedestrian and bicyclists by requiring pedestrian and bicycle enhancements consistent with other adopted plans and policies. Additionally, it would increase the density of infill development, which would reduce the need for vehicle trips and its proximity to the Redwood City Transit Center would increase access to buses and commuter rail

service. A consistency determination for each relevant RWCmoves transportation goal is provided below in **Table 9-4**.

TABLE 9-4
RWCMOVES GOALS

Transportation Goals		Project Consistency Examples	
Goal 1	Eliminate traffic facilities and severe injuries for all modes by 2030.	The Project would require a grid street network that allows for safe movement of people and discourages speeding and other hazardous vehicle movements. The Transit District Amendment's proposed smaller blocks and grid network would be supplemented by enhanced crosswalks and traffic calming measures to support this goal. The addition of separated bicycle facilities would decrease exposure of bicyclists to vehicles.	
Goal 2	Create a walking and bicycling-friendly community that provides a safe, balanced, and convenient transportation system.	Hamilton Street between Franklin Street and the Caltrain right-of-way would be converted from a Downtown Core Street to instead be identified as a potential privately owned, publicly accessible open space to allow a safe path-of-travel for pedestrians and bicyclists between the Transit District area and downtown.	
Goal 3	Provide seamless connections and improved street access to all areas within the City, but especially along mixed-use corridors designated in the General Plan and Citywide Transportation Plan.	See project consistency examples for Goals 1 and 2.	
Goal 4	Embrace innovation in all forms of emerging technologies, especially in ways to creatively manage congestion and the transportation system.	The Project would encourage shared parking and, with the elimination of the Lane from Broadway to Jefferson Avenue between the Caltrain right-of-way and the Redwood City Transit Center, would accommodate widening of the Caltrain right-of-way in connection with potential future relocation and expansion of the Redwood City Transit Center. The Project would also include strategies to manage curbs for use by Transportation Network Company (TNC) (e.g., Uber, Lyft, etc.) activities.	
Goal 5	Reach over 50% of all trips being by non-driving modes by 2040; remaining automobile trips should be shared rides and/ or zero emission trips.	The Project's location directly adjacent to the Transit Center minimizes vehicle trips and vehicle miles traveled (see Impact TR-2).	
Goal 6	Invest in projects that support a resilient, equitable and sustainable transportation system.	The Project requires improvements for non-vehicle modes of transportation and is situated near the Transit Center, which promotes transit use.	

SOURCES: RWCmoves, 2018; Redwood City Transit District DTPP Amendments Transportation Analysis (Appendix B), 2022.

#### **Transit Demand**

OPR has opined that a project that increases transit ridership is not considered to result in a significant adverse environmental impact. The Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) states that:

When evaluating impacts to multimodal transportation networks, lead agencies generally should not treat the addition of new transit users as an adverse impact. An infill development may add riders to transit systems and the additional boarding and alighting may slow transit vehicles, but it also adds destinations, improving proximity and

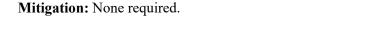
accessibility. Such development also improves regional vehicle flow by adding less vehicle travel onto the regional network.

Therefore, while the proposed Transit District DTPP Amendments would result in increases in office and residential populations that could increase demand for transit services, these increases would not result in a significant impact.

#### Conclusion

As discussed above, the proposed Transit District DTPP Amendments would be consistent with and promote General Plan, DTPP policies, and RWCmoves goals for the Downtown area, resulting in a less than significant impact. Mitigation measures identified in the DTPP Final EIR to address intersection and freeway segment operations impacts (Mitigation Measures 9-1 through 9-8) would not be applicable to the proposed Transit District DTPP Amendments due to the change in performance metrics used to determine a significant transportation impact, as required by SB 743 and CEQA Guidelines section 15064.3(b). Also, based on guidance published by OPR in 2018, adding transit ridership is not considered a significant adverse environmental impact, and therefore the transit-related mitigation measure identified in the DTPP Final EIR (Mitigation Measure 9-9) would not be applicable to the proposed Transit District DTPP Amendments.

In summary, based on the analysis presented above, implementation of the proposed Transit District DTPP Amendments would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The proposed Transit District DTPP Amendments would not result in new or more severe circulation-related impacts than the impacts identified in the DTPP Final EIR. Therefore, the impact would be *less than significant* and no mitigation measures would be required.



Impact TR-2: Implementation of the proposed Transit District DTPP Amendments would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). (Less than Significant)

#### **DTPP Impact Summary**

As discussed above in Section 9.3.2, *Significance Criteria*, this significance criterion was not evaluated in the DTPP Final EIR. This criterion is the direct result of implementation of SB 743 (see Section 9.2, *Regulatory Setting*) and the move from delay/capacity-based performance metrics to VMT, which occurred after certification of the DTPP Final EIR.

#### Project Impacts

The following summarizes the VMT impact methodology, analysis, and determination; travel demand modeling assumptions and adjustments used to calculate baseline and project VMT are documented in the Transportation Analysis conducted for the proposed Transit District DTPP Amendments (see Appendix B).

#### **VMT Screening**

In the first step of the VMT evaluation, the proposed Transit District DTPP Amendments components were evaluated against the City's screening criteria. Land use projects that meet the City's screening criteria summarized above in Section 9.3.2, *Significance Criteria*, are presumed to result in a less-than-significant VMT impact and do not require further analysis. While some land use developments within the Transit District area would likely meet the screening criteria (e.g., affordable housing, location in a TPA, locally-serving public facilities), others may not. Therefore, a full VMT analysis was conducted using the County's travel demand forecasting model (C/CAG-VTA model).

#### **Trip Generation**

Trip generation refers to the amount of travel activity associated with a change in land use at a given location. The C/CAG-VTA model was used to estimate daily vehicle trips for the purposes of this SEIR. This represents a conservative approach, since the C/CAG-VTA model uses industry standard/ generic trip generation characteristics for the different land uses to estimate vehicle trips. Trip generation studies conducted as part of RWCmoves show that Redwood City's rates are typically lower than standard industry rates. Additional detail on assumptions used to adjust and run the C/CAG-VTA model to reflect development that could occur under the proposed Transit District DTPP Amendments is provided in Appendix B.

The Transit District Amendment's proposed land uses were allocated to the appropriate Transportation Analysis Zones (TAZs) based on their location. The City model adjusts the trip generation to account for internalization, or the trips among uses within the Transit District area that are not expected to leave the Transit District area. Therefore, the trip generation is reported for the entire Project and is not broken down by specific land use. **Table 9-5** shows the total number of average weekday daily vehicle trips as a result of the Project based on an analysis of future conditions with and without the Project. The proposed Transit District DTPP Amendments would generate approximately 20,200 total net new daily vehicle trips. <sup>14</sup>

TABLE 9-5
AVERAGE WEEKDAY DAILY VEHICLE TRIPS

	Cumulative No Project	Cumulative + Project	Net New Project Trips
Daily	15,000	35,200	20,200

NOTE: Trip generation estimates rounded to nearest 100.

SOURCE: Redwood City Transit District DTPP Amendments Transportation Analysis (Appendix B), 2022.

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For comparison purposes, trip generation rates from the industry standard Institute of Transportation Engineers (ITE) Trip Generation Manual were applied to the proposed land use types and quantities. Using ITE's average daily rates of 10.84 trips per thousand square feet of office development and 4.72 trips per housing unit, the proposed Transit District DTPP Amendments would generate approximately 22,862 daily vehicle trips (17,670 for office, 5,192 for residential). In comparison to the C/CAG-VTA modeled average daily vehicle trips shown above in Table 9-5, the estimated trip generation using ITE's rates is about 13 percent higher; The ITE estimates are slightly higher because the ITE trip generation estimates, unlike the C/CAG-VTA trip generation estimates, are unadjusted and do not take into account vehicle trip efficiencies that are a function of the presence/proximity of complementary land uses and the mode shift to non-vehicle travel modes (i.e., walking, bicycling, transit) that occurs in a dense downtown area in proximity to transit.

#### Residential and Office VMT

The VMT estimate for all residential vehicle trips generated by the proposed Transit District DTPP Amendments with an origin or destination within the Transit District area were divided by the number of residents in TAZ 1628 to obtain VMT per capita. The results were compared to the City's VMT threshold for residential projects. 15 Similarly, the VMT estimate for all Projectrelated office-generated vehicle trips with an origin or destination within the Transit District area were divided by the number of employees in TAZ 1628 to obtain VMT per employee. The results were compared to the City's VMT threshold for office projects. The results for the residential and office components of the proposed Transit District DTPP Amendments are summarized in **Table 9-6**.

**TABLE 9-6** RESIDENTIAL AND OFFICE VMT ANALYSIS RESULTS

Scenario	VMT	VMT Threshold	Exceed VMT Threshold?			
Residential Project Components						
Existing	01		n/a			
Cumulative No Project	01	10.5 VMT per capita	n/a			
Cumulative Plus Project	8.1	-	No			
Office (General Employment)	Project Components					
Existing	14.3		n/a			
Cumulative No Project	14.0	15.0 VMT per employee	n/a			
Cumulative Plus Project	11.4		No			

#### NOTES:

n/a = Existing and Cumulative No Project VMT is not evaluated against threshold.

SOURCE: Redwood City Transit District DTPP Amendments Transportation Analysis (Appendix B), 2022.

The existing office VMT is below the City's threshold and there are no residential units in the Transit District area under the Existing and Cumulative No Project scenarios. With implementation of the proposed Transit District DTPP Amendments, both the residential and office VMT would be below the City's VMT thresholds, and the Project is considered to have a less-than-significant VMT impact, and no VMT mitigation measures are required.

While the proposed Transit District DTPP Amendments would allow for more than 1.63 million square feet of office uses, the VMT per employee would decrease due to the increase in infill development and proximity to the Redwood City Transit Center, which would encourage shorter trip lengths and more trips via transit. For example, a hypothetical office project that has 150 employees and is located in an area with limited transit accessibility would result in most employees driving; thus, each employee would generate two vehicle trips (one inbound trip to the office and

<sup>1</sup> The Transit District does not include any residential units under Existing and Cumulative No Project conditions.

<sup>15</sup> The VMT thresholds for both residential and office projects are provided in the Redwood City Transportation Analysis Manual, which is Appendix F to RWCMoves, the citywide transportation plan, July 21, 2020. Available at: https://www.google.com/url?client=internal-element-cse&cx=014272426406783312333:dyw6z6f4fre&q= https://www.redwoodcity.org/home/showpublisheddocument%3Fid%3D22106&sa=U&ved=2ahUKEwjg6Z6f17X3 AhWNEEQIHbNgDqYQFnoECAEQAg&usg=AOvVaw3SGepNCXXJqZPKo3JZwUJ1. Accessed April 27, 2022.

one outbound trip back home). If the average employee commute trip length is 10 miles roundtrip, then this hypothetical office project would generate 1,500 total VMT (150 driving employees x 10-mile roundtrip = 1,500 miles) or 10.0 VMT per employee (1,500 miles divided by 150 total employees). If this same hypothetical office project were to be located instead in an area with a high level of transit accessibility, and we assume that one-third of employees would now choose to use transit, then only 100 employees would drive. In this scenario, the hypothetical office project would generate 1,000 total VMT (100 driving employees x 10-mile roundtrip = 1,000 miles) or 6.7 VMT per employee (1,000 miles divided by 150 total employees). Thus, the proximity to transit can reduce VMT per service population compared to projects that are in more suburban settings with limited commute options; in this hypothetical example, VMT was reduced from 10.0 VMT per employee to 6.7 VMT per employee. Please note that this is a hypothetical example for discussion purposes only to demonstrate how access to transit can affect VMT.

#### **Project Effects on VMT**

The Transit District DTPP Amendments' effect on VMT was also analyzed using the "boundary method." The boundary method evaluates VMT that occurs within a selected geographic boundary (e.g., city, county, or region). The selected regional boundary for this analysis includes all of Redwood City, as specified in the City's Transportation Analysis Manual. <sup>16</sup> This captures all on-road vehicle travel on a roadway network for any purpose and includes local trips as well as trips that pass through the area without stopping.

An example of how a project can affect VMT is the addition of housing in a job-rich downtown. Workers in the downtown, an area that currently has limited housing options, must travel a greater distance between their home and work. Adding housing in downtown will result in shorter distances for many of the home-to-work trips and would, therefore, reduce VMT to/from the downtown. While the new housing itself will "generate" more daily vehicle trips, in that there will be more cars coming in and out of a newly developed residential site, it will generally attract those trips away from other residential developments located farther away. If the boundary VMT in the area served by the new residential development were to be assessed, it is likely that the total amount of driving in that area will have decreased rather than increased.

**Table 9-7** presents the total citywide VMT under cumulative conditions in 2040 and the calculated citywide VMT per capita, based on the total VMT in Redwood City divided by the total service population (residents and employees).

As shown in Table 9-7, the citywide VMT per capita under 2040 cumulative conditions without the proposed Transit District DTPP Amendments would be 10.38 VMT per capita. Under 2040 cumulative conditions with the proposed Transit District DTPP Amendments, the citywide boundary VMT per capita is estimated to be 10.01 miles, which would be less than the citywide VMT per capita without the proposed Transit District DTPP Amendments. Therefore, the impact of the proposed Transit District DTPP Amendments' on VMT, applying the boundary method, would be less than significant.

<sup>&</sup>lt;sup>16</sup> Redwood City Transportation Analysis Manual, July 21, 2020 (see footnote 15, p. 9-24); page 35.

TABLE 9-7
BOUNDARY METHOD CITYWIDE CUMULATIVE VMT ESTIMATES

Scenario	Cumulative No Project	Cumulative + Project	Exceed VMT Threshold?	
Vehicle Miles Traveled	2,035,800	2,059,300	n/a	
Service Population	196,100	205,700	n/a	
VMT per Capita <sup>1</sup>	10.38	10.01	No	

#### NOTE:

SOURCE: Redwood City Transit District DTPP Amendments Transportation Analysis (Appendix B), 2022.

#### Redwood City Transportation Demand Management (TDM) Ordinance

In December 2021, the City adopted a Transportation Demand Management (TDM) ordinance. The TDM ordinance requires all new development in the City that meet specified development thresholds (generally 25 or more units and/or 10,000 square feet or more commercial development, including offices development) to develop a TDM plan and requires annual monitoring with financial incentives to meet specified targets. This ordinance would apply to new development in the Transit District area even if individual projects qualified for VMT screening discussed previously. Thus, the City's TDM ordinance has the potential to further reduce VMT from the values shown in Table 9-6 since the TDM program would incentivize reduced vehicle trips and increased multimodal trips. The reductions attributable to the TDM ordinance were not quantified because VMT impacts were already determined to be less than significant, but compliance by individual subsequent development projects with the TDM ordinance would further reduce those impacts.

Many of the proposed Transit District DTPP Amendments reflect elements that would reduce single-occupancy vehicle trips and be complimentary to the City's TDM Ordinance goals. Specifically, the proposed amendments to right-size/reduce parking ratios, incentivize shared parking, increase bicycle parking ratios, improve access to long-term and short-term bicycle parking, and improve multimodal access to the Transit District area would support the City's goal to increase multimodal access and reduce single-occupancy vehicle trips.

#### **Roadway Network Changes**

The proposed Transit District DTPP Amendments includes several roadway network changes, which are described above in Section 9.3.1, *Scope of Analysis*. None of the streets currently exist, but were identified in the DTPP as future roadways. The proposed elimination of the one-block segments of Hamilton Street and Harrison Avenue are short (about 250 feet) and would not result in any noticeable change in VMT. Similarly, the removal of the lane between the Caltrain right-of-way and the Redwood City Transit Center and the Sequoia Station Shopping Center site would not noticeably change VMT, since the Transit District area and surrounding area generally provides a grid network that allows for efficient circulation within the Transit District area. Parallel facilities are available on Franklin Street and El Camino Real.

Per capita is defined by dividing total VMT by the sum of all employees, residents, and students.

Since the Transit District area generally has a grid network, there are easily accessible alternate routes for vehicle travel, and on balance the network changes are small and would not substantially increase VMT in the area, the Project is considered to have a less-than-significant roadway network change impact.

#### **Grade Separations and VMT**

As discussed in Chapter 2, *Project Description*, separate from the project being evaluated in this SEIR, the Redwood City Transit Center is anticipated to be relocated to the north of the existing location to provide space for an enlarged four-track Caltrain station. As part of this effort, the City, in partnership with Caltrain, SamTrans, and the San Mateo County Transportation Authority, is studying the feasibility of separating all existing at-grade crossings in Redwood City. The six grade crossings are currently located at Whipple Avenue, Brewster Avenue, Broadway, Maple Street, Main Street, and Chestnut Street. The goal of the grade separation study is to evaluate alternatives to address the current challenges of Caltrain at-grade crossings and to separate the railroad from the roadway. The City has not selected a preferred alternative, but is considering the following two options: a) grade-separate all crossings with Maple Street having bicycle and pedestrian access only and Chestnut Street having either full access or bicycle and pedestrian access only; and b) grade-separate the northern crossings only, leaving the southern crossings at-grade. The impact of these potential grade crossings on VMT are included as part of the cumulative analysis for Transportation and Circulation, which is discussed in Chapter 17, *Cumulative Impacts*.

#### Conclusion

As discussed above, new vehicle trips generated by the proposed Transit District DTPP Amendments would not exceed VMT thresholds established by the City. Furthermore, the effect of roadway network changes proposed by the Transit District DTPP Amendments was found to not have a substantial effect on VMT.

Therefore, implementation of the proposed Transit District DTPP Amendments would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). The proposed Transit District DTPP Amendments would not result in new significant VMT impacts. The impact would be *less than significant* and no mitigation measures would be required.

Mitigation: None require	ed.	

Impact TR-3: Implementation of the proposed Transit District DTPP Amendments would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Less than Significant)

The DTPP Final EIR found that impacts related to the introduction/worsening of hazards or incompatible uses would be less than significant. While conceptual street network changes are proposed as part of the Transit District DTPP Amendments, potential development within the Transit District area has not advanced to the stage of developing detailed street designs. As

detailed street designs are developed, any roadway extensions and new streets would need to comply with the DTPP, RWCmoves and the Street Design Criteria included in the City's Engineering Standards, all of which include design specifications to ensure safe and efficient travel of vehicles, bicycles, pedestrians, and transit vehicles. Therefore, the proposed Transit District DTPP Amendments would not introduce any geometric design features or incompatible uses, and would not result in a new or more severe impact related to traffic hazards than the impact identified in the DTPP Final EIR. This impact would be *less than significant*.

wingation: None require	ea.	

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# Impact TR-4: Implementation of the proposed Transit District DTPP Amendments would not result in inadequate emergency access. (Less than Significant)

The transportation analysis in the DTPP Final EIR found that impacts related to emergency access would be less than significant. However, the DTPP Final EIR also addressed emergency response and evacuation impacts in Chapter 8, *Public Services*, concluding that there would be a potentially significant impact and imposing mitigation to require the City to implement signal prioritization for emergency response vehicles. Due to changes to the CEQA Guidelines since certification of the DTPP Final EIR, this impact discussion and mitigation is provided in Chapter 14, *Hazards and Hazardous Materials* of this SEIR.

Efficient operations of City streets help to reduce response times for emergency responders including the Redwood City Police and Fire Department personnel, as well as private ambulance services. An emergency access assessment was conducted to determine if the proposed Transit District DTPP Amendments has the potential to impede emergency vehicle access by creating conditions that would substantially affect the ability of drivers to yield the right-of-way to emergency vehicles or preclude the ability of emergency vehicles to access streets located within the Transit District area.

Any roadway extensions, such as Franklin Street between Jefferson Avenue and James Avenue, would need to comply with the Street Design Criteria included in the City's Engineering Standards, as well as relevant sections from RWCmoves, which include design specifications that consider emergency vehicle access requirements. All new street segments would be designed in accordance with City policies and provide adequate emergency vehicle access and would not impede emergency vehicle access to the Transit District area and surrounding area by emergency vehicles. The Fire Department and other relevant City departments would review the final design and on-site circulation, once completed, to ensure that there is adequate emergency access.

Overall, the proposed roadway extensions and new streets provide for a grid network that has adequate emergency vehicle access throughout the Transit District area. The streets proposed to be removed/closed are generally short (fewer than 400 feet) and would still allow for emergency vehicle access to individual buildings. The proposed Transit District DTPP Amendments would not result in new or more severe impacts related to emergency access than the impact identified in the DTPP Final EIR. Therefore, the impact would be *less than significant*.

Mitigation: None required.

#### 9.4 References

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9. Transportation and Circulation

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# **CHAPTER 10**

# Utilities and Infrastructure; Hydrology and Water Quality

This SEIR chapter analyzes the effects of the changes to utilities and infrastructure proposed as part of the proposed Transit District DTPP Amendments, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts. While analysis of impacts related to solid waste were included in Chapter 8, *Public Services*, of the DTPP Final EIR, topics related to solid waste are analyzed in this section to align with relevant utility and service system topics. Consistent with the organization of the DTPP Final EIR, this section also addresses hydrology and water quality issues.

#### Findings of the DTPP Final EIR

Topics related to water and wastewater were addressed in the Utilities and Infrastructure chapter of the DTTP Final EIR. Redwood City's 2005 Urban Water Management Plan (UWMP) was used as the basis for the water supply analysis, and the DTPP Final EIR found that the 2005 UWMP accounted for projected growth within the DTPP area and concluded that adequate water supply was available to serve proposed growth. Accordingly, the DTPP Final EIR determined that the DTPP would have no impact related to water supply.

The DTPP Final EIR found that existing water lines had capacity to serve the DTPP, but upsizing or water line replacements could be needed in the future due to aging infrastructure. Additional improvements could also be needed to ensure adequate fire flow to new development within the DTPP. The construction of water system improvements was described to be temporary and within existing rights of way, and no unusual significant environmental impact were anticipated due to construction activity. As such, the DTPP Final EIR determined that impacts related to potable and fire flow water systems were less than significant.

The DTPP Final EIR found that the available treatment capacity at the South Bayside System Authority's wastewater treatment plant would be adequate to meet the net increase in generation from the DTPP. Thus, the DTPP would not result in any wastewater capacity exceedances, and impacts were determined to be less than significant.

The DTPP Final EIR found that individual projects developed within the DTPP would include replacing existing developed areas with new development, and although residential and commercial densities would increase, there would be minimal difference between the DTPP

Since adoption of the DTPP, the South Bayside System Authority has transitioned to Silicon Valley Clean Water.

buildout scenario and existing conditions in terms of stormwater runoff. No areawide drainage improvements were anticipated, and the DTPP was found to potentially result in a reduction of stormwater runoff, due to increased landscaping. As a result, impacts on storm drainage infrastructure were determined to be less than significant.

Stormwater quality impacts during construction activities were analyzed in the DTPP Final EIR and the analysis determined that the DTPP would have a less than significant impact as it relates to construction runoff contaminating receiving waters because impacts would be adequately addressed through compliance with City, County, and (Regional Water Quality Control Board) RWQCB requirements. Additionally, compliance with the NPDES Construction General Permit and associated SWPPP would reduce water quality impacts.

Long-term water quality impacts were analyzed in the DTPP Final EIR, which determined that, if not properly controlled, the increased activity in the area could lead to substantial water quality issues. However, the long-term impacts would be adequately addressed through compliance with City, County, and RWQCB requirements, and the DTPP Final EIR concluded that the impacts would be less than significant, and no mitigation was required.

Groundwater impacts were analyzed in the DTPP Final EIR and were determined to be less than significant impacts because Redwood City did not then and had no intention of using groundwater as a water supply, so future development within the DTPP area would not have caused a depletion of groundwater supplies. Additionally, because future developments would be constructed on previously developed land, there would not be a substantial increase in impervious surfaces. The City is studying potential future use of groundwater as an emergency or backup source of water.<sup>2</sup> However, it would be speculative to consider potential future effects thereof, as no definitive plans yet exist.

Flooding impacts were analyzed in the DTPP Final EIR, which determined that the impacts would be less than significant because the DTPP area was not within an established 100-year flood zone per the 2012 Flood Insurance Rate Maps. The updated 2019 Flood Insurance Rate Maps include a portion of the DTPP that is within the 100-year flood zone; however, no portion of the Transit District area is within the 100-year flood zone. No mitigation was required.

Flooding impacts related to dam failure were analyzed in the DTPP Final EIR and were determined to be less than significant. The DTPP area is within the Emerald Lake Dam inundation area and could be subject to flooding in the event of a dam failure. The City has included potential dam failure in its emergency preparedness, response, and evacuation programs. Therefore, the potential flooding impacts related to failure of the Emerald Lake dam would be less than significant. No mitigation was required.

Seiche, Tsunami, and Mudflow impacts were analyzed in the DTPP Final EIR and were determined to be less than significant. The DTPP area is not within a tsunami hazard zone and is far enough inland that a seiche would not produce enough force to pose a substantial risk to

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Redwood City 2020 Urban Water Management Plan (UWMP; discussed below in Section 10.2.15; see UWMP p. 67). UWMP available at: https://www.redwoodcity.org/residents/water).

persons or property. Additionally, the DTPP area is flat and away from hillsides and there is no risk of being subject to a debris flow. No mitigation was required.

Analysis of impacts related to solid waste were included in Chapter 8, *Public Services*, of the DTPP Final EIR. The DTPP Final EIR found that the DTPP would increase the demand for solid waste collection and disposal services, but would not generate an inordinate volume of solid waste and the Ox Mountain Landfill would have sufficient capacity to serve the DTPP. Therefore, the DTPP Final EIR determined impacts related to solid waste to be less than significant.

# 10.1 Environmental Setting

#### 10.1.1 Water Infrastructure

#### **Water Supply**

The City's water service area spans approximately 17 square miles and includes the incorporated limits of Redwood City, as well as areas of San Mateo County outside of those limits, including Cañada College, the Emerald Lake Hills Area, a portion of the Town of Woodside, and the City of San Carlos. The City currently purchases all of its potable water supplies from the San Francisco Regional Water System (RWS), which is operated by the San Francisco Public Utilities Commission (SFPUC) (West Yost, 2022). Approximately 85 percent of the water supply to the SFPUC RWS originates in the Hetch Hetchy watershed, located in Yosemite National Park, and flows down the Tuolumne River into the Hetch Hetchy Reservoir. Water from the Hetch Hetchy watershed is managed through the Hetch Hetchy Water and Power Project. The remaining 15 percent of the water supply to the SFPUC RWS originates locally in the Alameda and Peninsula watersheds and is stored in six different reservoirs in Alameda and San Mateo Counties (Redwood City, 2021a). The SFPUC RWS supplies water to both retail and wholesale customers. Retail customers include residents, businesses, and industries located within the City and County of San Francisco's boundaries. Wholesale customers include 26 cities and water supply agencies in Alameda, San Mateo and Santa Clara counties, including Redwood City (West Yost, 2022).

The City is a member agency of Bay Area Water Supply and Conservation Agency (BAWSCA) and purchases treated water from the SFPUC RWS in accordance with the November 2018 Amended and Restated Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo, and Santa Clara Counties, which was adopted in 2019. The term of the agreement is 25 years, with a beginning date of July 1, 2009, and an expiration date of June 30, 2034.<sup>3</sup> Per the agreement, the City has an Individual Supply Guarantee (ISG) of 10.93 million gallons per day (MGD), or 12,243 acre-feet per year (AFY), supplied by the SFPUC RWS. Between 2016 and 2020, the City purchased between 67 percent and 80 percent of its ISG.

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According to the Redwood City 2020 Urban Water Management Plan (UWMP; discussed below in Section 10.2.15; see UWMP p. 84), "Water supplies from the SFPUC RWS through 2045 are projected to be equivalent to the City's ISG of 12,243 AFY, which is the City's contractual entitlement to SFPUC wholesale water, which survives in perpetuity." UWMP available at: https://www.redwoodcity.org/residents/water).

In addition, although the City does not currently use groundwater as a supply source, it is in the early phase of evaluating groundwater for potential future emergency supply. A preliminary assessment of groundwater production potential for the City found that sufficient groundwater supply may be available for the City to use as a back-up supply. The portion of the subbasin underlying the City is in a state of equilibrium and water quality is expected to be sufficient for municipal and irrigation uses, though some level of treatment may be required. The hydrological setting for groundwater is discussed in Section 10.1.6, *Hydrological Setting*, below.

The City also operates a water recycling program, which supplies non-potable water to a portion of the City's customers. Silicon Valley Clean Water (SVCW) operates the wastewater treatment plant that produces recycled water for the City (both are discussed further below). The Redwood City recycled water project has a design capacity of up to 3,238 AFY of average annual demand and includes the option to export recycled water to neighboring communities (West Yost, 2022).<sup>4</sup>

#### **Water Distribution System**

#### Potable Water

The City's water system is comprised of 260 miles of water distribution and transmission pipelines, ten pump stations, 60 dedicated water sampling stations, 13 water storage tanks with a capacity of 22 million gallons. The City's Water System Master Plan (WSMP) identifies strategies for maintaining and improving water system service levels for the community aligned with Level of Service (LOS) Goals. These goals include: 1) maintain reliable customer service; 2) protect public health and operator safety; and 3) provide cost-effective projects. These LOS Goals guide capital expenditures for the system and future updates to water rates and connection fees needed to support the water system. Given that Redwood City has developed over more than 150 years, roughly 40 percent of the City's water infrastructure was originally installed between 1903 and 1950, and regular investments are needed to ensure residents have reliable water service (Redwood City, 2021b).

#### Recycled Water

Recycled water is an alternative water source that can safely replace potable water for a variety of non-potable services. Investment in recycled water has helped to reduce demands on the City's potable water supply significantly, and it currently accounts for 9 percent of the City's overall water demand. SVCW produces Redwood City's recycled water at its wastewater treatment plant. The City's recycled water distribution system includes two 2.18-million-gallon storage tanks, a

Current theoretical supply capacity of the recycled water project is 2,857 AFY, with potential expansion, when demand warrants, of up to 3,238 AFY. Usage of recycled water was 856 AFY in 2020, according to the UWMP; current demand is limited both by the geographic area served by recycled water supply lines and by the fact that many existing uses do not have the capacity to efficiently use recycled water. The "supply" of recycled water identified in the UWMP is limited by the demand, as the recycled water project does not produce recycled water for which no demand exists. Additionally, because recycled water cannot substitute for potable water in certain instances, the full potential supply of recycled water is not considered in the UWMP so as not to artificially "inflate" the City's overall water supply. For these reasons, within the UWMP, supply and demand values for any given scenario will match. Nevertheless, should demand for recycled water increase beyond what was projected in the UWMP, there is capacity to meet that demand up to 2,857 AFY at present and potentially up to 3,238 AFY in the future.

distribution pump station, five sample stations, and approximately 19 miles of distribution pipelines. In 2016, the City completed Phase 2A of its recycled water project, which brought recycled water west of Highway 101 to serve Redwood City's Downtown area near Kaiser Hospital. The system currently extends into Downtown as far as the intersection of Walnut and Marshall Streets, near the southwest corner of the Kaiser campus. Expansion of the recycled water system is in progress with two major recycled water pipeline extensions for the Broadway Plaza and South Main Mixed-Use projects. These pipe alignments will enable the City to connect other existing and newly developed properties to recycled water, further reducing demands on the potable water system (Redwood City, 2021b). The South Main Mixed-Use project is located adjacent to the DTPP area and approximately 0.2 miles southeast of the Transit District area. There is currently no recycled water supply in the Transit District area.

#### 10.1.2 Wastewater

#### **Wastewater Treatment**

SVCW is a Joint Powers Authority comprised of the City of Belmont, City of Redwood City, City of San Carlos, and West Bay Sanitary District. SVCW owns and operates a wastewater treatment plant, including support facilities necessary for the operation and maintenance of the treatment plant, wastewater conveyance system force mains, five wastewater conveyance pump stations, and an effluent outfall into the San Francisco Bay (SVCW, 2020).

SVCW's Wastewater Treatment Plant is located in the Redwood Shores area of Redwood City. The Plant processes all wastewater delivered to the Plant from the service areas via the conveyance system. The regional wastewater treatment plant has an average dry weather flow permitted capacity of 29 million gallons per day (MGD), and a peak wet weather flow capacity of 71 MGD. The plant also has an approximately nine-mile influent force main pipeline that conveys wastewater from the SVCW Member Entities to five pump stations, the treatment plant, and a 1.25-mile effluent disposal pipeline that discharges treated effluent into the San Francisco Bay. Four pump stations pump raw wastewater to the SVCW force main and one booster station pumps peak wet weather flows from West Bay Sanitary District and City of Redwood City when necessary. SVCW owns, operates and maintains the pump stations and is reimbursed by the individual member agencies for costs expended on the operation and maintenance related to the member agency's service areas. SVCW also provides recycled water to the City of Redwood City (SVCW, 2021).

# **Wastewater Conveyance**

The City operates a sanitary sewer system that consists of 184 miles of gravity sewers (approximately 5,300 line segments), 4,772 manholes, 10 miles of force mains, and 31 lift stations. The sewers range in size from 4 inches to 60 inches in diameter and the piping system includes 26 siphons. Property owners are responsible for installation, maintenance and repair of the parcel upper private sewer lateral(s). The City is responsible for the lower lateral from the property line to the City main line.

The City of Redwood City 2013 Sewer Master Plan identifies and prioritizes capacity and rehabilitation improvement projects and recommends a phased capital improvement program (CIP), including budget estimates, for implementing the needed capacity improvements to the wastewater collection system. The 2013 Master Plan included a hydraulic analysis with updated flow monitoring information and land use data. The update resulted in revisions to the City's future capital improvement program for both existing and future capacity enhancement requirements. It should be noted that the analysis from the 2013 Sewer Master Plan is now outdated and will be revised/updated with an additional study of the potentially required sewer system improvements that could be required by development in the Transit District area and elsewhere in Downtown. The ongoing Transit District area utility study will address the infrastructure needs of the Transit District area, including but not limited to improvements of sanitary sewer mains downstream of the immediate Transit District area. The City currently funds its collection system capital needs on a pay-as-you-go, cash basis, and has increased its sewer rates accordingly (Redwood City, 2018). The City has completed a number of the capacity improvement projects recommended in previous master plans, but capacity deficiencies in the conveyance system remain. Additional redevelopment is projected in the future, which will further increase wastewater flows and may create additional capacity constraints (Redwood City, 2021b).

The sanitary sewer collection system is systematically upgraded through the Sewer Replacement Program, replacing ten to fifteen thousand linear feet of sewer pipes annually. CCTV inspections are also performed annually to understand the condition of the sewer collection system pipelines and evaluated to prioritize pipeline replacements. Flow capacity has also been evaluated to determine areas of the collection system which may need to be upsized to meet future development flows and requirements. In addition to capital improvements to sewer pipelines, the City rehabilitates one to two of its 31 sewer pump stations each year (Redwood City, 2021b).

# 10.1.3 Stormwater Drainage

The Redwood City Public Works Services Department maintains, operates, and repairs Redwood City's stormwater system. The stormwater system is comprised of 22 pump stations, 2,685 storm drain catch basins, inlets, and siphons, more than 100 miles of storm drain pipe, 82 open culverts, more than 10 miles of creeks, drain ditches, and canals, and 150 acres of storm retention basins in Redwood Shores. The stormwater drainage system is highly regulated as the stormwater eventually flows into the San Francisco Bay (Redwood City, 2010). An existing stormwater culvert traverses the Transit Center area, running generally from west to east beneath the Sequoia Station shopping center. The culvert extends through Downtown and empties into Redwood Creek just east of Bradford Street.

# 10.1.4 Energy and Telecommunications Systems

#### Pacific Gas and Electric

Pacific Gas and Electric Company (PG&E) provides electric and natural gas service in Redwood City. In the City, there are overhead and underground PG&E electric distribution systems, and overhead and underground secondary distribution and service system. The closest major electric

transmission line (under 100 kV) to the Transit District area runs east to west across above Highway 101 east of Woodside Road (PG&E, 2022a). In the City, there are also underground natural gas distribution systems, with the major natural gas transmission line running through the DTPP area north of the Transit District area along Marshall Street and Winslow Street (PG&E, 2022b).

### Peninsula Clean Energy

Peninsula Clean Energy (PCE) is a community choice energy (CCE) program which allows Redwood City, along with the County and the other towns and cities in San Mateo County, to pool the electricity demands of our businesses and residents, purchase renewable power and reinvest in local infrastructure. All customers are automatically enrolled in PCE's "default" option, EcoPLUS, which is both cleaner and typically less expensive than PG&E's default product. Customers may also choose to "opt up" to PCE's 100 percent renewable option, ECO100, which is slightly more expensive than PG&E's default product. Customers can also choose to "opt out" and return to PG&E (Redwood City, 2022).

### **Telecommunications**

The telecommunications system serving the City consists of aboveground and buried telecommunications circuits from several providers, primarily AT&T and Comcast.

### 10.1.5 Solid Waste

Recology of San Mateo County is the City's selected contractor to handle all solid waste collection for Redwood City, including garbage, recyclables, and organics. The Ox Mountain Sanitary Landfill (2 Mi N-E Half Moon Bay Off Hwy 92, Half Moon Bay, CA) is the disposal site for all solid waste collected by Recology that is not diverted. Ox Mountain Landfill is permitted to accept 3,598 tons of waste per day and currently averages approximately 1,650 tons of solid waste per day for disposal (including construction/demolition, and municipal waste). The Ox Mountain Landfill has approximately 17,240,000 cubic yards of remaining capacity as of February 2022, and is estimated to reach permitted disposal capacity by the year 2034 (CalRecycle, 2022). In 2019, the statewide average disposal rate was 6.7 pounds per resident per day with a total of approximately 42.2 million tons of solid waste landfilled (CalRecycle, 2021). The average disposal rate for the City in 2020 was 5.2 pounds per resident per day and 6.8 pounds per employee per day (CalRecycle, 2020).

## 10.1.6 Hydrological Setting

The Santa Clara Valley located near the southern end of San Francisco Bay is a 4,500-square mile drainage basin that includes portions of several Bay Area counties. The valley is bounded by the Santa Cruz Mountains to the southwest and the Diablo Range to the northeast.

The San Francisco Bay Area experiences a Mediterranean climate characterized by mild, wet winters and dry, warm summers. Air temperatures are mild and seldom below freezing due to proximity to the ocean. Winter weather is dominated by storms from the northern Pacific Ocean

that produce nearly all the annual rainfall, and also cause storm surges that elevate water levels in San Francisco Bay. Summer weather is dominated by sea breezes caused by differential heating between the hot interior valleys and the cooler coast. The prevailing wind direction is from the west to northwest in the late spring through early fall, with more variable conditions in the winter. The area typically receives about 90 percent of its precipitation in the fall and winter months, with the greatest average rainfall occurring in January.

### Groundwater

Redwood City is within the Santa Clara Groundwater Basin, San Mateo Plain Subbasin (Basin 2-009.03). The subbasin is bounded by the Santa Cruz Mountains to the west, San Francisco Bay to the east, and the Westside Basin to the north, and the San Francisquito Creek and the Santa Clara Subbasin to the south. The San Mateo Plain Subbasin is not adjudicated and, as of 2019, is ranked a very low priority basin (City of Redwood City, 2021a). As a very low priority subbasin, the San Mateo Plain Subbasin is not subject to the requirements under the Sustainable Groundwater Management Act (SGMA) (City of Redwood City, 2021a). Groundwater in the Santa Clara Subbasin is of generally good quality. Key issues of concern in the subbasin are land subsidence caused by past groundwater overdraft, and saline intrusion into groundwater through tidal channels near southern portions of San Francisco Bay.

### **Flooding**

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the Transit District area boundary is not within the 100-year flood zone (FEMA, 2019).

### **Dam Inundation Zones**

According to the dam failure inundation map published by the Division of Safety of Dams (DSOD), portions of Redwood City (including the Transit District area) are within the inundation zone for the Emerald Lake Dam (DSOD, 2019).

### **Tsunami and Seiche**

Tsunamis are ocean waves generated by vertical movement of the sea floor, normally associated with earthquakes or volcanic eruptions. Seiches are oscillations of enclosed or semi-enclosed bodies of water that result from seismic events, wind stress, volcanic eruptions, underwater landslides, and local basin reflections of tsunamis.

According to the Tsunami Hazard Area Map for San Mateo County, the Transit District area is outside of the delineated hazard area and would not be subject to tsunami or seiche (CGS, 2021).

## 10.2 Regulatory Setting

The following section focuses on any changes to the regulatory setting that have occurred since certification of the DTPP Final EIR. Section 10.2 of DTPP Final EIR Chapter 10, *Utilities and Infrastructure*, includes the regulatory setting for this topic and is still current for this SEIR,

except as noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

## 10.2.1 Urban Water Management Planning Act

California Water Code Section 10610 *et seq.* requires all public water systems that provide water for municipal purposes to more than 3,000 customers, or that supply more than 3,000 AFY, to prepare a UWMP. UWMPs are key water supply planning documents for municipalities and water purveyors in California, and often form the basis of Water Supply Assessments (WSAs) (refer to the following discussion of Senate Bill [SB] 610 and SB 221) prepared for individual projects. UWMPs must be updated at least every 5 years on or by July 1 in years ending in 1 and 6. The City of Redwood City adopted its 2020 UWMP in June 2021 (Redwood City, 2021a).

### 10.2.2 Senate Bills 610 and 221

The purpose and legislative intent of SB 610 and SB 221, enacted in 2001, is to require specific evaluations be performed and documented by the local water provider that indicate there are sufficient water supplies available to meet the project's anticipated water demand. SB 610 requires the local water provider for a large-scale development project to prepare a WSA.<sup>5</sup> The WSA evaluates the water supply available for new development based on anticipated demand. The WSA must be included in the environmental document. The lead agency may evaluate the information presented in the WSA, and then must determine whether the projected water supplies would be sufficient to satisfy the project's demands in addition to existing and planned future uses. Completion of a WSA requires collection of proposed water supply data and information relevant to the project in question, an evaluation of existing/current use, a projection of anticipated demand sufficient to serve the project for a period of at least 20 years, delineation of proposed water supply sources, and an evaluation of water supply sufficiency under single-year and multiple-year drought conditions.

West Yost prepared a WSA for the proposed Transit District DTPP Amendments on behalf of the City, which is included as **Appendix E** of this SEIR. The conclusions of the WSA are described and analyzed in Impact UT-2 below.

SB 221 requires the local water provider to provide "written verification" of "sufficient water supplies" to serve subdivisions involving more than 500 residential units per Government Code Section 66473.7. Sufficiency is different under SB 221 than under SB 610. Under SB 221, sufficiency is determined by considering:

All projects that meet any of the following criteria require a WSA: (1) A proposed residential development of more than 500 dwelling units; (2) a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; (3) a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; (4) a proposed hotel or motel, or both, having more than 500 rooms; (5) a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area; (6) a mixed-use project that includes one or more of the projects specified in SB 610; or (7) a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

- The availability of water over the past 20 years;
- The applicability of any urban-water shortage contingency analysis prepared in compliance with Water Code Section 10632;
- The reduction in water supply allocated to a specific use by an adopted ordinance; and
- The amount of water that can be reasonably relied upon from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer.

As a result of the information contained in the written verification, a city or county may attach conditions during the tentative map approval process to ensure that an adequate water supply is available to serve the proposed plan. If the verification relies on projected water supplies that are not currently available, it must include detailed information about the source of the new water, the financing for any capital outlays required, the securing of applicable federal, state and local permits for any necessary infrastructure to deliver the water, and any necessary regulatory approvals. Typically, following project certification, an additional water supply verification must be completed at the tentative map stage, prior to adoption of the final map, for certain tentative maps.

## 10.2.3 Assembly Bill 325

Assembly Bill (AB) 325, the Water Conservation in Landscaping Act of 1990, directs local governments to require the use of low-flow plumbing fixtures and the installation of drought-tolerant landscaping in all new development. Pursuant to the Water Conservation in Landscaping Act, the California Department of Water Resources developed a Model Water Efficient Landscape Ordinance (MWELO). Currently, development projects of sufficient size/scope as outlined in the State MWELO are required to self-certify by completing MWELO worksheets to demonstrate compliance with MWELO standards. An annual report, submitted to the state, is prepared by the City to summarize the number and scale of landscape improvements.

## 10.2.4 Water Code Section 10608 et seq. (Senate Bill 7 or Senate Bill X7-7)

Water Code Section 10608 et seq. required urban retail water suppliers to set and achieve water use targets that would help the state achieve a 20 percent per capita reduction in urban water use by 2020. SB X7-7 required each urban retail water supplier to develop urban water use targets and an interim urban water use target, in accordance with specified requirements. The bill is intended to promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in California Water Code Section 10631 as part of UWMPs. The City's UWMP complied with these requirements.

## 10.2.5 Senate Bill 7 (2016)

In September 2016, Governor Jerry Brown signed into law SB 7, which requires new multifamily residential rental buildings in California constructed after January 1, 2018, to include a sub-meter

for each dwelling unit and to bill tenants in apartment buildings accordingly for their water use to encourage water conservation.

### 10.2.6 Executive Orders B-29-15 and B-37-16

In April 2015, Governor Brown issued Executive Order B-29-15, which called for mandatory water use reductions. The executive order required cuts for public landscaping and institutions that typically use large amounts of water (e.g., golf courses), banned new landscape irrigation installation, and required municipal agencies to implement conservation pricing, subsidize watersaving technologies, and implement other measures to reduce the state's overall urban water use by 25 percent. The order also required local water agencies and large agricultural users to report their water use more frequently.

In May 2016, Governor Brown issued Executive Order B-37-16, which made the mandatory water use reduction of 25 percent permanent and directed the California Department of Water Resources and State Water Resources Control Board (State Water Board) to strategize further water reduction targets. The order also made permanent the requirement that local agencies report their water use monthly. Additionally, certain wasteful practices such as sidewalk hosing and runoff-causing landscape irrigation were permanently outlawed, while local agencies must prepare plans to handle droughts lasting 5 years. The current Urban Water Management Plan outlines the steps the City has taken and will be taking to comply with the reduction. 6

## 10.2.7 Senate Bill 6060 and Assembly Bill 1668

In 2018, Senate Bill 606 and Assembly Bill 1668 were passed and build on California's ongoing efforts to make water conservation a way of life and to provide a structure for long-term improvements in water conservation and drought planning. The two bills include provisions that require both urban and agricultural water suppliers to set annual water budgets and prepare for droughts; mandate that urban water suppliers develop water use objectives and long-term standards for efficient water use; provide incentives for water suppliers to recycle water; and identify small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning.

## 10.1.1 California Green Building Standards Code

### Water and Wastewater

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code is intended to encourage more sustainable and environmentally friendly building practices, conserve natural resources, and promote the use of energy-efficient materials and equipment. Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state. Mandatory measures related to water conservation include water-conserving plumbing fixture and

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<sup>6 2020</sup> Urban Water Management Plan for City of Redwood City, June 2021; available at: https://www.redwoodcity.org/home/showpublisheddocument/23745/637618448235530000. Reviewed April 24, 2022.

appliance requirements, including flow rate maximums, compliance with state and local water-efficient landscape standards for outdoor potable water use in landscape areas, and recycled water systems, where available. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and non-residential uses; the 2019 amendments to the CALGreen Code became effective January 1, 2020. Updates include more stringent requirements for residential metering faucets, and a requirement that all residential and non-residential developments adhere to a local water efficient landscape ordinance or to the State of California's Model Water Efficient Landscape Ordinance, whichever is more stringent. As a condition of approval, the City requires that all projects with more than 500 square feet of landscaping install a landscape irrigation system that conforms to the California Water-Efficient Landscape Ordinance and Model Water Efficiency Landscape Ordinance requirements,<sup>7</sup>

#### Solid Waste

As amended, the CALGreen Code (California Code of Regulations Title 24, Part 11) requires that readily accessible areas be provided for recycling by occupants of residential buildings. The CALGreen Code also requires that residential building projects recycle and/or salvage for reuse a minimum of 65 percent of their non-hazardous construction and demolition waste, or comply with a local construction and demolition waste management ordinance, whichever is more stringent (Section 5.408.1). The 2016 version of the code increased the minimum diversion requirement for non-hazardous construction and demolition waste to 65 percent from 50 percent (in the 2013 and earlier versions) in response to AB 341, which declared the policy goal of the state that not less than 75 percent of solid waste generated would be source reduced, recycled, or composted by 2020.

# 10.2.8 Assembly Bill 939 (California Integrated Waste Management Act)

AB 939, enacted in 1989 and known as the Integrated Waste Management Act (Public Resources Code Section 40050 et seq.), requires each city and county in the state to prepare a Source Reduction and Recycling Element to demonstrate a reduction in the amount of waste being disposed to landfills. The act required each local agency to divert 50 percent of all solid waste generated within the local agency's service area by January 1, 2000. Diversion includes waste prevention, reuse, and recycling. SB 1016 revised the reporting requirements of AB 939 by implementing a per capita disposal rate based on a jurisdiction's population (or employment) and its disposal.

The Integrated Waste Management Act requires local agencies to maximize the use of all feasible source reduction, recycling, and composting options before using transformation (incineration of solid waste to produce heat or electricity) or land disposal. The act also resulted in the creation of the state agency now known as the California Department of Resources Recycling and Recovery (CalRecycle). Under the Integrated Waste Management Act, local governments develop and implement integrated waste management programs consisting of several types of plans and

<sup>7</sup> Redwood City Municipal Code Section 47.120.

policies, including local construction and demolition ordinances. The act also set in place a comprehensive statewide system of permitting, inspections, and maintenance for solid waste facilities, and authorized local jurisdictions to impose fees based on the types and amounts of waste generated.

In 2011, AB 341 amended AB 939 to declare the policy goal of the state that not less than 75 percent of solid waste generated would be source reduced, recycled, or composted by the year 2020, and annually thereafter.

## 10.2.9 Assembly Bills 341 and 1826

AB 341, signed into law in 2012, requires commercial and multi-family dwellings to recycle. AB 1826 (2014) furthered diversion and recycling requirements by requiring that all businesses and multi-family dwellings with more than five units also divert organic material. AB 1826 does not require multi-family dwellings to divert organic food waste.

### 10.2.10 Senate Bill 1383

SB 1383 established targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. SB 1383 granted CalRecycle the regulatory authority required to achieve the organic-waste disposal reduction targets. It also established a target of recovering not less than 20 percent of currently disposed edible food for human consumption by 2025.

## 10.2.11 National Pollutant Discharge Elimination System Construction General Permit

Construction of individual projects that could be developed as part of the proposed Transit District DTPP Amendments would disturb more than one acre of land surface, potentially affecting the quality of stormwater discharges into waters of the United States. The Transit District DTPP Amendments would, therefore, be subject to the National Pollutant Discharge Elimination System (NPDES) *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002, Construction General Permit; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ).

The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the United States from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface. The permit regulates stormwater discharges from construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a risk level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk at the site and the risk to receiving waters during periods of soil exposure (e.g., grading and site stabilization). The

sediment risk level reflects the relative amount of sediment that could be discharged to receiving water bodies, and is based on the nature of the construction activities and the location of the site relative to receiving water bodies. The receiving-waters risk level reflects the risk to receiving waters from the sediment discharge. Depending on the risk level, the construction projects could be subject to the following requirements:

- Effluent standards
- Good site management "housekeeping"
- Non-stormwater management
- Erosion and sediment controls

- Run-on and runoff controls
- Inspection, maintenance, and repair
- Monitoring and reporting requirements

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that includes specific best management practices (BMPs) designed to prevent sediment and pollutants from coming into contact with stormwater and moving off-site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management, and good housekeeping. They are intended to protect surface water quality by preventing eroded soil and construction-related pollutants from migrating off-site from the construction area. Routine inspection of all BMPs is required under the Construction General Permit. In addition, the SWPPP must contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The SWPPP must be prepared before construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff.

Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, and washing and fueling of vehicles and equipment. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site after construction).

In the Transit District area, the Construction General Permit is implemented and enforced by the San Francisco Bay Regional Water Quality Control Board, which administers the stormwater permitting program. Dischargers must electronically submit a notice of intent and permit registration documents to obtain coverage under this Construction General Permit. Dischargers are to notify the San Francisco Bay Regional Water Quality Control Board of violations or incidents of non-compliance, and submit annual reports identifying deficiencies in the BMPs and explaining how the deficiencies were corrected. The risk assessment and SWPPP must be prepared by a State Qualified SWPPP Developer, and implementation of the SWPPP must be overseen by a State

Qualified SWPPP Practitioner. A legally responsible person, who is legally authorized to sign and certify permit registration documents, is responsible for obtaining coverage under the permit.

## 10.2.12 National Pollutant Discharge Elimination System Waste Discharge Regulations

Discharges of stormwater runoff from municipal separate storm sewer systems (MS4s) are regulated by the Municipal Regional Stormwater NPDES permit, under Order No. R2-2015-0049; NPDES Permit No. CAS612008, issued by the San Francisco Bay Regional Water Board.

Under CWA Section 402(p), stormwater permits are required for discharges from MS4s that serve populations of 100,000 or more. The Municipal Regional Permit (MRP) manages the Phase I Permit Program (serving municipalities of more than 100,000 people), the Phase II Permit Program (for municipalities of fewer than 100,000 people), and the Statewide Storm Water Permit for the California Department of Transportation.

The State Water Board and the individual water boards implement and enforce the MRP. Multiple municipalities, including the City of Redwood City, along with San Mateo County, are co-permittees.

## 10.2.13 Municipal Regional Permit Provision C.3

Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area, or 5,000 square feet or more of impervious surface area for regulated projects involving special land use categories (i.e., auto service, retail gasoline station, restaurant, and/or uncovered parking), are required to implement site design, source control, and Low Impact Development—based stormwater treatment controls to treat post-construction stormwater runoff. Low Impact Development—based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and for using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures be properly installed, operated, and maintained.

In addition, the MRP requires new development and redevelopment projects that create or replace 1 acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, generate silt pollutants, or cause other impacts on local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimum size threshold, drain into tidally influenced areas or directly into San Francisco Bay, or drain into hardened channels, or if they are infill projects in sub-watersheds or catchment areas that are at least 65 percent impervious.

## 10.2.14 San Mateo Countywide Integrated Waste Management Plan

The California Integrated Waste Management Act directs counties to prepare a Countywide Integrated Waste Management Plan (CIWMP). This plan consists of the Source Reduction and Recycling Elements (SRREs), the Household Hazardous Waste Elements (HHWEs), and the Nondisposal Facility Elements (NDFEs) of each jurisdiction, the Countywide Siting Element, and the Countywide Integrated Waste Management Summary Plan. The CIWMP addresses waste management conditions and provides an overview of the actions that will be taken to achieve the diversion requirements of Public Resources Code section 41780 and to maintain 15 years of disposal capacity. California statute requires the County of San Mateo to review its CIWMP every five years and then report on its adequacy to the California Integrated Waste Management Board. The last review of the CIWMP was completed in 2019 (County of San Mateo, 2019).

## 10.2.15 Redwood City UWMP

The City's UWMP is a foundational document and source of information about the City's historical and projected water demands, water supplies, supply reliability and potential vulnerabilities, water shortage contingency planning, and demand management programs. The City of Redwood City adopted its 2020 UWMP in June 2021 (Redwood City, 2021a). A Water Shortage Contingency Plan (WSCP) was also developed to serve as a flexible framework of planned response measures to mitigate future water supply shortages.

The WSCP serves as a standalone document to be engaged in the case of a water shortage event, such as a drought or supply interruption, and defines specific policies and actions that will be implemented at various shortage level scenarios. The primary objective of the WSCP is to ensure that the City has in place the necessary resources and management responses needed to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during water supply shortages and interruptions. Consistent with California Water Code (CWC) Section 10632, the WSCP includes six levels to address shortage conditions ranging from up to 10 percent to greater than 50 percent shortage, identifies a suite of demand reduction measures for the City to implement at each level, and identifies procedures for the City to annually assess whether or not a water shortage is likely to occur in the coming year, among other things.

Each stage of the City's WSCP requires declaration by the City Council once a governing body, such as SFPUC, has required a voluntary or mandatory reduction in water use due to water supply shortages or an emergency. Each stage includes implementation of a mandatory water allocation program, voluntary restrictions on end uses, as well as various agency actions. Through the enactment of the various levels of the WSCP, the City can reduce the shortage in water supply by up to 55 percent.<sup>8</sup>

During the preparation of the City's 2020 UWMP, information regarding the reliability of the SFPUC RWS was provided to the City by BAWSCA, in coordination with SFPUC. The

Redwood City Urban Water Management Plan (see footnote 6, p. 10-11), Table 8-2, page 128.

following sections describe the potential impacts of the 2018 Bay-Delta Plan Amendment on SFPUC RWS reliability and SFPUC's Alternative Water Supply Planning Program designed to investigate and plan for new water supplies to address future long-term water supply reliability challenges and vulnerabilities on the RWS.

### 2018 Bay-Delta Plan Amendment

In December 2018, the State Water Resources Control Board (SWRCB) adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, which establishes water quality objectives to maintain the health of the rivers and the Bay-Delta ecosystem. Among the goals of the adopted Bay-Delta Plan Amendment is to increase salmonid populations in the San Joaquin River, its tributaries (including the Tuolumne River), and the Bay-Delta. Specifically, the plan amendment requires increasing flows in the Stanislaus, Tuolumne, and Merced rivers to 40 percent of unimpaired flow from February through June every year, whether it is wet or dry. During dry years, this would result in a substantial reduction in the SFPUC's water supplies from the Tuolumne River watershed.

If this plan amendment is implemented, the SFPUC would be able to meet the projected water contractual obligations to its wholesale customers as presented in the SFPUC 2020 UWMP in normal years but would experience significant supply shortages in dry years. Implementation of the Bay-Delta Plan Amendment would result in substantial dry-year water supply shortfalls throughout the SFPUC's regional water system service area, including Redwood City. In single dry years, supply shortages for SFPUC's wholesale customers collectively, would range from 36 to 46 percent. In multiple dry years for SFPUC's wholesale customers collectively, supply shortages would range from 36 to 54 percent. Implementation of the Bay-Delta Plan Amendment will require rationing in all single dry and multiple dry years through 2045. If the Bay-Delta Plan Amendment is not implemented, SFPUC would be able to meet 100 percent of the projected purchases of its wholesale customers during all year types through 2045 except during the fourth and fifth consecutive dry years for base year 2045 when 15 percent wholesale supply shortages are projected.

The SWRCB has stated that it intends to implement the plan amendment by the year 2022, assuming all required approvals are obtained by that time. However, at this time, the implementation of the Bay-Delta Plan Amendment has not occurred and is uncertain for several reasons. First, since adoption of the Bay-Delta Plan Amendment, over a dozen lawsuits have been filed in both state and federal court, challenging the SWRCB's adoption of the Bay-Delta Plan Amendment, including two legal challenges filed by the federal government, at the request of the U.S. Department of Interior, Bureau of Reclamation in state and federal courts. These cases are in the early stage and there have been no dispositive court rulings to date.

State Water Resources Control Board Resolution No. 2018-0059, Adoption of Amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and Final Substitute Environmental Document, December 12, 2018, available at https://www.waterboards.ca.gov/plans\_policies/docs/2018wqcp.pdf.

<sup>&</sup>quot;Unimpaired flow" represents the water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds.

Second, the Bay-Delta Plan Amendment is not self-executing and does not allocate responsibility for meeting its new flow requirements to the SFPUC or any other water rights holders. Rather, the plan amendment merely provides a regulatory framework for flow allocation, which must be accomplished by other regulatory and/or adjudicatory proceedings, such as a comprehensive water rights adjudication or, in the case of the Tuolumne River, the Clean Water Act section 401 certification process in the Federal Energy Regulatory Commission's relicensing proceeding for Don Pedro Dam. The license amendment process is currently expected to be completed in the 2022–2023 timeframe. This process and other regulatory and/or adjudicatory proceeding would likely face legal challenges and have lengthy timelines, and quite possibly could result in a different assignment of flow responsibility for the Tuolumne River than currently exists (and therefore a different water supply effect on the SFPUC).

Third, in recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, the water board directed its staff to help complete a "Delta watershed-wide agreement, including potential flow measures for the Tuolumne River" by March 1, 2019, and to incorporate such agreements as an "alternative" for a future amendment to the Bay-Delta Plan to be presented to the [SWRCB] as early as possible after December 1, 2019." In accordance with the SWRCB's instruction, on March 1, 2019, SFPUC, in partnership with other key stakeholders, submitted a proposed project description for the Tuolumne River that could be the basis for a voluntary substitute agreement with the SWRCB ("March 1st Proposed Voluntary Agreement"). On March 26, 2019, the Commission adopted Resolution No. 19-0057 to support SFPUC's participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and California Environmental Protection Agency and the leadership of the Newsom administration. The negotiations for a voluntary agreement have made significant progress since an initial framework was presented to the SWRCB on December 12, 2018. The package submitted on March 1, 2019 is the product of renewed discussions since Governor Newsom took office. While significant work remains, the package represents an important step forward in bringing together diverse California water interests. 11

In June 2021, in response to various comments from wholesale customers regarding the reliability of the RWS as described in SFPUC's 2020 UWMP, the SFPUC provided a memorandum describing SFPUC's efforts to remedy the potential effects of the Bay-Delta Plan Amendment. As described in the memorandum, SFPUC's efforts include the following:

- Pursuing a Tuolumne River Voluntary Agreement
- Evaluating the drought planning scenario in light of climate change
- Pursuing alternative water supplies
- Litigating with the State over the BayDelta Plan Amendment
- Litigating with the State over the proposed Don Pedro FERC Water Quality Certification

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In late October 2021, State regulators announced that these negotiations stopped before an agreement was reached. It is unclear whether or when negotiations might be reinitiated.

For these reasons, whether, when, and the form in which the Bay-Delta Plan Amendment will be implemented, and how those amendments will affect the SFPUC's water supply, is currently unknown.

### **Alternative Water Supply Program**

In early 2020, the SFPUC began implementation of the Alternative Water Supply Planning Program (AWSP), a program designed to investigate and plan for new water supplies to address future long-term water supply reliability challenges and vulnerabilities of the RWS particularly in light of the possible implementation of the Bay-Delta Plan Amendment.

Included in the AWSP is a suite of diverse, non-traditional supply projects that, to a great degree, leverage regional partnerships and are designed to meet the water supply needs of the SFPUC Retail and Wholesale Customers through 2045. As of the most recent Alternative Water Supply Planning Quarterly Update, SFPUC has budgeted \$264 million over the next ten years to fund water supply projects. The drivers for the program include: (1) the adoption of the Bay-Delta Plan Amendment and the resulting potential limitations to RWS supply during dry years; (2) the net supply shortfall following the implementation of SFPUC's Water System Improvement Plan (WSIP)<sup>12</sup>; (3) San Francisco's perpetual obligation to supply 184 mgd to the Wholesale Customers; (4) adopted Level of Service Goals to limit rationing to no more than 20 percent system-wide during droughts; and (5) the potential need to identify water supplies that would be required to offer permanent status to interruptible customers.

The SFPUC is considering several water supply options and opportunities to meet all foreseeable water supply needs, including surface water storage expansion, recycled water expansion, water transfers, desalination, and potable reuse. These efforts and their expected benefit to supply reliability are listed below, and described in further detail in the City's 2020 UWMP and SFPUC 2020 UWMP:

- Daly City Recycled Water Expansion (Regional; Normal and Dry-Year Supply)
- Alameda County Water District Union Sanitary District Purified Water Partnership (Regional; Normal and Dry-Year Supply)
- Crystal Springs Purified Water (Regional; Normal and Dry-Year Supply)
- Los Vaqueros Reservoir Expansion (Regional; Dry Year Supply)
- Bay Area Brackish Water Desalination (Regional; Normal and Dry-Year Supply)
- Calaveras Reservoir Expansion (Regional; Dry Year Supply)
- Groundwater Banking (Dry Year Supply)
- **Inter-Basin Collaborations**

<sup>12</sup> The Water System Improvement Program (WSIP) is a \$4.8 billion-dollar, multi-year capital program to upgrade the SFPUC's regional and local water systems. The program repairs, replaces, and seismically upgrades crucial portions of the Hetch Hetchy Regional Water System. The program consists of 87 projects (35 local projects located within San Francisco and 52 regional projects) spread over seven counties from the Sierra foothills to San Francisco. The San Francisco portion of the program is 100 percent complete as of October 2020. The Regional portion is approximately 99 percent complete. The current forecasted date to complete the overall WSIP is May 2023.

Capital projects under consideration would be costly and are still in the early feasibility and conceptual planning stages. The exact yields from these projects are not quantified at this time, as these supply projects would take 10 to 30 years to implement and the exact amount of water that can be reasonably developed is currently unknown.

As with traditional infrastructure projects, there is a need to progress systematically from planning to environmental review, and then on to detailed design, permitting and construction of these alternative water supply projects. Given the complexity and inherent challenges, these projects will require a long lead time to develop and implement. SFPUC staff have developed an approach and timeline to substantially complete planning and initiate environmental review by July 2023 for a majority of the alternative water supply projects under consideration.

## 10.2.16 Redwood City Green Infrastructure Plan

The City has prepared a Green Infrastructure Plan in compliance with San Francisco Bay MRP Provision C.3.j.i that details how Provision C.3 of the MRP and Low-Impact Development methods (described above) will be incorporated to retrofit existing storm drainage infrastructure using Green Infrastructure facilities constructed on public and private parcels and within the public right-of-way. Green Infrastructure refers to the construction and retrofit of storm drainage to reduce runoff volumes, disperse runoff to vegetated areas, harvest and use runoff where feasible, promote infiltration and evapotranspiration, and use bio -retention and other natural systems to detain and treat runoff before it reaches the City's creeks and the San Francisco Bay. Green infrastructure facilities include, but are not limited to, pervious pavement, infiltration basins, bio -retention facilities or raingardens," green roofs, and rainwater harvesting systems. Green infrastructure can be incorporated into construction on new and previously developed parcels, as well as new and rebuilt streets, roads, and other infrastructure within the public right-of-way (Redwood City, 2019). The City also has green infrastructure development guidelines that require stormwater treatment for developments in addition to C.3 regulated projects.

## 10.2.17 Requirements For Residential and Commercial Properties in Recycled Water Service Area

Municipal Code Section 38.52. Projects involving new multi-family residential and commercial subdivision of land for which a tentative map or parcel map is required pursuant to California Government Code section 66426 and Chapter 30, Subdivisions, of the Municipal Code or which require a City permit, or both, and which are located within the Recycled Water Service Area, are required to be dual plumbed to provide for the internal use of recycled water and to provide for the use of recycled water for landscape irrigation.

## 10.2.18 Redwood City Stormwater Management and Discharge Control Program Ordinance

*Municipal Code Chapter 27A*. The City collects fees pursuant to the Stormwater Management and Discharge Control Program which can be used for the maintenance, management, operation and repair of the stormwater drainage system, the acquisition, construction and reconstruction

(including the extension or replacement) of existing stormwater mains, collector mains and trunk lines, and the enlargement or construction of the stormwater drainage system.

### 10.2.19 Construction and Demolition Debris Diversion Ordinance

Municipal Code Chapter 9, Article XI. The Redwood City Construction and Demolition Debris Diversion Ordinance (C&D Ordinance) enhances the City's Green Building Ordinance to encourage the conservation of natural resources, reduce waste in landfills generated by construction projects, and promote the use of recycled materials. At least 65 percent of debris from construction, roofing, and full demolition projects must be diverted from landfills through recycling practices. All full demolition projects (residential and non-residential) are also required to divert 100 percent of inert material (asphalt, brick, concrete, dirt, fines, rock, sand, soil, and stone).

## 10.2.20 Redwood City General Plan

The City of Redwood City General Plan (General Plan) establishes the key goals, policies, and programs for the physical development of the City through 2030. Goals and policies relevant to public services and recreation include the following:

- Goal BE-40: Provide safe and reliable potable and recycled water storage and distribution systems that will meet current and future needs.
- *Policy BE-40.1*: Improve the level of service, reliability, quality, and life cycle of the city's potable and recycled water storage and distribution system.
- Policy BE-40.2: Maintain the city's water system to ensure adequate fire flow.
- *Policy BE-40.3*: Locate and design new capital-intensive potable and recycled water storage and distribution facilities, particularly storage tanks, in a manner that minimizes visual, cost, and environmental impacts to the surrounding area.
- *Policy BE-40.6*: Support the expansion of the city's Recycled Water Service Area, and actively promote widespread use of recycled water in and around Redwood City.
- Goal BE-41: Provide adequate and reliable wastewater collection and treatment facilities that meet current and future needs.
- *Policy BE-41.1*: Continue to ensure adequate treatment capacity and collection system for Redwood City's wastewater conveyed to at South Bayside System Authority (SBSA)<sup>13</sup> treatment facilities while protecting water quality and public health, and minimizing adverse impacts to the environment.
- *Policy BE-41.2*: Work with South Bayside System Authority (SBSA)<sup>14</sup> member agencies to ensure that the treatment facility has sufficient capacity to meet future wastewater treatment needs.

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Since adoption of the General Plan, the South Bayside System Authority has transitioned to Silicon Valley Clean Water.

<sup>14</sup> Since adoption of the General Plan, the South Bayside System Authority has transitioned to Silicon Valley Clean Water.

- Goal BE-42: Support reliable, high quality, and environmentally sound energy distribution systems to meet current and future needs.
- *Policy BE-42.1*: Require that improvements and maintenance to electric and gas transmission and distribution systems that are made to accommodate new growth be performed in a manner that maintains safety, reliability, and environmental compatibility.
- Goal BE-43: Advocate for access to high-quality established and emerging communications technologies to facilitate efficient and affordable communication for individuals, businesses, education, and government functions.
- *Policy BE-43.1*: Support efforts to develop improved communications technology in a manner that minimizes visual and environmental impacts to the surrounding area, while benefiting government, business, education, and public safety.
- *Policy BE-44.2*: Continue to require the placement of utilities underground with new development.
- Goal BE-45: Minimize the volume of solid waste that enters regional landfills.
- *Policy BE-45.1*: Meet or exceed State mandates regarding the diversion of waste from landfills.
- *Policy BE-45.2*: Encourage recycling, composting, and source reduction by residential and non-residential sources in Redwood City.
- *Policy BE-45.3*: Promote green building practices with respect to recycling material from building demolition and using recycled building materials in new construction.

## 10.3 Impacts and Mitigation Measures

## 10.3.1 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects; or
- b) have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years; or
- c) result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or
- d) generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- e) fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste; or

- f) violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality; or
- g) substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin; or
- h) substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - i. result in substantial erosion or siltation on- or off-site:
  - ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
  - iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
  - iv. impede or redirect flood flows; or
- i) in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
- j) conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

## 10.3.2 Impacts and Mitigation Measures

Overall impacts of the proposed Transit District DTPP Amendments on utilities and infrastructure (including hydrology and water quality) would be generally the same as those identified in the DTPP Final EIR, as further described below.

Impact UT-1: Implementation of the proposed Transit District DTPP Amendments would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (Less than Significant with Mitigation)

The proposed Transit District DTPP Amendments would provide for the development of additional housing units and office space in the City and a subsequent increase in demand for water, recycled water, wastewater treatment, storm water drainage, electric power, natural gas, and telecommunications facilities. The developable area of the DTPP, including the Transit District area, is already urbanized with land uses that are served by existing utilities. New development would require connections to utilities that are already present in adjacent roadways, the construction of which is analyzed in this SEIR as part of the overall development of the proposed Transit District DTPP Amendments. Changes proposed to utilities infrastructure as part of future developments will be subject to the City's review and permitting process. See the discussions below for anticipated infrastructure needs for each utility system associated with the proposed Transit District DTPP Amendments.

The City is also currently preparing utilities studies for the water and recycled water, sewer, and stormwater drainage systems for the Transit District area to identify needed improvements, provide cost estimates associated with the needed improvements, establish funding mechanism(s), and/or incorporate into the City's Capital Improvement Program (CIP).

#### Water

The DTPP Final EIR found that existing water lines had capacity to serve the DTPP area, but upsizing or water line replacements could be needed in the future due to aging infrastructure. Additional improvements could also be needed to ensure adequate fire flow to new development within the DTPP area. The construction of water system improvements was described to be temporary and within existing rights of way, and no unusual significant environmental impact would be anticipated due to construction activity. As such, the DTPP Final EIR determined impacts related to potable and fire flow water systems to be less than significant.

The City generally owns and maintains the water distribution mains that provide water service in Redwood City. Under standard City development procedures, each individual future project within the Transit District area would be required to pay applicable City development and water capacity fees, contribute fees to any SFPUC RWS Alternative Water Supply Planning Program funding mechanism that may be developed to alleviate future supply shortages, pay its fair-share towards necessary water system facilities, construct water system capacity-enhancing improvements/upgrades to support the proposed development's water infrastructure needs, and submit final onsite water system design specifications and construction plans for approval by the City. These plans would also include connections to and extension of recycled water infrastructure that is now in progress adjacent to the DTPP, and less than 0.25 miles from the Transit District area. It is anticipated that the new recycled water supply main(s) for the proposed Transit District DTPP Amendments would extend generally northwestward from the currently planned extension of the City's recycled water system that, once constructed, will terminate at Maple and Lathrop Streets, although other and/or additional connection points may ultimately be identified.

Development within the Transit District area would also be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. For outdoor water use, the CALGreen Code requires that irrigation controllers be weather- or soil moisture—based and automatically account for rainfall, or be attached to a rainfall sensor. Implementation of water conservation and efficiency measures would minimize the potable water demand generated and lessen the need for capacity or other improvements to the water system.

Water system capacity-enhancing improvements that would be necessitated by new private development within the Transit District area would be funded by private developers. Water system improvements (including connection to recycled water infrastructure) would be completed as a component of a future development, as described further in the context of water supplies, and would involve ground disturbance to currently developed land (generally within roadways or public rights-of-way). At a minimum, it is anticipated that improvements would be required to supply recycled water to the Transit District area, which currently lacks a recycled water supply, as stated above in the Environmental Setting and is addressed in further detail in the discussion

regarding Impact UT-2 below. Upsizing the water main and/or extending the recycled water utility to new development in the Transit District would have short-term construction disturbance and related temporary transportation disruption and air quality and noise effects—all of which would be similar to those of routine utility construction and would, therefore, be less than significant due to their limited duration at any given location. Because the water main upsizing and recycled water utility extension would occur underground and within existing roadways and rights-of-way, no other construction or operational impacts are anticipated. Accordingly, no further environmental impacts due to water system improvements would be generated beyond those identified and addressed elsewhere in this SEIR for overall construction activity associated with the proposed Transit District DTPP Amendments (e.g., Chapter 11, *Noise and Vibration*, and Chapter 12, *Air Quality*).

Future development projects within the Transit District area would also be required to meet the required fire flow velocities and flow durations pursuant to the California Fire Code and Redwood City Engineering Standards. Subsequent development projects would be required by City codes to take typical fire and safety precautions, such as prohibiting on-site fires; reporting any fires, even if they have been extinguished; discarding any smoking materials in approved containers; maintaining access to emergency vehicles; and maintaining access to fire hydrants, emergency water tanks, and emergency turnouts. However, according to City staff, the transmission and distribution systems are not sized to provide adequate flows and pressures under emergency service for future citywide development. 15 Emergency water storage volume for emergency uses in a fire, earthquake, or a temporary shutdown of the SFPUC system is also inadequate. In case of an emergency, subsequent development projects in the Transit District area could contribute to a deficit in emergency water supply. Accordingly, Mitigation Measure UT-1, which would require each subsequent development project to make a fair-share contribution to development of an emergency water supply for Downtown, would be applicable to each subsequent development projects in the Transit District area would be required by make a fairshare payment toward construction of planned new emergency water facilities to serve Downtown Redwood City. This water storage system would provide for water supplies in the case of drought and disaster-caused emergencies, such as a temporary interruption of water supplies due to an earthquake.

Mitigation Measure UT-1: Emergency Water Storage: All subsequent development projects in the Transit District area, regardless of size, shall pay a fair-share contribution towards the cost of providing emergency water storage for all proposed uses to fund the design and construction of such storage.

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The demonstrated need to construct emergency potable water storage tank is described and documented in the following reports: "A Technical Report on the City Water Storage Capability," Redwood City Community Development Services and Public Works Services Department staff, December 24, 1997; "Preliminary Engineering Report--Municipal Services Center (MSC) Water Storage Tank and Pumping Station," Thomas Yeager, P.E., of Kennedy/Jenks Consultants, Palo Alto, March 27, 2002; "Main City Pressure Zone Emergency Water Supply Report," Chu Chang, P.E., Phong Du, P.E., and Tonia Tabucchi, of Redwood City staff, August 2003; "Water System Master Plan", West Yost & Associates, October 2011. The Main City water service area, which includes the Transit District area, has a documented need for 6.32 million gallons of emergency water storage to provide emergency water supply for maximum day demand and fire flow.

### Significance after Mitigation: Less than Significant

#### Wastewater

The DTPP Final EIR found that the DTPP would not result in any wastewater capacity exceedances, and impacts were determined to be less than significant.

The City operates a sanitary sewer system that consists of sewer pipelines, manholes, force mains, and lift stations. SVCW also has an approximately nine-mile influent force main pipeline that conveys wastewater from Redwood City to the Redwood City pump station, and ultimately the wastewater treatment plant (see Impact UT-3 below for analysis related to wastewater treatment plant capacity). Redwood City collects wastewater treatment capacity fees from new construction projects which result in an added wastewater burden and reimburses SVCW for costs expended on the operation, capital repairs, and maintenance related to the City's service areas. Additional redevelopment is projected in the future, which will further increase wastewater flows and may create additional capacity constraints. As such, development within the Transit District area would be subject to constructing sewer system capacity-enhancing improvements and providing capacity fees that would be collected by the City to address the new wastewater demand.

Development within the Transit District area would be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. Implementation of water conservation and efficiency measures would reduce the wastewater generated.

Sewer system capacity-enhancing improvements that would be necessitated by new private development within the Transit District area would be funded by private developers. Sewer capacity improvements would likely be completed as a component of a future development and would involve ground disturbance to currently developed land (generally within roadways or within public rights-of-way). As with the extension of recycled water infrastructure described above, limited and temporary effects of sewer capacity construction would be similar to those of routine utility projects and would be less than significant. Because the utility extension would occur underground and within existing roadways and rights-of-way no other construction or operational impacts are anticipated from the sewer system capacity-enhancing improvements that may be necessitated by future development.

#### Stormwater

The DTPP Final EIR found that individual projects developed within the DTPP would include replacing existing developed areas with new development, and although residential and commercial densities would increase, there would be minimal difference between the DTPP buildout scenario and existing conditions in terms of stormwater runoff. No areawide drainage improvements were anticipated, and the DTPP was found to potentially result in a reduction of stormwater runoff, due to increased landscaping and City's runoff retention requirements. As a result, impacts on storm drainage infrastructure were determined to be less than significant.

The City owns and maintains the stormwater system in Redwood City. Future development projects within the Transit District area would be subject to the City's Stormwater Management and Discharge Control Program Ordinance (Municipal Code Chapter 27A).

As part of the review process for individual development projects which create or replace 10,000 square feet of impervious surface area, preparation of a stormwater control plan would be required. In addition, projects recreating or replacing an acre or more of impervious area (unless exempted) must also provide flow controls (or hydromodification management measures) so that post-project runoff does not exceed estimated pre-project rates and durations. Regulated projects for which building or grading permits are issued must include Low Impact Development (LID) design measures (such as pervious paving or bioretention areas) for stormwater capture and pretreatment.

Redwood City Municipal Code Chapter 27A contains regulatory requirements for stormwater management and discharge control. Projects developing within the Transit District area would be required to implement stormwater treatment measures that would control stormwater flow volumes and improve stormwater quality. Stormwater treatment measures proposed as part of a project's permanent stormwater pollution prevention measures onsite and offsite are also required to be designed in accordance with the City's Green Infrastructure Plan. The stormwater treatment plans submitted for projects would be subject to City engineering review and approval.

Relocation of an existing underground stormwater culvert beneath Sequoia Station would likely be undertaken by development projects that necessitate the relocation. Stormwater drainage system capacity-enhancing improvements that would be necessitated by new private development within the Transit District area would be funded by private developers. Stormwater drainage system improvements would likely be completed as a component of a future development and would involve ground disturbance to currently developed land (generally within roadways or within public rights-of-way). As with the extension of recycled water infrastructure described above, limited and temporary effects of stormwater drainage system construction would be similar to those of routine utility projects and would be less than significant. Because the utility relocation would occur underground and within existing roadways and rights-of-way, no other construction or operational impacts are anticipated from the stormwater drainage system capacity-enhancing improvements that may be necessitated by future development.

### Electricity, Natural Gas, and Telecommunications Facilities

The DTPP Final EIR did not specifically identify impacts to electricity, natural gas, and telecommunications facilities. PG&E and PCE provide electric service in the City, and PG&E provides natural gas service. The telecommunications system serving the City of Redwood City consists of aboveground and buried telecommunications circuits from several providers, primarily AT&T and Comcast. New meter and service connections would be coordinated with the provider at the time new development is proposed. As discussed in Chapter 13, *Climate Change*, future development would also be subject to a suite of programs and regulations that would reduce energy use.

Energy and telecommunication system improvements would likely be completed as a small component of a future development and would involve ground disturbance to currently developed land (generally on redevelopment sites, within roadways, or within public rights-of-way). As with the extension of recycled water infrastructure described above, limited and temporary effects of such construction for electricity, natural gas and telecommunications facilities would be similar to those of routine utility projects and would be less than significant. Because the utility relocation would occur underground and/or within existing roadways and rights-of-way, no other construction or operational impacts are anticipated from these improvements that may be necessitated by future development.

### Summary

Overall, the potential replacement or extension of utility infrastructure to serve the Transit District area would be installed primarily in existing roadways and utility rights-of-way. Aside from short-term construction disturbance, no unusual or further environmental impacts would be generated beyond those identified elsewhere in this Draft SEIR for overall construction activity for the proposed Transit District DTPP Amendments (e.g. Chapter 11, *Noise and Vibration*, and Chapter 12, *Air Quality*). For these reasons, and because changes proposed to utilities infrastructure as part of future developments will be subject to the City's review and permitting process, the proposed Transit District DTPP Amendments would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. The proposed Transit District DTPP Amendments would result in a new impact not identified in the DTPP Final EIR due to the identified need for emergency water supply; however, with mitigation, this impact would be reduced to a *less-than-significant level*. Therefore, impact would be *less than significant with mitigation*.

Impact UT-2: With implementation of the proposed Transit District DTPP Amendments, the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. (Less than Significant with Mitigation)

Redwood City's 2005 UWMP was used as the basis for the water supply analysis in the DTPP Final EIR, which found that the 2005 UWMP accounted for projected growth within the DTPP and concluded that adequate water supply was available to serve proposed growth. Accordingly, the DTPP Final EIR determined that the DTPP would have no impact related to water supply.

The proposed Transit District DTPP Amendments would result in an increase in population on the project site and thus an increased demand for water. The project would use water provided by the City, which has multiple sources of water, as discussed in Section 10.1.1, including potable water from the SFPUC RWS and recycled water from SVCW. Per the requirements of SB 610, a WSA was prepared for the proposed Transit District DTPP Amendments by West Yost on behalf of the City of Redwood City (West Yost, 2022).

The projected water demand associated with the proposed Transit District DTPP Amendments is 161.4 AFY of potable water and 415.8 AFY of recycled water. The water demand projections for the Proposed Project include both potable and recycled water uses to conform to the requirements of Redwood City's Municipal Code. According to Redwood City's Municipal Code Section 38.52, all new commercial and multi-family residential properties located within the City's recycled water service area must be dual plumbed to provide for internal use of recycled water and must also use recycled water for any landscape irrigation. The potable/recycled water ratio for indoor water use is estimated to be 20/80 percent for office uses and 70/30 percent for residential uses, based on historical meter readings for existing dual plumbed projects. All landscaping water demand projected for the proposed Transit District DTPP Amendments would be supplied by recycled water, as required under Redwood City Municipal Code Section 38.52. Achievement of these shares of recycled water in the proposed Transit District area would require the extension of the City's recycled water main system into the Transit District area. To ensure the improvements are sufficiently certain, adequately funded, and can be implemented over time, Mitigation Measure UT-2, below, is required.

Mitigation Measure UT-2: Recycled Water Infrastructure: The developer of all subsequent development projects in the Transit District area, regardless of size, shall be required to install an extension of recycled water supply pipelines to each development project with sufficient recycled water capacity to provide for all of the project's recycled water demands while achieving the required pressure, flow, and other system design criteria of recycled water system pursuant to City of Redwood City standards. Where a project developed earlier pays the entire cost of recycled water pipeline extension to the Transit District area, the original developer may be reimbursed by subsequent development projects located within the Transit District area which must pay a fair-share contribution (based upon its proportion of wastewater generated from within the Transit District area) towards the extension of recycled water supply pipelines to connect the project to the City's recycled water system prior to ground disturbance.

The City's most recently adopted UWMP is the 2020 UWMP, which was adopted in June 2021. The City's 2020 UWMP incorporated the future population, employment and water demand projections for buildout of the City's 2010 General Plan, as well as the water demands associated with several other proposed development projects, whose addition would require a General Plan amendment. The projected water demand for the proposed Transit District DTPP Amendments is included in the City's 2020 UWMP (UWMP Section 4.2.2 and Table 4-5).

In the City's 2020 UWMP, projected normal year supplies are shown to be adequate to satisfy the City's projected normal year demands. However, in the City's 2020 UWMP, and the WSA prepared for the proposed Transit District DTPP Amendments, the City's purchased supplies from the SFPUC RWS assume dry year supply reductions as a result of the implementation of the Bay-Delta Plan Amendment, which significantly reduces dry year allocations for SFPUC wholesale customers (including the City). Recycled water is estimated to be available during all hydrologic years at a volume that meets the City's projected recycled water demands. However, because of the uncertainties surrounding the implementation of the Bay-Delta Plan Amendment (detailed in Section 10.2.15), the WSA described findings for two scenarios, one assuming the

Bay-Delta Plan Amendment is implemented and one assuming that the Bay-Delta Plan Amendment is not implemented.

Under the scenario in which the Bay-Delta Plan Amendment is implemented, substantial supply shortfalls are projected in dry years for all agencies that receive water supplies from the SFPUC RWS. For the City, supply shortfalls are projected in single dry years (ranging from 32 to 40 percent) and in multiple dry years (ranging from 32 to 47 percent) through 2045.

If supply shortfalls do occur, the City expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its WSCP. Consistent with California Water Code (CWC) §10632, the WSCP includes six levels to address shortage conditions ranging from up to 10 percent to greater than 50 percent of demand, identifies a suite of demand reduction measures for the City to implement at each level, and identifies procedures for the City to annually assess whether or not a water shortage is likely to occur in the coming year, among other things.

Each stage of the WSCP imposes a series of drought response actions, some of which become stricter in succeeding phases. So, for example, at Stage 1, outdoor residential watering is limited to 15 minutes per day, three days per week, while by Stage 3, the limit is 10 minutes per day, once per week, and in Stage 5, outdoor residential watering is prohibited altogether. At each drought stage, the WSCP establishes an overall water use budget for each residential and nonresidential water customer. In Stage 1, as an example, residential customers are budgeted to use indoor water at a rate of 50 gallons per person per day (gpcd). This water use budget decreases by drought stage, to 40 gpcd in Stage 3 and to 27 gpcd by Stage 6. Non-residential water customers are budgeted for reductions from baseline water use of, for example, 3 percent in Stage 1, 10 percent in Stage 3, and 35 percent by Stage 6. According to the WSCP, enforcement will focus on "soliciting cooperation from water customers who are unaware of the restrictions or have failed to comply with" the WSCP. As such, a main focus of the City's planned demand reduction measures is to increase public outreach and keep customers informed of the water shortage emergency and actions they can take to reduce consumption. However, in the event of noncooperation, the City may take enforcement action, ranging from warnings to fines, increasing by violation, and to discontinuance of water service after a fifth violation. Other actions that the City would take include coordination with other agencies, implementing water rate incentives and penalties, increasing water waste patrols, etc.

As shown in **Table 10-1**, with implementation of the WSCP, the City would be able to reduce the difference between water demand and supply (the shortage) for each stage of a drought emergency.

Like all water users in Redwood City, development within the Transit District area would be subject to water use limitations in the WSCP in the event of water shortages resulting from dry years and implementation of the Bay-Delta Plan Amendment, should such limitations be imposed.

TABLE 10-1
ESTIMATED WATER USE REDUCTION UNDER WATER SHORTAGE CONTINGENCY PLAN

Drought Stage	Reduction Goal	WSCP Reduction of Shortage
Stage 1	Up to 10%	5%
Stage 2	Up to 20%	15%
Stage 3	Up to 30%	25%
Stage 4	Up to 40%	35%
Stage 5	Up to 50%	45%
Stage 6	Greater than 50%	55%

SOURCE: 2020 Urban Water Management Plan for City of Redwood City, June 2021, Tables 8-1 and 8-2.

With implementation of the Bay-Delta Plan Amendment, the projected single dry year shortfalls (of 32 to 40 percent) would require implementation of Stage 4 or 5 of the City's WSCP, which, according to Chapter 8 of the UWMP, would reduce the shortage by 35 and 45 percent, respectively. The projected multiple dry year shortfalls (of 32 to 47 percent) would require implementation of Stage 4, 5, or 6 of the City's WSCP, which would reduce the shortage by up to 55 percent. Each stage of the City's WSCP requires declaration by the City Council once a governing body, such as SFPUC, has required a voluntary or mandatory reduction in water use due to water supply shortages or an emergency. Each stage includes implementation of a mandatory water allocation program, voluntary restrictions on end uses, as well as various agency actions. These shortfall projections likely underestimate the potential supply that will be available in the future because they do not account for any new water supplies from the SFPUC's Alternative Water Supply Planning Program.

Under the scenario in which the Bay-Delta Plan Amendment is not implemented, the total projected water supplies determined to be available in single dry years and multiple dry years are only slightly lower than the projected water demand associated with the City's existing and planned future uses, including the proposed Transit District, through 2045. These projected supply shortfalls are significantly less than the projected supply shortfalls if the Bay-Delta Plan Amendment is implemented. This includes both single dry years (shortfalls ranging from 1 to 2 percent) and multiple dry years (shortfalls ranging from 1 to 11 percent). Based on SFPUC's analysis, a supply shortfall of 11.1 percent is projected during the fourth and fifth consecutive dry years in 2045. If supply shortfalls do occur, the City expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of the City's WSCP. Without implementation of the Bay-Delta Plan Amendment, the projected single dry year shortfalls would require implementation of Stage 1 of the City's WSCP, and the projected multiple dry year shortfalls would require implementation of Stage 1 or 2 of the City's WSCP, which would reduce the shortage by up to 15 percent.

In addition, SB 221 applies to proposed residential developments of over 500 dwelling units and requires that the water supplier provide a written verification that the water supply for the project is sufficient, prior to issuance of the final permits. Because the proposed Transit District DTPP Amendments anticipate 1,100 multi-family residential units, individual projects may be subject to

the requirements of SB 221 (Government Code section 66473.7) and a verification of sufficient water supply (SB 221) report would be required prior to final approvals for projects with 500 or more residential units.

Projects developed within the Transit District area would be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. For outdoor water use, the CALGreen Code requires that irrigation controllers be weather- or soil moisture—based and automatically account for rainfall, or be attached to a rainfall sensor. Additionally, Redwood City Municipal Code Section 38.52 requires all new and existing commercial properties and new multi-family residential properties to use recycled water for irrigation. Implementation of water conservation and efficiency measures and use of recycled water would minimize the potable water demand generated by the proposed Transit District DTPP Amendments. These potential savings were not considered in the Water Supply Assessment, which is therefore conservative.

Because water savings in excess of the deficit created by the project can be achieved (with or without implementation of the Bay-Delta Plan Amendments) using the City's WSCP stages, the project will have sufficient water, so long as recycled water infrastructure is extended. The Transit District DTPP Amendments would not contribute to dry year water supply shortages because the City's 2020 Urban Water Management Plan included projected water demand sufficient to accommodate growth associated with the proposed amendments and the customers in the Transit District would be subject to the same drought-related curtailments as the City's other customers. Subsequent development projects within the Transit District would use less water per capita than many existing developments due to the obligation to install water efficient fixtures and use recycled water. As a result, this planned growth would not cause the City to increase curtailments. And, as noted above, subsequent projects developed in the Transit District would be required to pay applicable City development and water capacity fees, contribute fees to any SFPUC RWS Alternative Water Supply Planning Program funding mechanism that may be developed to alleviate future supply shortages, and pay its fair-share towards necessary water system facilities. For these reasons, the City would have sufficient water supplies to accommodate the growth associated with the proposed Transit District DTPP Amendments.

As noted above, the DTPP Final EIR determined that the DTPP would have no impact related to water supply. The proposed Transit District DTPP Amendments would result in new, more severe impacts than what was previously identified in the DTPP Final EIR for water supply. However, implementation of new Mitigation Measure UT-2 would reduce the identified impact to a *less-than-significant* level.

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Impact UT-3: Implementation of the proposed Transit District DTPP Amendments would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (Less than Significant)

The DTPP Final EIR found that the available treatment capacity at the South Bayside System Authority's wastewater treatment plant would be adequate to meet the net increase in generation from the DTPP, and impacts were determined to be less than significant. Since adoption of the DTPP, the South Bayside System Authority has transitioned to SVCW.

Development within the Transit District area would result in an increase in population and thus an increased demand for wastewater treatment. SVCW collects and treats wastewater from the City of Redwood City, as discussed in Section 10.1, *Environmental Setting*.

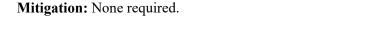
SVCW's treatment plant has a permitted dry weather capacity of 29 MGD and a peak wet weather flow capacity of 71 MGD (RWQCB, 2021). In 2017, the SVCW Commission approved the Regional Environmental Sewer Conveyance Upgrade Program, which consists of replacing or rehabilitating various components of the existing wastewater treatment and conveyance system, including pipelines and pump stations to ensure reliable operation of the overall wastewater system (SVCW, 2022a). Redwood City collects wastewater treatment capacity fees from new construction projects which result in an added wastewater burden to ensure that new users pay their fair share for facilities and necessary capacity upgrades, and reimburses SVCW for costs expended on the operation, capital repairs, and maintenance related to the City's service areas. As such, upgrades are being added at SVCW's wastewater treatment plant, SVCW is carrying out additional capital improvements as funds become available, and capacity fees would be collected by the City to address the new wastewater demand. The treatment plant's current average daily flow is 12-14 MGD (SVCW, 2022b). Based on the indoor water demand calculated in the WSA prepared for the proposed Transit District DTPP Amendments (West Yost, 2022), the addition of 1,100 residential units and 1.63 million square feet of office uses as proposed with the Transit District area would generate approximately 339,245 gallons of wastewater per day or approximately 0.34 MGD, representing approximately 2 percent of the 15-17 MGD excess average daily capacity of the treatment plant. 16 Therefore, the proposed Transit District DTPP Amendments' estimated wastewater generation would be adequately served by the SVCW wastewater treatment plant.

The methodology for calculating the fair share contribution is described in a report to City Council dated December 6, 2010, wherein the methodology was proposed for the Kaiser Hospital project at 1150 Veterans Boulevard and accepted by City Council. Additionally, development within the Transit District area would be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. Implementation of water conservation and efficiency measures would minimize the wastewater generated.

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Calculations based on indoor water demand calculated in the WSA prepared for the proposed Transit District DTPP Amendments: Total non-residential wastewater demand = 211,900 gpd x 95% = 201,305 gpd; Total residential wastewater demand = 145,200 gpd x 95% = 137,940 gpd.

Since the SVCW treatment plant would have adequate capacity to serve the proposed Transit District DTPP Amendments' demand, the proposed Transit District DTPP Amendments would not result in wastewater treatment capacity issues and would not result in new or more severe impacts than impacts identified in the DTPP Final EIR. Therefore, this impact would be *less than significant*.



Impact UT-4: Implementation of the proposed Transit District DTPP Amendments would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. (*Less than Significant*)

The DTPP Final EIR found that the DTPP would not generate an inordinate volume of solid waste (i.e., a rate inconsistent with adopted land use plans, policies, or regulations) and the Ox Mountain Landfill would have sufficient capacity to serve the DTPP. As a result, the DTPP Final EIR determined impacts related to solid waste to be less than significant.

#### Construction

During construction of individual projects consistent with the proposed Transit District DTPP Amendments, construction-related debris would be generated. Projects developed within the Transit District area would be required to comply with existing solid waste reduction requirements, including applicable federal, State and local solid waste statutes and regulations during construction. As described in Section 10.2, *Regulatory Setting*, Redwood City requires development projects to achieve at least 65 percent diversion under the C&D Ordinance and CALGreen Code, and full demolition projects would be required to divert 100 percent of inert material (asphalt, brick, concrete, dirt, fines, rock, sand, soil, and stone). Projects are also required to create and maintain a construction waste management plan. The diversion requirement may be met through direct facility recycling, reuse of the materials on site, or donation to reuse and salvage businesses. The Ox Mountain Landfill serves the City and accepts mixed construction and demolition waste. The remaining residue from the materials that cannot be recovered would be landfilled.

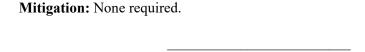
The Ox Mountain Landfill has an estimated 17,240,000 cubic yards of remaining capacity (19,826,000 tons) and an expected closure date of 2034. Project construction is not expected to generate substantial amounts of solid waste during construction relative to the remaining capacity of the Ox Mountain Landfill. Therefore, construction associated with the proposed Transit District DTPP Amendments would not generate solid waste in excess of local infrastructure and would not impair the attainment of state-level or local waste reduction goals. This impact would be *less than significant*, the same as found for the DTPP Final EIR.

### Operation

During operation of individual projects within the Transit District area, the additional development would result in an increase in the demand for solid waste services. The proposed Transit District DTPP Amendments would allow for development of up to 1,100 residential units and 1.63 million square feet of office space which would generate solid waste. With the addition of 2,510 potential residents and 7,080 employees within the Transit District area (see Chapter 5, *Population and Housing*), the residential uses would generate up to approximately 6.5 tons of waste per day and the proposed office uses would generate up to approximately 24.1 tons of waste per day. <sup>17</sup> Together, approximately 30.6 tons per day (or 11,169 tons of waste per year) could be generated under the proposed Transit District DTPP Amendments.

The Ox Mountain Landfill is permitted to accept 3,598 tons of waste per day and currently averages approximately 1,650 tons of solid waste per day. The Ox Mountain Landfill has approximately 17,240,000 cubic yards of remaining capacity (19,826,000 tons) and an expected closure date of 2034 (CalRecycle, 2022), although the County's most recent review of the CIWMP in 2019 indicated that Ox Mountain Landfill had an estimated 19 remaining years of capacity. The County is currently revising the Siting Element of its CIWMP, which will identify facilities and proposed programs that would provide San Mateo County with sufficient disposal capacity to meet the required minimum of 15 years of combined permitted disposal capacity per the requirements of Public Resources Code Section 41260 (County of San Mateo, 2019). The daily solid waste estimates associated with the proposed Transit District DTPP Amendments would account for less than 0.9 percent of the permitted daily capacity of the Ox Mountain Landfill, and as such the proposed Transit District DTPP Amendments would not generate substantial amounts of solid waste during operation relative to the capacity of local infrastructure.

Projects developed within the Transit District area would be required to comply with existing solid waste reduction requirements, including applicable federal, State and local solid waste statutes and regulations during operation. Compliance with existing policies and regulations, including the CALGreen building and State recycling and organic material diversion requirements, would reduce the non-renewable sources of solid waste, and minimize the solid waste disposal requirements of the proposed Transit District DTPP Amendments. Therefore, operation of development within the Transit District area would not generate solid waste in excess of the local infrastructure, and would not impair the attainment of state-level or local waste reduction goals. The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. Therefore, this impact would be *less than significant*.



<sup>17</sup> The average disposal rate for the City in 2020 was 5.2 pounds per resident per day and 6.8 pounds per employee per day (CalRecycle, 2020). This represents a conservative estimate, as these rates include all residential and non-residential land uses. Multi-family residential and office uses typically generate lower rates as compared to single family residential and industrial or commercial uses (CalRecycle, 2022b).

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# Impact UT-5: Implementation of the proposed Transit District DTPP Amendments would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (*Less than Significant*)

The DTPP Final EIR found that the DTPP would not generate an inordinate volume of solid waste (i.e., a rate inconsistent with adopted land use plans, policies, or regulations). As a result, the DTPP Final EIR determined impacts related to solid waste regulations to be less than significant.

During construction and operation associated with development within the Transit District area, development projects would be required to comply with federal, state, and local solid waste standards identified in Section 10.2, *Regulatory Setting*, such as the California Integrated Waste Management Act, AB 939, the CALGreen Code, AB 341 and AB 1826, SB 1383, and the City of Redwood City C&D Ordinance. Recology of San Mateo County oversees the collection, transfer, and disposal of residential garbage, recycling, and organics in the City, assisting with keeping the City compliant with state-mandated recycling requirements (AB 341 and AB 1826), including recycling of organics. As a result of these requirements and oversight, development within the Transit District area would not conflict with applicable waste reduction policies. Therefore, the proposed Transit District DTPP Amendments would not result in new or more severe impacts regarding compliance with solid waste regulations than the impacts identified in the DTPP Final EIR. This impact would be *less than significant*.

Mitigation: None required.	

# Impact UT-6: Implementation of the proposed Transit District DTPP Amendments would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. (*Less than Significant*)

The DTPP Final EIR found that the DTPP would not create substantial impacts related to surface runoff as future development would replace existing developed areas, and there would be negligible change in the amount of impervious surfaces. The DTPP Final EIR determined that there would be no increase in stormwater runoff and no area-wide drainage system improvements are anticipated.

The DTPP Final EIR analyzed both construction-related (short-term) and long-term water quality impacts and determined that construction site runoff and stormwater water runoff could substantially degrade water quality if not properly managed. In both cases, the DTPP Final EIR found that impacts to water quality would be adequately mitigated through required implementation of the City, County, and RWQCB requirements. Among these requirements is the NPDES General Construction Permit, which requires the preparation and implementation of a SWPPP. Implementation of the SWPPP is required by law and compliance is mandatory; established water quality regulations would reduce potential water quality impacts to a less-than-significant level.

Conclusions of the DTPP Final EIR remain valid for implementation of the proposed Transit District DTPP Amendments because the Transit District area boundary is within the DTPP

boundary, and soil conditions have not changed. As discussed above, the proposed Transit District DTPP Amendments would allow for development on previously developed land, and the change in impervious surfaces would be negligible. Further, the added landscaping and conversion of a segment of Hamilton Street from a required street to a potential privately owned, publicly accessible open space would provide additional pervious surfaces. Additionally, the increase in allowable office capacity would not affect the amount of runoff produced because the allowable development footprint is not being changed. While there could be additional soil disturbance as a result of future developments within the Transit District area, runoff amounts would be similar to what was analyzed for the area in the DTPP Final EIR and would therefore present a similar level of impact.

Compliance with SWPPP regulations would be sufficient to address impacts from the proposed Transit District DTPP Amendments as they relate to water quality issues as a result of polluted runoff from future ground disturbance. The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. Therefore, the impact would be *less than significant*.

Mitigation: None required.	

Impact UT-7: Implementation of the proposed Transit District DTPP Amendments would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (*Less than Significant*)

The DTPP Final EIR determined that the DTPP would not have a significant impact on groundwater resources because Redwood City does not currently utilize groundwater as a supply source and does not intend to start in the future. The DTPP Final EIR further concluded that the DTPP would not interfere with groundwater recharge in the region because the DTPP will not result in a substantial increase in impervious surface area.

The City's UWMP was updated in 2021 and has since reconsidered the use of groundwater for municipal and irrigation purposes (Redwood City, 2021a). However, the proposed Transit District DTPP Amendments do not propose the use of the groundwater supply, and would redevelop an already urbanized area so that the amount of impervious surfaces would remain essentially the same. For these reasons, the impacts on groundwater resulting from the proposed Transit District DTPP Amendments would be similar to those identified in the DTPP Final EIR and would not result in new or more severe impacts. The impact would be *less than significant*.

whitigation. None required.	

Mitigation None required

Impact UT-8: Implementation of the proposed Transit District DTPP Amendments would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or offsite; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; (iv) impede or redirect flood flows. (Less than Significant)

The DTPP Final EIR determined that the DTPP would not alter the existing drainage pattern of the area because all future developments would replace existing developed areas. As a result, the amount of runoff would not change as a result of the DTPP. Further, because future developments would replace existing developments, the amount of impervious surface area would not be substantially increased.

Given that the Transit District area would be a sub-area within the DTPP boundary, that future development would replace existing developed areas and proposed infrastructure improvements would be within existing rights of way and subject to City review, ensuring no substantial changes to drainage patterns, the impacts from the proposed Transit District DTPP Amendments would be similar to those identified in the DTPP Final EIR and would not result in new or more severe impacts. The impact would be *less than significant*.

Mitigation: 1	None required.	

Impact UT-9: Implementation of the proposed Transit District DTPP Amendments would not result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation. (*Less than Significant*)

The DTPP Final EIR determined that the DTPP area is not within the 100-year flood zone, although portions are within the 500-year flood zone. Due to the City's involvement in the National Flood Insurance Program, all new developments within a flood zone would be subject to specific flood damage avoidance requirements. The DTPP Final EIR further determined that the DTPP area is not within a tsunami zone or in an area at risk of inundation from a seiche.

The DTPP Final EIR determined that the impacts of the DTPP would be less than significant, as it relates to risks associated with a flood, tsunami, or seiche. The Transit District area is further inland than the larger DTPP boundary and would not result in new or more severe impacts than what was identified in the DTPP Final EIR. Therefore, tsunami and seiche related impacts would be *less than significant*. Further, the Transit District area is not within the 100-year flood zone, so flood-related risks would also be less than significant.

Mitigation: None required.	

# Impact UT-10: Implementation of the proposed Transit District DTPP Amendments would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (*Less than Significant*)

The DTPP Final EIR determined that there would be less-than-significant impacts related to violating water quality standards and groundwater resources, which are included as goals and objectives in water quality control plans and sustainable groundwater management plans, because required implementation of City, County, and RWQCB regulations (including preparation of a SWPPP) would reduce any potential impacts to a less-than-significant level. Redwood City does not propose to utilize the groundwater supply for the Transit District area, and future developments would not increase the amount of impervious surfaces. For these reasons, and because the proposed Transit District DTPP Amendments would subject to the same City, County, and RWQCB requirements, the potential impacts from the proposed Transit District DTPP Amendments to water quality control plans and sustainable groundwater management plans would not result in new or more severe impacts than what was identified in the DTPP Final EIR. Therefore, this impact would be *less than significant*.

Mitigation: None required.	

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## **CHAPTER 11**

## Noise and Vibration

This SEIR chapter analyzes the effects of the changes to noise and vibration that would result from implementation of the proposed Transit District DTPP Amendments, focusing on changes to the DTPP Final EIR (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

### Findings of the DTPP Final EIR

Noise impacts assessed in the DTPP Final EIR included all of the DTPP plan area, including parcels within the Transit District area. The construction noise impact was identified as potentially significant in the DTPP Final EIR which then identified conditions of approval on all future projects involving demolition and construction activities (Mitigation Measure 11-4).

An operational noise impact was identified in the DTPP Final EIR with respect to impacts of the existing noise environment on proposed sensitive land use. However, CEQA no longer requires that potential effects of the environment on the project be analyzed or mitigated. Mitigation Measure 11-1 was identified in the DTPP Final EIR to require noise studies for proposed new multifamily residential project within the DTPP to identify noise reduction measures necessary to ensure achievement of the land use compatibility noise standards established in the City *Noise Element*.

The operational noise impact with respect to increases in roadside noise from traffic increases generated by implementation of the DTPP were identified as a less than significant impact in the DTPP Final EIR.

The construction vibration impact was identified as potentially significant in the DTPP Final EIR which then identified conditions of approval on all future projects involving demolition and construction activities (Mitigation Measure 11-3).

An operational vibration impact was identified in the DTPP Final EIR with respect to impacts of the existing environment on proposed sensitive land uses. However, CEQA no longer requires that potential effects of the environment on the project be analyzed or mitigated.<sup>2</sup> Mitigation Measure 11-2 was identified in the DTPP Final EIR to require vibration studies for proposed new habitable buildings within 100 feet of the Caltrain or California High Speed Rail right-of-way within the DTPP to identify the need for vibration reduction measures necessary to ensure achievement of the vibration exposure standards established by the Federal Transit Administration.

California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369.

<sup>&</sup>lt;sup>2</sup> California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369.

## 11.1 Environmental Setting

## 11.1.1 Noise Principles and Descriptors

Noise is generally defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 and 140 dB corresponding to the thresholds of feeling and pain, respectively. Pressure waves traveling through air exert a force registered by the human ear as sound.

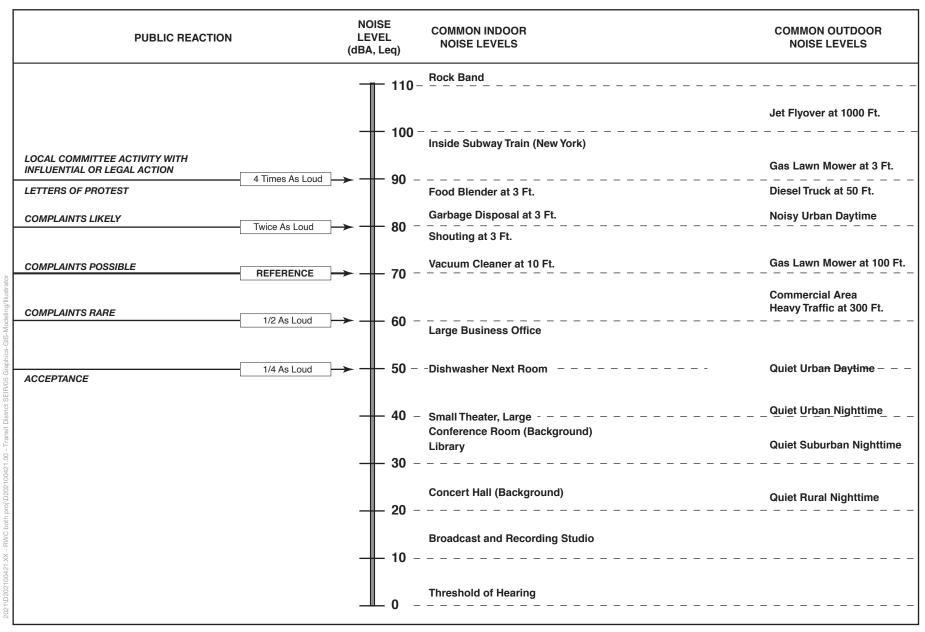
Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude. When all audible frequencies of a sound are measured, a sound spectrum is plotted, consisting of a range of frequencies spanning 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, during the assessment of potential noise impacts, sound is measured using an electronic filter that deemphasizes frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology for frequency de-emphasis and is typically applied to community noise measurements. **Figure 11-1** shows some representative noise sources and their corresponding A-weighted noise levels. All noise levels presented in this report are A-weighted unless otherwise stated.

## 11.1.2 Noise Exposure and Community Noise

An individual's noise exposure is a measure of noise over a period of time. A noise level is a measure of noise at a given instant in time. The noise levels presented on Figure 11-1 are representative of measured noise at a given instant in time; however, they rarely persist consistently over a long period of time. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.

These successive additions of sound to the community noise environment change the community noise level from instant to instant. Thus, noise exposure must be measured over a period of time to legitimately characterize a community's noise environment and evaluate cumulative noise



SOURCE: Caltrans Transportation Laboratory Noise Manual, 1982; and modification by ESA

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impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The following are the most frequently used noise descriptors:

- L<sub>eq</sub>: The equivalent-continuous sound level, used to describe noise over a specified period of time in terms of a single numerical value. The L<sub>eq</sub> of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. Also referred to as the "average sound level."
- $L_{max}$ : The maximum, instantaneous noise level experienced during a given period of time.
- L<sub>min</sub>: The minimum, instantaneous noise level experienced during a given period of time.
- L<sub>dn</sub>: The average A-weighted noise level during a 24-hour day that is obtained after 10 dBA are added to noise levels measured between 10 PM to 7 AM to account for nighttime noise sensitivity. Also referred to as the "day-night average noise level" (DNL). The L<sub>dn</sub> is the metric used by the Noise Element of the *Envision San José General Plan* (General Plan) for assessing the land use compatibility of non-aviation sources.
- CNEL: The community noise equivalent level. This is the average A-weighted noise level during a 24-hour day that is obtained after 5 dBA are added to noise levels measured between 7 a.m. and 10 p.m. and 10 dBA are added to noise levels between 10 PM and 7 AM to account for noise sensitivity in the evening and nighttime, respectively. The CNEL metric is reported as a number and is generally understood to be in terms of A-weighted decibels. The CNEL is the metric generally used for assessment of aircraft noise. The result is normally about 0.5 dBA higher than L<sub>dn</sub> using the same 24-hour data (California Department of Transportation, 2013).

#### **Noise Attenuation**

Stationary "point" sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 to 7.5 dBA per doubling of distance from the source, depending on the topography of the area and environmental conditions (e.g., atmospheric conditions and noise barriers, vegetative or manufactured). Widely distributed noise, such as that generated by a large industrial facility spread over many acres, or by a street with moving vehicles (known as a "line" source) would typically attenuate at a lower rate—approximately 3 to 4.5 dBA each time the distance doubles from the source, which also depends on environmental conditions (California Department of Transportation, 2013). Noise from large construction sites exhibits characteristics of both "point" and "line" sources, and attenuation will therefore generally range between 4.5 and 7.5 dBA each time the distance doubles.

## 11.1.3 Effects of Noise on People

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance)
- Interference effects (e.g., communication, sleep, and learning interference)
- Physiological effects (e.g., startle response)
- Physical effects (e.g., hearing loss)

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects of environmental noise refer to those effects that interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity.

Overall, there is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur (California Department of Transportation, 2013):

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived.
- Outside of the laboratory, a 3 dB change in noise levels is considered barely perceivable.
- A change in noise levels of 5 dB is considered readily perceivable.
- A change in noise levels of 10 dB is subjectively heard as doubling of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion; hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dB, the combined sound level would be 53 dB, not 100 dB.

#### 11.1.4 Fundamentals of Vibration

As described by the Federal Transit Administration (FTA) in the *Transit Noise and Vibration Impact Assessment* (Federal Transit Administration, 2018), groundborne vibration can be a serious concern for the neighbors of a transit system route or maintenance facility, which can cause buildings to shake and rumbling sounds to be heard. In contrast with airborne noise, groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains, buses on rough roads, and construction activities such as blasting, pile driving, and operation of heavy earth-moving equipment.

Several different methods are used to quantify vibration. Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. PPV is most frequently used to describe the impacts of vibration on buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is

defined as the average of the squared amplitude of the signal. Decibel notation (in vibration decibels [VdB]) is commonly used to measure RMS.

The relationship of PPV to RMS velocity is expressed in terms of the "crest factor," defined as the ratio of the PPV amplitude to the RMS amplitude. Peak particle velocity is typically a factor of 1.7 to 6 times greater than RMS vibration velocity (Federal Transit Administration, 2018). The decibel notation acts to compress the range of numbers required to describe vibration.

Typically, groundborne vibration generated by human activity attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment.

The effects of groundborne vibration include movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, vibration can damage buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile driving during construction. Annoyance from vibration often occurs when the vibration levels exceed the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings. FTA's measure of the threshold of architectural damage for conventional sensitive structures is 0.2 inches per second (in/sec) PPV (Federal Transit Administration, 2018).

In residential areas, the background vibration velocity level is usually around 50 VdB (approximately 0.0013 in/sec PPV, with a crest factor of 4). This level is well below the vibration-velocity-level threshold of perception for humans, which is approximately 65 VdB. A vibration velocity level of 75 VdB is considered to be the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (FTA, 2018).

## 11.1.5 Existing Ambient Noise Levels

The Transit District area is located in the western portion of Downtown Redwood City. It is generally located between Brewster Avenue to the north, the Caltrain tracks to the east, Jefferson Avenue to the south, and El Camino Real, California Street, and Perry Street to the west. The Transit District area is located in an area of Downtown that accommodates almost entirely retail commercial land uses, although it abuts some residential uses.

The Transit District area is located within an artery of regional transportation that influences the local noise environment. The Redwood City Transit Center is a central passenger rail hub served by Caltrain with at-grade rail crossings at Broadway and at Brewster Avenue that generate additional noise from warning bells and required horn blasts. Between San José and Redwood City, approximately 96 weekday passenger trains travel the rail line between 4:30 am and 1:30 am with additional traffic generated by freight trains. Noise from these operations substantially contributes to noise levels in the vicinity of the at-grade crossings as demonstrated by the noise levels recorded below at monitoring location ST-9. This aspect of environmental noise setting is the same as was analyzed in the 2010 FEIR and the CEQA guidelines have since been revised to preclude assessment of impacts of the environment on a proposed project except when a project exacerbates such an impact.

Arterial roadways also contribute to the noise environment around the plan area. State Route (SR) 82 El Camino Real is adjacent to the western boundary of the Transit District area, while Jefferson Avenue forms the southern boundary of the Transit District area.

A series of long-term and short-term noise level measurements were conducted in the project vicinity in 2006 in support of the DTPP Final EIR to establish existing ambient noise conditions. Because of the age of these measurements, in support of this SEIR, short-term measurements were conducted in 2022 at the four previous long-term locations within proximity to the Transit District area to ascertain any changes in the noise environment at these locations from land use and transportation changes that may have occurred during the intervening years. Additionally, attended short-term measurements were conducted at five new locations to embellish these other measurements within the District. Noise measurements were taken near existing residential uses adjacent to the Transit District area as well as within the plan area as residential, day care and other noise sensitive uses may result from the proposed plan. The noise surveys were conducted using a Larson Davis Model LxT2 sound level meter that was calibrated before use and operated according to the manufacturer's written specifications. **Table 11-1** shows the measured average noise level (Leq) during the monitoring period. **Figure 11-2** identifies the measurement locations.

TABLE 11-1
EXISTING AND 2006 NOISE ENVIRONMENTS IN THE DTPP VICINITY

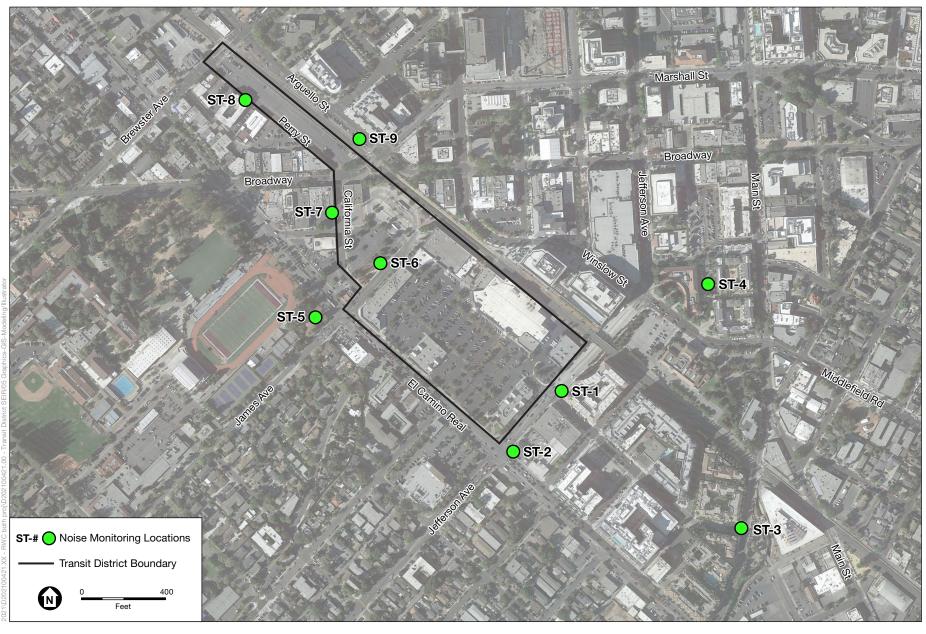
	N	loise Levels (dB	<b>A</b> )	
Noise Monitoring Location	2006 CNEL Noise Level <sup>a</sup>	2006 Daytime <sup>b</sup> Average L <sub>eq</sub>	2022 Daytime Average L <sub>eq</sub>	Primary Noise Sources
ST-1: 1 Franklin Street at Jefferson Avenue. Mixed use with upper story residential.	NA	NA	68	Traffic on Jefferson Avenue and Caltrain
ST-2: 1201 El Camino Real at Jefferson Avenue (LT-2 in DTPP Final EIR)	74	72	69	Traffic on El Camino Real and Jefferson Avenue
ST-3: Franklin Street Apartments at Maple Street (LT-3 in DTPP Final EIR)	70	64	67	Traffic on Maple Street and Caltrain at-grade crossing
ST-4: City Hall Square (LT-6 in DTPP Final EIR)	60	57	51	Distant traffic on localized roadways
ST-5: Sequoia High School El Camino Real at James Avenue	NA	NA	72	Traffic on El Camino Real and James Avenue
ST-6: Triangle parklet on James Avenue near Caltrain parking lot	NA	NA	63	Traffic on El Camino Real and James Avenue and Caltrain
ST-7: California Avenue behind 2601 Broadway	NA	NA	60	Traffic on Broadway
ST-8: 75 Perry Street Apartments	NA	NA	68	Traffic on Perry Street and Caltrain at-grade crossing at Brewster Avenue
ST-9: Arguello Street 16 feet from Caltrain tracks (LT-1 in DTPP Final EIR)	79	71	74	Caltrain pass-by events, at grade crossing and traffic on Arguello Street and Broadway

NOTES: dBA = A-weighted decibels; L<sub>eq</sub> = equivalent-continuous sound level; CNEL = Community Noise Exposure Level; NA = not applicable (these locations were not reported in the DTPP Final EIR)

SOURCES: City of Redwood City, *Downtown Precise Plan Final EIR*, December 2010. Environmental Science Associates noise survey, 2022 (Appendix C).

a Noise levels at ST-2, ST-3, ST-4, and ST-9 were monitored in support of the DTPP Final EIR

b Daytime hours are considered to be 7 AM to 10 PM. Nighttime hours are considered to be 10 AM to 7 PM.



SOURCE: ESA, 2022; Google Earth, 2022

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Additionally, existing roadside noise levels along roadway segments within the immediate vicinity of the Transit District area were modeled to provide estimates of existing weekday noise levels. **Table 11-2** presents existing roadside noise levels during the weekday peak commute hour. These modeled noise levels reflect only the noise generated by traffic on the identified roadway segments; they do not include other sources in the area, such as rail and aircraft noise where these other sources are nearby.

TABLE 11-2
EXISTING TRAFFIC NOISE ALONG ROADWAYS IN THE TRANSIT DISTRICT VICINITY

Roadway Segment	Existing Ldn (dBA)
Weekday Peak-Hour Noise Levels	
Maple St from El Camino Real to Main St	49
James Ave from Clinton St to El Camino Real	61
Jefferson Ave from Clinton St to El Camino Real	64
Jefferson Ave from El Camino Real to Sequoia Station	70
Broadway from El Camino Real to Perry St	60
Broadway from Perry St to Arguello St	62
Broadway from Arguello St to Winslow St	61
Broadway from Winslow St to Jefferson Ave	54
Marshall St from Arguello St to Winslow St	49
Brewster Ave from Fulton St to Broadway	54
Brewster Ave from Broadway to El Camino Real	49
Middlefield Road from Jefferson Ave to Main St	60
Middlefield Road from Main St to Maple St	63
Middlefield Road from Beech St to Chestnut St	61

NOTE: dBA = A-weighted decibels

SOURCES: Traffic data compiled by Fehr & Peers in 2022, and noise modeling performed by Environmental Science Associates in 2022.

## 11.1.6 Existing Groundborne Vibration Levels

Sources of vibration in the project vicinity include Caltrain operations. FTA has published generalized ground-surface vibration curves for locomotive-powered passenger and freight trains (**Table 11-3**). Most Caltrain operations stop at the Redwood City Caltrain Station which results in train speeds along the eastern project boundary that are generally in the range of 5–30 miles per hour.

The only other source of groundborne vibration in the project vicinity is travel by heavy-duty vehicles (e.g., refuse trucks, haul trucks) on local roadways. Trucks typically generate groundborne vibration velocity levels of around 63 VdB (approximately 0.006 in/sec PPV) at a distance of 50 feet; these levels could reach 72 VdB (approximately 0.016 in/sec PPV) where trucks pass over discontinuities in the roadway (FTA, 2018).

TABLE 11-3
GENERALIZED VIBRATION LEVELS FROM LOCOMOTIVE-POWERED PASSENGER OR FREIGHT TRAINS\*
(VIBRATION DECIBELS AND PEAK PARTICLE VELOCITY)

	Distance from Tracks						
Train Speed	30 Feet	50 Feet	100 Feet	150 Feet	200 Feet		
10 mph	74 VdB/0.051 PPV	71 VdB/0.040 PPV	62 VdB/0.019 PPV	60 VdB/0.016 PPV	58 VdB/0.013 PPV		
20 mph	80 VdB/0.085 PPV	77 VdB/0.066 PPV	68 VdB/0.031 PPV	66 VdB/0.026 PPV	64 VdB/0.022 PPV		
30 mph	84 VdB/0.12 PPV	81 VdB/0.092 PPV	72 VdB/0.043 PPV	70 VdB/0.037 PPV	68 VdB/0.03 PPV		
50 mph	88 VdB/0.17 PPV	85 VdB/0.13 PPV	76 VdB/0.060 PPV	74 VdB/0.024 PPV	72 VdB/0.043 PPV		

NOTES: MPH = MILES PER HOUR; PPV = PEAK PARTICLE VELOCITY; VDB = VIBRATION DECIBELS

SOURCE: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

## 11.1.7 Sensitive Receptors

Some land uses are considered more sensitive to ambient noise levels than others because of the amount of noise exposure (in terms of both the duration of exposure and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, and auditoriums generally are more sensitive to noise than are commercial and industrial land uses.

Working from north to south, the northernmost sensitive receptors adjacent to the Transit District area consist of the 75 Perry Street Apartment building near the corner of Brewster Avenue. There are multi-family residential units above ground floor commercial at 201 Marshall Avenue at the corner with Arguello Avenue.

Although the Sequoia High School campus is located south of Brewster Avenue and west of El Camino Real, the school uses adjacent to the Transit District area are primarily athletic fields, and academic buildings are located over 600 feet to the west of El Camino Real. There are single-family residential uses along James Avenue and on Arch Street, approximately 150 feet west of El Camino Real.

To the south, there are multi-family residential units above ground floor commercial at One Franklin Street at the corner of Jefferson Avenue with additional multi-family residential extending along the east side of Franklin Street to Maple Street to the south. There is also a multi-family residential building at 1090 Main Street at the confluence with Maple Street.

**Table 11-4** identifies these receptors within 500 feet<sup>3</sup> of the Transit District area boundary and their approximate distances to the Transit District area.

<sup>\*</sup> These levels reflect generalized diesel locomotive activity and do not reflect potential future reductions from electrification of Caltrain and increases from potential future High-Speed Rail operations.

This distance was selected because typical construction noise levels can affect a sensitive receptor at a distance of 500 feet if there is a direct line-of-sight between a noise source and a noise receptor (i.e., a piece of equipment generating 85 dBA would attenuate to 65 dBA over a distance of 500 feet). An exterior noise level of 65 dBA will typically attenuate to an interior noise level of 40 dBA with the windows closed which is below the State of California interior noise standard of 45 dBA.

TABLE 11-4
EXISTING NOISE-SENSITIVE RECEPTORS WITHIN 500 FEET OF THE TRANSIT DISTRICT AREA

Type of Sensitive Receptor	Location	Minimum Distance from Transit District Boundary	Representative Monitoring Location
Multifamily apartment building	75 Perry Street	30 feet	ST-8
Multifamily residential complex	201 Marshall Street	115 feet	ST-9
School classrooms	Sequoia High School	600 feet	ST-5
Single-family residential	400 block of Arch Street	150 feet	ST-5
Multifamily residential complex	1 Franklin Street	75 feet	ST-1
Multifamily apartment complex	119 Franklin Street	460 feet	ST-2
Multifamily residential complex	299 Franklin Street	340 feet	ST-2
Multifamily residential complex	101-149 Maple Street	750 feet	ST-2
Multifamily apartment building	1090 Main Street	820 feet	ST-4

SOURCES: Data compiled by Environmental Science Associates in 2022; Google Earth (imagery date July, 2019) for parcel data (address and distance to the Transit District.

## 11.2 Regulatory Setting

The following section focuses on any changes to the regulatory setting that have occurred since certification of the DTPP Final EIR. Section 11.2 of DTPP Final EIR Chapter 11, *Noise and Vibration*, includes the regulatory setting for this topic and is still current for this SEIR, except as noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

The primary federal noise standards that directly regulate noise related to the operation of the proposed project pertain to noise exposure and workers. The U.S. Occupational Safety and Health Administration (US OSHA) enforces regulations to safeguard the hearing of workers exposed to occupational noise. The US OSHA has established worker noise exposure limits that vary with the duration of the exposure and require that a hearing conservation program be implemented if employees are exposed to noise levels in excess of 85 dBA.

Federal regulations also establish noise limits for medium and heavy trucks (more than 4.5 tons, gross vehicle weight rating) under Code of Federal Regulations (CFR) Title 40, Part 205, Subpart B. The federal truck pass-by noise standard is 80 dBA at 15 meters from the vehicle pathway centerline. These controls are implemented through regulatory controls on truck manufacturers.

## 11.2.1 Federal Transit Authority Vibration Standards

FTA has adopted vibration standards that are used to evaluate potential building damage impacts from construction activities. **Table 11-5** shows FTA's vibration damage criteria.

TABLE 11-5
CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

NOTES: in/sec = inches per second; PPV = peak particle velocity

SOURCE: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

In addition, FTA has adopted standards related to human annoyance for groundborne vibration impacts for the following three land use categories: Vibration Category 1, High Sensitivity; Vibration Category 2, Residential; and Vibration Category 3, Institutional. FTA defines these categories as follows:

- Category 1: Buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes.
- Category 2: All residential land uses and any buildings where people sleep, such as hotels and hospitals.
- Category 3: Institutional land uses such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

Under conditions where there is an infrequent number of events per day, FTA has established thresholds of 65 VdB for Category 1 buildings, 80 VdB for Category 2 buildings, and 83 VdB for Category 3 buildings. 4 Under conditions where there is an occasional number of events per day, FTA has established thresholds of 65 VdB for Category 1 buildings, 75 VdB for Category 2 buildings, and 78 VdB for Category 3 buildings. 5 No thresholds have been adopted or recommended for commercial and office uses.

## 11.2.2 California Department of Public Health Noise Standards

The California Department of Public Health has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. **Table 11-6** shows these guidelines for land use and noise exposure compatibility. In addition, California Government Code Section 65302(f) requires each county and city in the state to prepare and adopt a comprehensive long-range general plan for its physical development. Section 65302(g) requires the general plan to include a noise element. The noise element must:

FTA defines "infrequent events" as fewer than 30 vibration events of the same kind per day.

<sup>&</sup>lt;sup>5</sup> FTA defines "occasional events" as between 30 and 70 vibration events of the same source per day.

- Identify and appraise noise problems in the community;
- Recognize Office of Noise Control guidelines; and
- Analyze and quantify current and projected noise levels.

**TABLE 11-6** COMMUNITY NOISE EXPOSURE (DNL OR CNEL)

Land Use	Normally Acceptable <sup>a</sup>	Conditionally Acceptable <sup>b</sup>	Normally Unacceptable <sup>c</sup>	Clearly Unacceptable <sup>d</sup>
Single-Family Homes, Duplexes, Mobile Homes	50–60	55–70	70–75	above 75
Multifamily Homes	50–65	60–70	70–75	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50–70	60–70	70–80	above 80
Transient Lodging—Motels, Hotels	50–65	60–70	70–80	above 75
Auditoriums, Concert Halls, Amphitheaters	_	50–70	_	above 70
Sports Arenas, Outdoor Spectator Sports	_	50–75	_	above 75
Playgrounds, Neighborhood Parks	50–70	_	67–75	above 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50–75	_	70–80	above 80
Office Buildings, Business and Professional, Commercial	50–70	67–77	above 75	_
Industrial, Manufacturing, Utilities, Agriculture	50–75	70–80	above 75	_

NOTES: CNEL = community noise equivalent level; DNL = day-night average noise level

SOURCE: Governor's Office of Planning and Research, State of California General Plan Guidelines - Noise Element Guidelines, 2017.

The State of California also establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the state pass-by standard is consistent with the federal limit of 80 dBA. The state pass-by standard for light trucks and passenger cars (less than 4.5 tons, gross vehicle rating) is also 80 dBA at 15 meters from the centerline. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by state and local law enforcement officials.

## 11.2.3 California Building Code

The California Building Code requires that walls and floor/ceiling assemblies separating dwelling units from each other, or from public or service areas, have a sound transmission class<sup>6</sup> of 50 dB

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design

<sup>&</sup>lt;u>Clearly Unacceptable:</u> New construction or development should generally not be undertaken.

The sound transmission class is used as a measure of a material's ability to reduce sound. The sound transmission class is equal to the number of decibels a sound is reduced as it passes through a material.

for all common interior walls and floor/ceiling assemblies between adjacent dwelling units, or between dwelling units and adjacent public areas for multifamily units and transient lodging. The code specifies a maximum interior performance standard of 45 dBA.

The State of California has also established noise insulation standards for new multifamily residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards (California Code of Regulations, Title 24). The noise insulation standards set forth an interior standard of 45 dBA CNEL in any habitable room. They require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than 60 dBA CNEL. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

#### 11.2.4 State Vibration Standards

No state vibration standards are applicable to the proposed project. Moreover, according to the California Department of Transportation's (Caltrans's) *Transportation and Construction Vibration Guidance Manual* (California Department of Transportation, 2020), there are no official Caltrans standards for vibration. However, this manual provides guidelines for assessing the potential for vibration damage to various types of buildings, ranging from 0.08 to 0.12 in/sec PPV for extremely fragile historic buildings, ruins, and ancient monuments to 0.50 to 2.0 in/sec PPV for modern industrial/commercial buildings.

# 11.2.5 San Mateo County Airport Land Use Commission Comprehensive Land Use Plan

Portions of the Transit District area are located within the Airport Influence Area, as defined by the San Carlos Airport's Comprehensive Land Use Plan (CLUP) (City/County Association of Governments of San Mateo County, 2015), adopted by the San Mateo County Airport Land Use Commission in October 2015. The City of Redwood City is located within the Airport Influence Area (Area A) which includes areas around the Airport that are affected by noise, height, and safety considerations. The CLUP includes noise policies and standards for projects within Area A of the Airport, as summarized below. However, the 60, 65, 70, and 75 CNEL noise contours for San Carlos Airport do not extend into the City of Redwood City.

#### Airport Influence Area Policy 1 - Real Estate Disclosure Area

Within Area A of the AIA the real estate disclosure requirements of state law apply. Section 11010 (b) (13) of the Business and Professions Code requires people offering subdivided property for sale or lease to disclose the presence of all existing and planned airports within two miles of the property. The law requires that, if the property is within an "airport influence area" designated by an airport land use commission, the following statement must be included in the notice of intention to offer the property for sale:

#### NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the

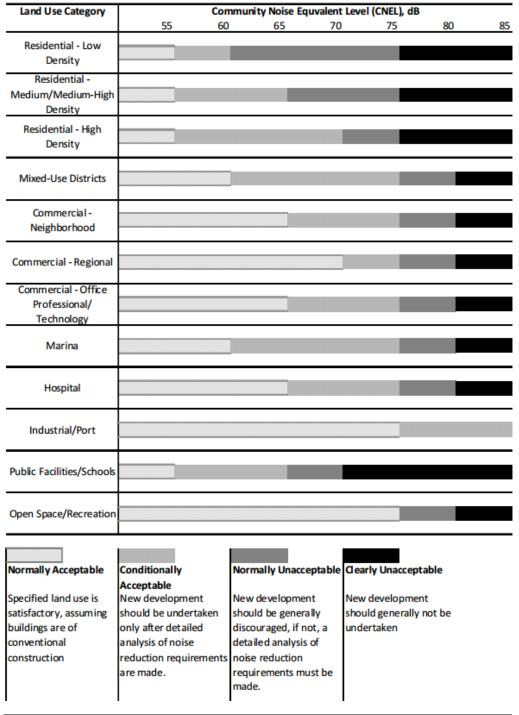
annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

## 11.2.6 Redwood City General Plan

Redwood City addresses issues of land use/noise compatibility, transportation noise, and community noise in the *Public Safety Element* of the Redwood City General Plan. The goals and policies in the General Plan *Noise Chapter* promote compatible development throughout the city and those listed below relate to the DTPP. Policies pertaining to noise and adopted for the purpose of avoiding or mitigating an environmental effect are listed below. Policies listed below that are also considered land use policies are addressed in Section 4.9, *Land Use and Planning*, of this Draft SEIR.

- *Policy PS-13.3*: Consider noise impacts as part of the development review process, particularly the location of parking, ingress/egress/loading, and refuse collection areas relative to surrounding residential development and other noise-sensitive land uses.
- *Policy PS-13.4*: In accordance with the Municipal Code and noise standards contained in the General Plan, strive to provide a noise environment that is at an acceptable noise level near schools, hospitals, and other noise sensitive areas
- *Policy PS-13.5*: Limit the hours of operation at all noise generation sources that are adjacent to noise sensitive areas, wherever practical.
- *Policy PS-13.6*: Require all exterior noise sources (construction operations, air compressors, pumps, fans, and leaf blowers) to use available noise suppressions devices and techniques to bring exterior noise down to acceptable levels that are compatible with adjacent land uses.
- *Policy PS-13.8*: Implement appropriate standard construction noise controls for all construction projects.
- *Policy PS-13.9*: Require noise created by new non-transportation noise sources to be mitigated so as not to exceed acceptable interior and exterior noise level standards.
- Policy PS-13.10: Do not allow new residential or other noise sensitive land use development in noise impacted areas unless effective mitigation measures are incorporated into the project design to reduce outdoor activity area noise levels

The General Plan also sets standards identifying appropriate noise levels for various uses within the City. **Figure 11-3** presents the City's Noise Guidelines for Land Use Planning, as presented in the City's General Plan Public Safety Element. The guidelines indicate acceptable and unacceptable noise environments for a variety of land uses, establishing more restrictive acceptable noise environments for noise sensitive uses such as residential, and less restrictive standards for noise tolerant industrial/port land uses.



SOURCE: City of Redwood General Plan, Public Safety Element, Noise Chapter. 2010.

Figure 11-3
Redwood City Noise Guidelines for Land Use Planning

## 11.2.7 Redwood City Municipal Code

Chapter 24 (Noise Regulation) of the Redwood City Municipal Code sets allowable noise limits for different types of receiving land uses. The noise levels allowed by the Noise Ordinance depend primarily on the background noise level in the area. For the residential developments in the project vicinity, applicable noise limits are discussed in Chapter 24, Article II, Division 2 and 3. Section 24.21 prohibits noise increases of 6 dB above local ambient measured noise at any point within a residential district due to an assemblage of 3 or more people during the hours of 8:00 PM and 8:00 AM. Section 24.31 of the Noise Ordinance prohibits noise levels from exceeding 110 dBA for any item of machinery, equipment, or device used during construction in a residential district. Section 24.32 of the Ordinance prohibits construction during the hours of 8:00 PM to 7:00 AM weekdays, and at any time on Saturdays, Sundays, and holidays, if the construction generates noise levels exceeding the local ambient noise level measured at any point within a residential district.

Section 36.7.B (Outdoor Equipment) of the City Zoning Code requires that outdoor equipment such as air conditioning units or pool equipment must be located in the side or rear yard and setback a minimum of five (5) feet from the property line and that such equipment may not generate noise that exceeds 55 dBA at any point along the property line.

## 11.2.8 Conditions of Approval

As a result of the California Supreme Court's decision with respect to impacts of the environment on a project, these potential non-CEQA impacts are not further addressed in this SEIR. However, the City, based on project-specific noise studies that may be conducted as individual subsequent development projects are considered for approval, would continue to enforce certain noise-related mitigation measures from the DTPP Final EIR, with clarifying edits, as conditions of approval for these subsequent development projects, as project applications and noise conditions warrant. Such conditions, uniformly applied by the City to all applicable projects consistent with the Redwood City General Plan, Municipal Code, and Zoning Code, may include the following:

#### Condition of Approval 11a: Noise Reduction Measures for Multifamily Housing

The City shall require noise studies consistent with the requirements of the California Building Code to be conducted for proposed new multifamily residential projects within the Transit District area to identify noise reduction measures necessary to achieve compatibility with City Noise Element guidelines (55 dBA CNEL at sensitive exterior spaces) and Title 24 standards (45 dBA CNEL within residential units). Each noise study must be approved by the City's Building Inspection Division prior to issuance of a building permit. Identified noise reduction measures, in order of preference so that windows can be opened, may include:

- Site and building design so as to minimize noise in shared residential outdoor activity areas by locating such areas behind the buildings, in courtyards, or orienting the terraces toward the interior of lots rather than streets;
- Site and building design so as to minimize noise in the most intensively occupied and noise-sensitive interior spaces of units, such as bedrooms, by placing such interior spaced and their windows and other openings in locations with less noise exposure;

- Windows and doors with a high Sound Transmission Class (STC) rating and noiseattenuating wall assemblies;
- Forced air mechanical ventilation systems in all units exposed to noise level
  exceeding Title 24 standards to allow residents the option of reducing noise by
  keeping the windows closed.

#### Condition of Approval 11b: Groundborne Vibration Measures for Habitable Buildings

The City shall require a detailed site-specific vibration study prior to development of new habitable buildings within 100 feet of the Caltrain or California High Speed Rail right-of-way. The study shall demonstrate that groundborne vibrations associated with rail operations either would not exceed applicable FTA groundborne vibration impact criteria, or can be reduced to below the applicable FTA criteria thresholds through building design and construction measures (e.g. stiffened floors, modified foundations), which shall be required as conditions of permit approval.

## 11.3 Impacts and Mitigation Measures

## 11.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe noise and vibration impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the certified DTPP Final EIR.

## 11.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) generate a substantial temporary or permanent increase in ambient noise levels in the vicinity
  of the project in excess of standards established in the local general plan or noise ordinance,
  or applicable standards of other agencies; or
- b) generate excessive groundborne vibration or groundborne noise levels; or
- c) for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

As discussed above, while CEQA requires the analysis of potential adverse effects of a project on the environment, the California Supreme Court ruled in 2015 in *CBIA v. BAAQMD* (*California Building Industry Association v. Bay Area Air Quality Management District*, 2015) that the potential effects of the environment on the project are legally not required to be analyzed or mitigated under CEQA. Except where the project's impacts would exacerbate the existing conditions CEQA no longer requires that potential effects of the environment on the project be analyzed or mitigated.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369.

An operational noise impact was identified in the DTPP Final EIR with respect to impacts of the existing noise environment on proposed sensitive land use, specifically, the noise impacts associated with Caltrain operations. Mitigation Measure 11-1 was identified in the DTPP Final EIR to require noise studies for proposed new multifamily residential project within the DTPP to identify noise reduction measures necessary to ensure achievement of the land use compatibility noise standards established in the City *Noise Element*.

An operational vibration impact was identified in the DTPP Final EIR with respect to impacts of the existing environment on proposed sensitive land use, specifically, the vibration impacts associated with Caltrain and future high speed rail operations. Mitigation Measure 11-2 was identified in the DTPP Final EIR to require a detailed, site-specific vibration study for new habitable buildings with 100 feet of the rail line.

## 11.3.3 Impacts and Mitigation Measures

Impact NO-1: Implementation of the proposed Transit District DTPP Amendments would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Less than Significant with Mitigation)

The DTPP Final EIR found that construction-related noise generated by the DTPP could result in a *potentially significant impact* and then identified conditions of approval on all future projects involving demolition and construction activities. Implementation of the proposed Transit District DTPP Amendments would not change this conclusion because the Transit District area is located within the DTPP boundaries and would allow similar construction activities as the DTPP. Modifications under the proposed Transit District DTPP Amendments would occur within the same area as was evaluated in the DTPP Final EIR, and this SEIR assumes that there would be no substantial increase in duration of construction-related activity. Although the modifications under the proposed Transit District DTPP Amendments would potentially change the minimum allowable height of the structures on some parcels assumed in the DTPP, these modifications would occur within the same overall building envelopes as in the DTPP and, hence would not extend the noise contour generated by construction activities.

DTPP Final EIR Mitigation Measure 11-4 is sufficient to address temporary construction noise impacts on receptors surrounding the Transit District area by restricting the hours of construction consistent with Chapter 24.32 of the City's municipal code and requiring noise controls measures consistent with Policies PS 13-6 and PS 13-8 of the City's General Plan. While some activities, like large concrete pours that require extended periods of continuous activity or complex utility relocation efforts, could require continuous work beyond the permitted hours, any work outside of the City's construction hours would be temporary and would require special permits that would entail compliance with applicable noise reduction requirements. The Redwood City Municipal Code allows for work on weekends/holidays on an as-needed basis.

The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impact identified in the DTPP Final EIR. Mitigation Measure NO-1 (formerly Mitigation Measure 11-4 from the DTPP Final EIR with clarifying edits) is applicable to the proposed

Transit District DTPP Amendments and is sufficient to reduce this impact to a *less-than-significant* level.

**Mitigation Measure NO-1: Construction Noise Reduction** (formerly Mitigation Measure 11-4 from the DTPP Final EIR with clarifying amendments): The City shall require Project Applicants to reduce demolition and construction noise impacts on adjacent uses by imposing conditions of approval on all future projects involving demolition and construction activities. These conditions shall require the Project Applicant to undertake the following conventional construction-period noise abatement measures:

- Construction Plan. Prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with nearby noise-sensitive facilities so that construction activities and the event schedule can be scheduled to minimize noise disturbance. This plan shall be provided to all noise-sensitive land uses within 500 feet of the construction site.
- Construction Scheduling. Ensure that noise-generating construction activity is limited to between the hours of 7:00 AM to 8:00 PM Monday through Friday except when authorized by the Building Official (Redwood City Municipal Code Section 24.32).
- Construction Equipment Mufflers and Maintenance. Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Equipment Locations. Locate stationary noise-generating equipment required on construction project sites as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project site.
- Construction Traffic. Route all construction traffic to and from the construction sites via designated truck routes to the maximum extent feasible. Prohibit construction-related heavy truck traffic in residential areas where feasible.
- Quiet Equipment Selection. Use quiet construction equipment, particularly air compressors, wherever feasible.
- *Temporary Barriers*. Construct solid plywood fences around construction sites adjacent to residences, operational businesses, or noise-sensitive land uses.
- Temporary Noise Blankets. Temporary noise control blanket barriers shall be erected along building facades of construction sites to attenuate noise from elevated activities if noise conflicts cannot be resolved by scheduling. (Noise control blanket barriers can be rented and quickly erected.)
- Noise Disturbance Coordinator. For projects that would last over one year in duration, the City may choose to require the Project Applicant to designate a "Noise Disturbance Coordinator" who shall be responsible for responding to any local complaints about construction noise. The Disturbance Coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. The Project Applicant shall post, in a conspicuous location, a telephone number for the Disturbance Coordinator at the construction site and include it in the notice sent to neighbors regarding the

construction schedule. (The Noise Disturbance Coordinator shall work directly with an assigned City staff member.)

Significance after Mitigation: Less than Significant							

Impact NO-2: Implementation of the proposed Transit District DTPP Amendments would not generate a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Less than Significant with Mitigation)

The DTPP Final EIR found that operational noise generated stationary sources associated with commercial uses including offices, retail stores, restaurants, or cafes proposed next to or below residential development could generate noise that could result in adverse changes to the noise environment. In addition, new residential development could generate noise that may adversely affect existing or proposed noise-sensitive uses (e.g., residential development noise sources such as mechanical equipment associated with new multifamily residential structures). However, no mitigation measures were identified in the DTPP Final EIR addressing this potential impact.

The DTPP Final EIR found that operational noise increased traffic generated by development under the DTPP would be a less than significant impact and no mitigation measures were required.

#### Operational Stationary Source Noise Impacts

Implementation of the proposed Transit District DTPP Amendments would allow increases in office space and residential development, along with redevelopment of retail space. New commercial development proposed next to or below residential development could generate noise that could result in adverse changes to the noise environment. In addition, new residential development could generate noise that may adversely affect existing or proposed noise-sensitive uses. An example of such residential development noise sources would be mechanical equipment associated with new multifamily residential structures.

Policy PS-13.3 of the City's General Plan requires that consideration of potential noise impacts be performed as part of the development review process, particularly the location of parking, ingress/egress/loading, and refuse collection areas relative to surrounding residential development and other noise-sensitive land uses. Policy PS-13.6 of the City's General Plan requires all exterior noise sources such as air compressors, pumps, fans, and leaf blowers to use available noise suppressions devices and techniques to bring exterior noise down to acceptable levels that are compatible with adjacent land uses. Additionally, Policy PS-13.9 of the City's General Plan requires that noise created by new non-transportation noise sources be mitigated so as not to exceed acceptable interior and exterior noise level standards.

Section 36.7.B (Outdoor Equipment) of the City Zoning Code requires that outdoor equipment such as air conditioning units or pool equipment must be located in the side or rear yard and setback a minimum of five (5) feet from the property line and that such equipment may not generate noise that exceeds 55 dBA at any point along the property line.

With respect to noise from public gatherings in the Downtown area, the DTPP provides for notifications to advise property owners, tenants and users of property within the DTPP Area of the inherent impacts and inconveniences associated with purchase, tenancy or use of property in the Downtown Precise Plan Area for the potential for noise to occur from restaurants, business operations and special events. The DTPP further states that such noise sources are not to be considered a nuisance within the DTPP.

While the General Plan policies, outdoor equipment provision of the City Zoning Code, and the DTPP's provisions regarding noise from public gatherings would address potential impacts from these sources, they would not address potential impacts associated with noise from mechanical equipment. Because the specific, type size, and locations of mechanical equipment associated with development within the Transit District area are unknown, a new mitigation measure is identified below to address potential noise conflicts that may be associated with mechanical equipment. The proposed Transit District DTPP Amendments would result in more severe impacts than what was previously identified in the DTPP Final EIR for stationary source noise. However, implementation of new Mitigation Measure NO-2 would provide a performance standard consistent with the restrictions of the General Plan Noise Element as well as Section 36.7.B (Outdoor Equipment) of the City Zoning Code. With implementation of new Mitigation Measure NO-2, the impact of the proposed Transit District DTPP Amendments with respect to generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance would be *less than significant*.

#### Mitigation Measure NO-2: Operational Noise Performance Standard

Prior to the issuance of any building permit, future Project Applicants within the Transit District area shall ensure that all mechanical equipment is selected and designed to reduce impacts on surrounding uses by meeting the performance standards of Chapters 36.7.B of the Redwood City Zoning Code, limiting noise from stationary sources such as mechanical equipment to 55 dBA at the property lines. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance has been verified by the City. Methods of achieving these standards include, but are not limited to, using low-noise-emitting HVAC equipment, locating HVAC and other mechanical equipment within a rooftop mechanical penthouse, and using shields and parapets to reduce noise levels to adjacent land uses. For emergency generators, industrial-grade silencers can reduce exhaust noise by 12 to 18 dBA, and residential-grade silencers can reduce such noise by 18 to 25 dBA (American Society of Heating, Refrigeration, and Air Conditioning Engineers, Technical Committee on Sound and Vibration, 2006). Acoustical screening can also be applied to exterior noise sources and can achieve up to 15 dBA of noise reduction (Environmental Noise Control, 2014).

An acoustical study shall be prepared by a qualified acoustical engineer during final building design to evaluate the potential noise generated by building mechanical equipment and to identify the necessary design measures to be incorporated to meet the City's standards. The study shall be submitted to the Director of the City of Redwood City Community Development and Transportation Department for review and approval before the issuance of any building permit.

Significance after Mitigation: Less than Significant

#### **Operational Traffic Noise Impacts**

In addition to allowing increases in office space and residential development, implementation of the proposed Transit District DTPP Amendments would also result in certain alterations to DTPP vehicular circulation within the Transit District area. These include the elimination of a planned but unbuilt lane between the Caltrain right-of-way and the Transit Center and Sequoia Station sites, and the elimination of the planned but unbuilt segment of Harrison Avenue between El Camino Real and the Caltrain right-of-way. It is noted that neither of these streets exists as a public street under existing conditions. In addition, the planned but unbuilt portion of Hamilton Street between El Camino Real and Franklin Street would be converted from a Downtown Core Street to a City Street, and the planned but unbuilt segment of Hamilton Street between Franklin Street and the Caltrain right-of-way would be changed from a Downtown Core Street and would instead be identified as a potential privately owned, publicly accessible open space that could allow for pedestrian and bicycle travel only, with non-emergency motor vehicles prohibited.

Potential vehicular traffic noise increases from existing (2021) conditions plus implementation of the proposed Transit District DTPP Amendments were evaluated and compared to the existing traffic noise levels. Noise levels along 14 street segments within and surrounding the Transit District area boundaries analyzed in the transportation analysis were quantitatively modeled and the modeling results are presented in **Table 11-7**. Roadway segment link volumes at these study locations were developed for the existing plus proposed Transit District DTPP Amendments and 2040 cumulative conditions. The roadways segments were selected as they represent roadways expected to be most likely used to access the Transit District area and therefore be affected by vehicle traffic changes.

As shown in Table 11-7, project-generated vehicular traffic would increase traffic noise along the 14 modeled segments up to 1.2 dBA, while some segments would experience a decrease in noise from traffic being redistributed as a result of new roadway connections. As described in the methodology section, this analysis considers any increase in traffic noise of greater than 3 dBA or 5 dBA, depending on the existing noise level, to result in a significant noise impact. As shown in Table 11-7, all traffic-noise increases resulting from implementation of the proposed Transit District DTPP Amendments would be below 3 dBA, which is also the level considered barely perceptible in laboratory environments. Therefore, traffic noise generated by subsequent projects under the proposed Transit District DTPP Amendments would not result in a substantial permanent increase in ambient noise levels. Operational traffic noise impacts resulting from the proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. Therefore, this impact would be *less than significant* and no mitigation is required.

Mitigation: None required.

TABLE 11-7
TRAFFIC NOISE INCREASES ALONG ROADWAYS IN THE PLAN VICINITY

Roadway Segment	Existing Conditions	Existing plus TD Implementation	Change in Noise Level	Significant?
Weekday Peak-Hour Noise Levels				
Maple St from El Camino Real to Main St	49.1	48.6	-0.5	No
James Ave from Clinton St to El Camino Real	60.8	60.7	-0.1	No
Jefferson Ave from Clinton St to El Camino Real	63.6	63.9	0.3	No
Jefferson Ave from El Camino Real to Sequoia Station	69.7	70.4	0.7	No
Broadway from El Camino Real to Perry St	59.8	59.6	-0.2	No
Broadway from Perry St to Arguello St	61.9	61.8	-0.1	No
Broadway from Arguello St to Winslow St	60.3	60.2	-0.1	No
Broadway from Winslow St to Jefferson Ave	53.9	53.7	-0.2	No
Marshall St from Arguello St to Winslow St	48.3	48.3	0	No
Brewster Ave from Fulton St to Broadway	54.2	55.2	1.0	No
Brewster Ave from Broadway to El Camino Real	49.2	48.3	-0.9	No
Middlefield Road from Jefferson Ave to Main St	59.8	61.0	1.2	No
Middlefield Road from Main St to Maple St	63.0	64.2	1.2	No
Middlefield Road from Beech St to Chestnut St	60.2	61.2	1.0	No

NOTE: dBA = A-weighted decibels

SOURCES: Traffic data compiled by Fehr & Peers in 2022, and noise modeling performed by Environmental Science Associates in 2022.

# Impact NO-3: Implementation of the proposed Transit District DTPP Amendments would not generate excessive groundborne vibration or groundborne noise levels. (*Less than Significant with Mitigation*)

The DTPP Final EIR found that construction-related vibration generated from construction under the DTPP could result in a *potentially significant impact* and then identified conditions of approval on all future projects involving demolition and construction activities. Implementation of the proposed Transit District DTPP Amendments would not change this conclusion because the Transit District area is located within the DTPP boundaries, and would allow for similar construction activities. This SEIR assumes that there would be no substantial increase in

vibrations-generating activities (e.g., demolition, pile driving) duration of construction-related activity with approval of the proposed Transit District DTPP Amendments. Also, the proposed Transit District DTPP Amendments does not propose any changes in allowable maximum building heights so the vibrations associated with construction to that height were previously accounted for. DTPP Final EIR Mitigation Measure 11-3 is sufficient to address construction-related vibration impacts on receptors surrounding the Transit District area, and has been included here with clarifying amendments as Mitigation Measure NO-3.

The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. Mitigation Measure NO-3 (formerly Mitigation Measure 11-3 from the DTPP Final EIR with clarifying edits) is applicable to the Transit District area and is sufficient to reduce this impact to a *less-than-significant* level.

Mitigation Measure NO-3: Vibration Reduction (formerly Mitigation Measure 11-3 from the DTPP Final EIR with clarifying edits): The City shall reduce ground-borne vibration levels that may be generated by future site-specific demolition and construction activities by imposing conditions of approval on all future projects involving demolition and construction activities, which conditions shall require the Project Applicant to ensure the following ground-borne vibration abatement measures are implemented by the construction contractor:

- Restrict vibration-generating activity to between the hours of 7:00 AM and 5:00 PM, Monday through Friday. Prohibit such activity on weekends and holidays.
- Notify occupants of land uses located within 200 feet of pile-driving activities of the project construction schedule in writing.
- Investigate in consultation with City staff possible pre-drilling of pile holes as a means of minimizing the number of percussions required to seat the pile.
- Conduct a pre-construction site survey documenting the condition of any historic structure located within 200 feet of pile driving activities.
- Monitor pile driving vibration levels to ensure vibration does not exceed appropriate thresholds for the building (5 mm/sec (0.20 inches/sec) ppv for structurally sound buildings and 2 mm/sec (0.08 inches/sec) ppv for historic buildings.

Significance a	aiter Mitigat	tion: Less that	n Significant

Impact NO-4: Implementation of the proposed Transit District DTPP Amendments would not expose people residing or working in the project area to excessive noise levels due to its location within the vicinity of a private airstrip, or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. (Less than Significant)

The DTPP Final EIR found that development under the DTPP would require disclosure of proximity to the airport as part of all real estate sales or leases and referral of the DTPP to the City/County Council of Governments of San Mateo County and the Airport Land Use

Commission for a determination of consistency with the San Mateo County Comprehensive Airport Land Use Compatibility Plan (ALUCP), as amended for San Carlos Airport. The DTPP Final EIR found that because the DTPP area is outside the projected 55 dB CNEL contour published in the Redwood City General Plan and the ALUCP, the potential impact related to airport noise would be *less than significant*.

The Transit District area is located approximately 1.5 miles from the San Carlos Airport. As discussed in Section 11.2 Regulatory Setting, portions of the District Area are located within the Airport Influence Area, as defined by the San Carlos Airport's ALUCP (City/County Association of Governments of San Mateo County, 2015), adopted by the San Mateo County Airport Land Use Commission in October 2015. The Transit District area is located within the Airport Influence Area (Area A) which includes areas around the Airport that are affected by noise, height, and safety considerations. The ALUCP includes a single noise policy for projects within Area A of the Airport. However, the 60, 65, 70, and 75 CNEL noise contours for San Carlos Airport do not extend into the City of Redwood City. Consequently, because noise from aircraft operations at the San Carlos Airport do not exceed 60 CNEL (a level "normally acceptable" per Table 11-6 above) anywhere in the Transit District area and because the ALUCP requires a Real Estate Disclosure as part of Policy 1 of the Airport Influence Area, the proposed Transit District DTPP Amendments would not result in new or more severe impacts with respect to airport noise than what was identified in the DTPP Final EIR. Therefore, impacts with respect to exposure of people residing or working in the project area to excessive noise levels due to its location within the vicinity of a private airstrip, or an airport land use plan would be less than significant.

#### 11.4 References

American Society of Heating, Refrigeration, and Air Conditioning Engineers, Technical Committee on Sound and Vibration, *Generator Noise Control—An Overview*, 2006.

California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369.

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, September 2020.

City/County Association of Governments of San Mateo County, *Final Comprehensive Airport Land Use Compatibility Plan for the Environs of San Carlos Airport*, adopted October 2015. Available at https://ccag.ca.gov/wp-content/uploads/2015/11/SQL\_FinalALUCP\_Oct15\_read.pdf. Accessed January 24, 2022.

Environmental Noise Control, Product Specification Sheet, ENC STC-32 Sound Control Panel System, 2014.

Federal Interagency Committee on Noise, Federal Agency Review of Selected Airport Noise Analysis Issues, August 1992.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

11. Noise and Vibration

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## **CHAPTER 12**

## Air Quality

This SEIR chapter analyzes the effects to air quality from implementation of the proposed Transit District DTPP Amendments, focusing on changes to the Downtown Precise Plan (DTPP) Final EIR (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

#### Findings of the DTPP Final EIR

Air quality impacts of the DTPP project were analyzed on pp. 12-6 to 12-21 of the DTPP Final EIR. The DTPP Final EIR included a discussion of impacts with respect to criteria air pollutant and ozone precursor emissions, localized carbon monoxide (CO) concentrations, community health risk and hazards, and odorous emissions. The EIR determined that the DTPP would be consistent with the Bay Area 2005 Ozone Strategy, the applicable Bay Area Air Quality Management District (BAAQMD) Clean Air Plan at the time, and would therefore have a less than significant impact with respect to regional criteria air pollutant and ozone precursor emissions. In addition, the DTPP Final EIR concluded that since traffic volumes at affected intersections would not increase to more than 44,000 vehicles per hour, the impact on localized CO levels would be less than significant.

Impact 12-1 of the DTPP Final EIR identified potentially significant construction and operational impacts from exposure to Toxic Air Contaminants (TACs) and fine particulate matter (PM<sub>2.5</sub>). In addition, the DTPP Final EIR identified a potentially significant impact with respect to odors as development facilitated by the DTPP could result in food service uses in the vicinity of residential or other odor-sensitive uses. In order to mitigate these impacts to a less than significant level, the DTPP Final EIR identified Mitigation Measure 12-1 and Mitigation Measure 12-2. With the implementation of these mitigation measures, the DTPP Final EIR found that the impacts of the DTPP on health risk and odorous impacts would be reduced to a less-than-significant level.

## 12.1 Environmental Setting

## 12.1.1 Climate and Meteorology

The Transit District area is located in the San Francisco Bay Area Air Basin (SFBAAB or "air basin"). Air quality is influenced by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. Climate and meteorological conditions that affect the accumulation or movement and dispersal of

air pollutants within the SFBAAB are the same as described in the DTPP Final EIR. The following setting information updates the existing air quality baseline.

#### 12.1.2 Criteria Air Pollutants

As required by the 1970 Federal Clean Air Act, the United States Environmental Protection Agency (U. S. EPA) initially identified six air pollutants that are pervasive in urban environments for which state and federal health-based ambient air quality standards were established. The U.S. EPA calls these pollutants "criteria air pollutants," and the agency has regulated them by developing specific public health-based and welfare-based criteria as the basis for setting permissible levels. Ozone, CO, particulate matter (PM), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead are the six criteria air pollutants originally identified by the U.S. EPA. Later, subsets of PM were identified and permissible levels were established. These include PM<sub>10</sub>, the fraction of PM 10 microns in diameter or less and PM of 2.5 microns in diameter or less (PM<sub>2.5</sub>).

**Table 12-1** briefly summarizes the sources and the most common health and environmental effects for each of the air pollutants for which there is a national and/or California ambient air quality standard (ambient air quality standards are discussed later under the Regulatory Setting).

Although the federal Clean Air Act established the NAAQS, individual states retained the option to adopt more stringent standards and to include other pollution sources. California had already established its own air quality standards when federal standards were established, and because of the unique meteorological challenges in California, there are differences between the state and national ambient air quality standards, as shown in Table 12-1. California ambient standards tend to be at least as protective as national ambient standards or are often more stringent. In addition to the six criteria air pollutants, California has adopted ambient air quality standards for sulfates, hydrogen sulfide, visibility reducing particles, and vinyl chloride.

## 12.1.3 Ambient Air Quality Standards

As discussed in the DTPP Final EIR, National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for criteria air pollutants have been set at levels considered safe to protect public health and welfare, and protect the environment.

**Table 12-2** summarizes the current NAAQS and CAAQS for each of the criteria air pollutants and updates Table 12.1 of the DTPP Final EIR.

TABLE 12-1
SOURCES, ENVIRONMENTAL AND HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS

Criteria Air Pollutant	Sources	Environmental & Health Effects
Ozone	Formed when reactive organic gases (ROG) and nitrogen oxides (NO <sub>x</sub> ) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.	<ul> <li>Respiratory symptoms</li> <li>Worsening of lung disease leading to premature death</li> <li>Damage to lung tissue</li> <li>Crop, forest and ecosystem damage</li> <li>Damage to a variety of materials, including rubber, plastics, fabrics, paint and metals</li> </ul>
Carbon Monoxide	Internal combustion engines, primarily gasoline-powered motor vehicles.	Chest pain in patients with heart disease     Headache     Light-headedness     Reduced mental alertness
Nitrogen Dioxide	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.	<ul><li>Lung irritation</li><li>Enhanced allergic responses</li></ul>
Sulfur Dioxide	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.	Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits
Particulate Matter (PM <sub>10</sub> )	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).	Premature death & hospitalization, primarily for worsening of respiratory disease     Reduced visibility and material soiling
Particulate Matter (PM <sub>2.5</sub> )	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO <sub>X</sub> , sulfur oxides, and organics.	Premature death     Hospitalization for worsening of cardiovascular disease     Hospitalization for respiratory disease     Asthma-related emergency room visits     Increased symptoms, increased inhaler usage
Lead	Present sources: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.	<ul> <li>Impaired mental functioning in children</li> <li>Learning disabilities in children</li> <li>Brain and kidney damage</li> </ul>
Sulfates	Produced by the reaction in the air of SO <sub>2</sub> .	Same as PM2.5, particularly worsening of asthma and other lung diseases     Reduces visibility
Hydrogen Sulfide	Geothermal power plants, petroleum production and refining	Nuisance odor (rotten egg smell)     At high concentrations: headache & breathing difficulties
Visibility Reducing Particles	See PM <sub>2.5</sub>	Reduced airport safety, scenic enjoyment, road safety, and discourages tourism
Vinyl Chloride	Polyvinyl chloride and vinyl manufacturing.	Central nervous system effects, such as dizziness, drowsiness & headaches     Long-term exposure: liver damage & liver cancer

SOURCE: CARB, 2022b; CARB, 2022c

TABLE 12-2
STATE AND FEDERAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	State Standards (CAAQS) <sup>a</sup>	Federal Standards (NAAQS) <sup>b</sup>	
0====	1 hour	0.09 ppm	NA	
Ozone	8 hours	0.070 ppm	0.070 ppm <sup>c</sup>	
Carbon Manavida (CO)	1 hour	20 ppm	35 ppm	
Carbon Monoxide (CO)	8 hours	9.0 ppm	9 ppm	
Nitragan Diavida (NO.)	1 hour	0.18 ppm	0.100 ppm	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual	0.03 ppm	0.053 ppm	
	1 hour	0.25 ppm	0.075 ppm	
Sulfur Dioxide (SO <sub>2</sub> )	24 hours	0.04 ppm	0.14 ppm	
	Annual	NA	0.03 ppm	
Destinate Metter (DM )	24 hours	50 μg/m³	150 μg/m³	
Particulate Matter (PM <sub>10</sub> )	Annual <sup>d</sup>	20 μg/m³	NA	
Fine Particulate Matter	24 hours	NA	35 μg/m³	
(PM <sub>2.5</sub> )	Annual	12 μg/m³	12 μg/m³	
	30 days	1.5 μg/m³	NA	
Lead	Calendar quarter	NA	1.5 μg/m³	
	Rolling 3-month average	NA	0.15 μg/m³	
Sulfates	24 hours	25 μg/m³	NA	
Hydrogen Sulfide	1 hour	0.03 ppm	NA	
Visibility reducing particles	8 hours	e	NA	
Vinyl Chloride	24 hours	0.01 ppm (26 μg/m³)	NA	

#### NOTES:

A = Attainment; N = Nonattainment; U = Unclassified; NA = Not Applicable, no applicable standard; ppm = parts per million;  $\mu$ g/m³ = micrograms per cubic meter

- a CAAQS = California ambient air quality standards. CAAQS for ozone, CO (except Lake Tahoe), SO<sub>2</sub> (one-hour and 24-hour), NO<sub>2</sub>, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All other State standards shown are values not to be equaled or exceeded.
- b NAAQS = national ambient air quality standards. NAAQS, other than ozone and particulates, and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The eight-hour ozone standard is attained when the three-year average of the fourth highest daily concentration is 0.08 ppm or less. The 24-hour PM<sub>10</sub> standard is attained when the three-year average of the 99th percentile of monitored concentrations is less than the standard. The 24-hour PM<sub>2.5</sub> standard is attained when the three-year average of the 98th percentile is less than the standard.
- c On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.
- State standard = annual geometric mean; national standard = annual arithmetic mean.
- Statewide visibility-reducing particle standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

SOURCE: BAAQMD, 2017a.

## 12.1.4 Ambient Air Quality

The BAAOMD has jurisdiction to regulate air quality within the nine-county SFBAAB. Accordingly, the region's air quality monitoring network provides information on ambient concentrations of criteria air pollutants at various locations in the SFBAAB. Table 12-3 presents a five-year summary for 2016 to 2020 of the highest annual criteria air pollutant concentrations, recorded at the air quality monitoring station closest to the Transit District area, operated and maintained by the BAAQMD at 897 Barron Avenue, approximately 7.2 miles southeast of the Transit District area. It also compares these concentrations with the most stringent applicable ambient air quality standards (whether state or federal). Concentrations shown in bold indicate only a localized exceedance of that standard. As attainment with air quality standards is determined on a basin-wide basis, it is possible for the basin to be in attainment with state or federal standards for a given pollutant notwithstanding an exceedance for a given pollutant standard at a local monitoring station. CO is not included in this table as CO concentrations have been well below the standards throughout the Bay Area since the SFBAAB was designated as attainment with respect to the CO standards in 1998. Lead and SO<sub>2</sub> are not included in this table because ambient lead concentrations are only monitored on an as-warranted basis, and the SFBAAB has never been designated as non-attainment for SO<sub>2</sub>. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. The only lead monitoring station in the Bay Area is located at Reid-Hillview Airport in San Jose (BAAOMD, 2021a). General aviation airports can be sources of lead because piston engine aircraft continue to use leaded fuel.

TABLE 12-3
SUMMARY OF AMBIENT AIR QUALITY DATA AT THE REDWOOD CITY STATION

		Monitoring Data by Year <sup>a</sup>				
Pollutant	Standard	2016	2017	2018	2019	2020
Ozone					<b>'</b>	
Maximum 1-Hour Concentration (ppm)	>0.090 ppm <sup>b</sup>	0.075	0.115	0.067	0.083	0.098
Days 1-Hour Standard Exceeded		0	2	0	0	1
Maximum 8-Hour Concentration (ppm)	0.070 ppm <sup>c</sup>	0.061	0.087	0.050	0.077	0.078
Days 8-Hour Standard Exceeded		0	2	0	2	1
Fine Particulate Matter (PM <sub>2.5</sub> )						
Maximum 24-Hour Concentration (μg/m³)	>35 µg/m³ <sup>c</sup>	19.5	60.8	120.9	29.5	124.1
Annual Average (μg/m³)	>12 µg/m³ b,c	-	9.1	10.6	7.0	9.8
Days 24-Hour Standard Exceeded		0	6	13	0	9
Nitrogen Dioxide (NO <sub>2</sub> )						
Maximum 1-Hour Concentration (ppb)	>100 ppb <sup>c</sup>	45.7	67.4	77.3	54.9	45.9
Days 1-Hour Standard Exceeded		0	0	0	0	0

NOTES: ppm = parts per million; ppb = parts per billing;  $\mu g/m^3$  = micrograms per cubic meter

SOURCE: CARB, 2022d

a "--" indicates that data are not available.

b State standard, not to be exceeded; also a federal standard, not to be exceeded more than one per year.

<sup>&</sup>lt;sup>c</sup> Federal standard, not to be exceeded.

Compliance with the standards is on a regional basis. In the air basin, compliance is demonstrated by ongoing measurements of pollutant concentrations at more than 30 air quality monitoring stations operated by the BAAQMD in all nine bay area counties. An exceedance of an ambient air quality standard at any one of the stations counts as a regional exceedance.

As shown in Table 12-3, the most stringent applicable standards for ozone (the state one-hour standard of 0.09 ppm and the federal eight-hour standard of 0.07 ppm) were exceeded in Redwood City by three and five days, respectively, between 2017 and 2020. Table 12-1 also shows that the state 24-hour PM<sub>10</sub> standard of 35 micrograms per cubic meter (μg/m³) was exceeded on 28 days between 2017 and 2020. The state annual average standard was not exceeded between 2016 and 2020. The Redwood City station does not monitor PM<sub>10</sub>, but ambient levels of NO<sub>2</sub> were not exceeded.

#### Air Quality Index

The U.S. EPA developed the Air Quality Index (AQI) scale to make the public health impacts of air pollution concentrations easily understandable. The index, much like an air quality "thermometer," translates daily air pollution concentrations into a number on a scale between 0 and 500. The numbers in the scale are divided into six color-coded ranges, with numbers 0 through 500 as outlined below:

- Green (0–50) indicates "good" air quality. No health impacts are expected when air quality is in the green range.
- Yellow (51–100) indicates air quality is "moderate." Unusually sensitive people should consider limiting prolonged outdoor exertion.
- Orange (101–150) indicates air quality is "unhealthy for sensitive groups." Active children and adults, and people with respiratory disease, such as asthma, should limit outdoor exertion.
- Red (151–200) indicates air quality is "unhealthy." Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
- **Purple (201–300)** indicates air quality is "very unhealthy." Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit outdoor exertion.
- Maroon (301–500) indicates air quality is "hazardous." This would trigger health warnings of emergency conditions, and the entire population is more likely to be affected.

The AQI numbers refer to specific amounts of pollution in the air. They are based on the federal air quality standards for ozone, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. In most cases, the federal standard for these air pollutants corresponds to the number 100 on the index chart. Thus, if the concentration of any of these pollutants rises above its respective standard, the air quality can be unhealthy for the public. In determining the air quality forecast, local air districts use the anticipated concentration measurements for each of the major pollutants, convert them into index numbers, and determine the highest index for each zone in a district. A Spare the Air Alert is

called for the Bay Area when air quality is expected to be unhealthy in any of the region's five reporting zones.

Readings below 100 on the AQI scale would not typically affect the health of the general public (although readings in the moderate range of 50 to 100 may affect unusually sensitive people). Levels above 300 rarely occur in the United States, and readings above 200 have not occurred in the Bay Area in decades, with the exception of the October 2017 and November 2018 wildfires north of San Francisco and the August/September 2020 complex wildfires that occurred throughout the Bay Area. As a result, the AQI in several neighboring counties reached the "very unhealthy" and "hazardous" designations, ranging from values of 201 to above 350. During those periods, the BAAQMD issued "Spare the Air" alerts and recommended that individuals stay inside with windows closed and refrain from significant outdoor activity. Wildfires appear to be occurring with increasing frequency in California and the Bay Area as a result of global warming and climate change. Eighteen of the state's 20 largest wildfires and most destructive fires on record have occurred since the year 2000 (CALFIRE, 2022).

AQI statistics over recent years indicate that air quality in the South Central Bay which includes Redwood City is predominantly in the "Good" or "Moderate" categories and healthy on most days for most people. Historical BAAQMD data indicate that the SFBAAB experienced air quality in the red level (unhealthy) on 34 days between 2017 and 2021. As shown in **Table 12-4**, the air basin had a total of 110 red-level or orange-level (unhealthy or unhealthy for sensitive groups) days between 2017 and 2021. A number of these days are attributable to the increasing frequency of wildfires. This table also shows that the SFBAAB experienced a total of 9 purple level (very unhealthy) days in between 2017 and 2021.

Table 12-4
Air Quality Index Statistics for the SFBAAB

	Number of Days per Year				
AQI Statistics	2017	2018	2019	2020	2021
Unhealthy for Sensitive Groups (Orange) AQI: 151-200	9	8	10	34	3
Unhealthy (Red) AQI: 201-300	9	8	0	17	0
Very Unhealthy (Purple) AQI: 301-500	3	5	0	1	0

SOURCE: BAAQMD, 2022

#### 12.1.5 TACs and Local Health Risks and Hazards

In addition to criteria air pollutants, individual projects may emit TACs. TACs collectively refer to a diverse group of air pollutants that may cause chronic (i.e., of long duration) and acute (i.e., severe but short-term) adverse effects on human health, including carcinogenic effects. Human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. Thus, individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

Unlike criteria air pollutants, TACs are not subject to ambient air quality standards but are regulated by air districts using a risk-based approach to determine which sources and which pollutants to control as well as the degree of control. A *health risk assessment* (HRA) is an analysis that estimates human health exposure to toxic substances, and when considered together with information regarding the toxic potency of the substances, a HRA provides quantitative estimates of health risks.<sup>1</sup>

The Office of Environmental Hazard Health Assessment (OEHHA, 2015) and the BAAQMD (BAAQMD, 2016) provide guidelines for conducting HRAs. Exposure assessment guidance published by the BAAQMD in January 2016 adopts the assumption that residences would be exposed to air pollution 24 hours per day, 350 days per year, for 30 years (BAAQMD, 2016a). Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

Exposure to fine PM (PM<sub>2.5</sub>) is strongly associated with mortality, respiratory diseases, and poor lung development in children, and other health effects, such as hospitalization for cardiopulmonary disease (San Francisco Department of Public Health, 2008). Diesel particulate matter (DPM), a byproduct of diesel fuel combustion, is also of concern. CARB identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans (CARB, 1998). The estimated cancer risk from exposure to DPM is much higher than the risk associated with any other TAC routinely measured in the region. DPM is discussed further, below.

In addition to monitoring criteria air pollutants, the Bay Area's air toxics network includes 16 monitoring sites, five of which were established by the CARB and are maintained by the BAAQMD. The remaining 11 sites are operated by the BAAQMD. These stations measure concentrations of volatile organic compounds (VOC), polycyclic aromatic hydrocarbons, and metals categorized as TACs. The TACs selected for monitoring are those that traditionally have been found in the highest concentrations in ambient air and therefore tend to produce the most significant risk. However, there are no monitoring stations in the immediate vicinity of the Transit District area that measure ambient concentrations of carcinogenic TACs.

## **Roadway-Related Pollutants**

Motor vehicles are responsible for a large share of air pollution, especially in California. Vehicle tailpipe emissions contain diverse forms of particles and gases, and vehicles also contribute to particulates by generating road dust and tire wear. Epidemiologic studies have demonstrated that people living close to freeways or busy roadways have poorer health outcomes, including increased asthma symptoms and respiratory infections, and decreased pulmonary function and poor lung development in children. Air pollution monitoring conducted in conjunction with epidemiologic studies has confirmed that roadway-related health effects vary with modeled exposure to PM and NO<sub>2</sub>. In traffic-related studies, the additional non-cancer health risk attributable to roadway

In general, a HRA is required if the BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. The applicant is then subject to a HRA for the source in question. Such an assessment generally evaluates chronic, long-term effects, estimating the increased risk of cancer as a result of exposure to one or more TACs.

proximity was seen within 1,000 feet of the roadway and was strongest within 300 feet (CARB, 2005). As a result, CARB recommends that new sensitive land uses not be located within 500 feet of a freeway or urban roads carrying more than 100,000 vehicles per day. CARB notes that these recommendations are advisory and should not be interpreted as defined "buffer zones," and that local agencies must balance other considerations, including transportation needs, the benefits of urban infill, community economic development priorities, and other quality of life issues. With careful evaluation of exposure, health risks, and affirmative steps to reduce risk where necessary, CARB's position is that infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level (CARB, 2005). Sometimes, suggesting project design changes or mitigation measures in the project review phase can also reduce or avoid potential impacts. This underscores the importance of addressing potential incompatible land uses as early as possible in the project review process, ideally in the general plan itself. Consistent with this recommendation, Policy PS-2.6 of the Redwood City General Plan requires all land uses proposed within 500 feet of U.S. 101, El Camino Real, and Woodside Road that will house, accommodate, or serve sensitive receptors to incorporate appropriate design and construction features (e.g., filters on HVAC systems) that reduce potential exposure of persons to pollutants.

#### **Diesel Particulate Matter**

CARB identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Mobile sources such as trucks and buses are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled highways. CARB estimated average bay area cancer risk from exposure to diesel particulate, based on a population-weighted average ambient diesel particulate concentration, at about 480 in one million as of the year 2000, which is much higher than the risk associated with any other toxic air pollutant routinely measured in the region.

In 2000, CARB approved a comprehensive *Diesel Risk Reduction Plan* to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines. Subsequent CARB regulations apply to new trucks and diesel fuel. With new controls and fuel requirements, 60 trucks built in 2007 would have the same particulate exhaust emissions as one truck built in 1988 (Pollution Engineering, 2006). The regulation was anticipated to result in an 80 percent decrease in statewide diesel health risk in 2020 as compared with the diesel risk in 2000. Many of the measures of the *Diesel Risk Reduction Plan* have been approved and adopted, including the federal on-road and offroad<sup>2</sup> diesel engine emission standards for new engines, as well as adoption of regulations for low sulfur fuel in California. Subsequent regulations regarding on-road diesel truck retrofits with particulate matter controls, 2010 or later engine standards, and fleet average emission rate standards to increase vehicle turnover have resulted in much lower DPM and PM<sub>2.5</sub> emissions over time. It is estimated that these regulations reduced diesel particulate emissions 78 percent from 1990 levels

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Non-road is the term EPA uses for vehicles and equipment that are not on-road, where in California this term is off-road.

(Cal Matters, 2021). Despite notable emission reductions, CARB recommends that proximity to sources of DPM emissions be considered in the siting of new sensitive land uses.

## 12.1.6 Existing Sources of Air Pollution in the Transit District Area

The BAAQMD's inventory of permitted stationary sources of emissions shows eleven permitted stationary emission facilities present within 1,000 feet of the Transit District area boundaries. The vast majority of these sources are permitted facilities that include stationary diesel engines for power generators and fuel stations.

There are no freeways within 1,000 feet of the Transit District area. Traffic on arterial roadways in the immediate vicinity of the Transit District area such as El Camino Real, Jefferson Avenue, Middlefield Road, Brewster Avenue and Broadway contribute to concentrations of PM<sub>2.5</sub>, DPM, and other air contaminants emitted from motor vehicles near the street level. Other "non-permitted" mobile sources of air pollution (e.g., railyards, trucking distribution facilities, and high-volume fueling stations) located 1,000 feet of the Transit District area include Caltrain operations.

#### 12.1.7 Odors

Odors are generally regarded as an annoyance rather than a health hazard. The ability to detect odors varies considerably among the population and is subjective. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors. Odor impacts should be considered for any proposed new odor sources located near existing receptors, as well as any new sensitive receptors located near existing odor sources. Odor sources typically include wastewater treatment plants, landfills, confined animal facilities, composing stations, food manufacturing plants, refineries, and chemical plants (BAAQMD, 2017b).

## 12.1.8 Sensitive Receptors

Air quality does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. More sensitive population groups include: the elderly and the young; those with higher rates of respiratory disease, such as asthma and chronic obstructive pulmonary disease; and those with other environmental or occupational health exposures (e.g., indoor air quality) that affect cardiovascular or respiratory diseases. The BAAQMD defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, daycare centers, hospitals, and senior-care facilities. Workers are not considered sensitive receptors because all employers must follow regulations set forth by the Occupation Safety and Health Administration to ensure the health and well-being of their employees (BAAQMD, 2011).

The proximity of sensitive receptors to motor vehicles is an air pollution concern, especially in urban areas where building setbacks are limited and roadway volumes are higher than suburban locations of the bay area. Vehicles also contribute to particulates by generating road dust and through tire wear.

Existing sensitive receptors evaluated in this analysis include a representative sample of known residents (child and adult) in the surrounding area, and other sensitive receptors (school children, daycare facilities, etc.) located in the surrounding community and along the expected travel routes of the on-road delivery and haul trucks in the immediate vicinity of the Transit District area. The health risk impact analysis in this document also includes sensitive receptors (residential uses, schools and childcare facilities) located within a distance of 1,000 feet from the Transit District area boundaries, consistent with BAAQMD guidance (BAAQMD 2017b).

**Table 12-5** identifies the sensitive receptors in the immediate vicinity of the Transit District area boundaries and their approximate distances.

TABLE 12-5
EXISTING SENSITIVE RECEPTORS IN THE VICINITY OF THE TRANSIT DISTRICT AREA

Type of Sensitive Receptor	Location	Minimum Distance from Plan Area Boundaries
Multifamily apartment building	75 Perry Street	30 feet
Multifamily residential complex	201 Marshall Street	115 feet
School classrooms	Sequoia High School	600 feet
Single-family residential	400 block of Arch Street	150 feet
Multifamily residential complex	1 Franklin Street	75 feet
Multifamily apartment complex	119 Franklin Street	460 feet
Multifamily residential complex	299 Franklin Street	340 feet
Multifamily residential complex	101-149 Maple Street	750 feet
Multifamily apartment building	1090 Main Street	820 feet
Little Steps Daycare	213 Jackson Avenue	770 feet

SOURCES: Data compiled by Environmental Science Associates in 2022; Google Earth (imagery date July, 2019) for parcel data (address and distance to the site).

### 12.2 Regulatory Setting

The following section focuses on any changes to the regulatory setting that have occurred since certification of the DTPP Final EIR. Section 12.2 of DTPP Final EIR Chapter 12, *Air Quality*, includes the regulatory setting for this topic and is still current for this SEIR, except as noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

The BAAQMD is the regional agency with jurisdiction over the nine-county region located in the SFBAAB. The Association of Bay Area Governments (ABAG), the Metropolitan Transportation Commission (MTC), county transportation agencies, cities and counties, and various non-governmental organizations also participate in the efforts to improve air quality through a variety of programs. These programs include the adoption of regulations and policies, as well as implementation of extensive education and public outreach programs. The BAAQMD is responsible for attaining and/or maintaining air quality in the region within federal and state air

quality standards. Specifically, the BAAQMD has the responsibility to monitor ambient air pollutant levels throughout the region and to develop and implement strategies to attain the applicable federal and state standards. The BAAQMD has permit authority over most types of stationary emission sources and can require stationary sources to obtain permits, and can impose emission limits, set fuel or material specifications, or establish operational limits to reduce air emissions. The BAAQMD also regulates new or expanding stationary sources of TACs and requires air toxic control measures for many sources emitting TACs.

## 12.2.1 Federal and State Attainment Designations for Criteria Air Pollutants

Pursuant to the 1990 Federal Clean Air Act Amendments, the U.S. EPA classifies air basins (or portions thereof) as "attainment", "nonattainment", or "unclassified" for each criteria air pollutant, based on whether or not the national standards had been achieved. As shown in **Table 12-6**, at the federal level, the SFBAAB is designated as a nonattainment area for the 8-hour ozone standard and the federal 24-hour PM<sub>2.5</sub> standard. The SFBAAB is in attainment for all other federal ambient air quality standards.

The California Clean Air Act (California Health and Safety Code section 39600 et seq.) passed in 1988, like its federal counterpart, calls for designation of areas as "attainment", "nonattainment", or "unclassified" with respect to the state standards. The SFBAAB is currently designated as nonattainment for the state 8-hour and 1-hour ozone standards, the state average and 24-hour  $PM_{10}$  standards, and the state average  $PM_{2.5}$  standards. The SFBAAB is designated as attainment or unclassified with respect to the other state standards.

The FCAA requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The FCAA added requirements for states containing areas that violate the national standards to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The U.S. EPA has the responsibility to review all SIPs to determine if they conform to the mandates of the FCAA and will achieve air quality goals when implemented.

### California Building and Energy Efficiency Standards (Title 24)

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce emissions of criteria pollutants or TACs, increased energy efficiency and reduced consumption of natural gas and other fuels would also result in lower criteria pollutant and TAC emissions from residential and non-residential buildings subject to these standards. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods (CEC, 2018).

TABLE 12-6
SAN FRANCISCO BAY AREA AIR BASIN ATTAINMENT STATUS

		Designation/Classification		
Pollutant	Averaging Time	State Standards	Federal Standards	
Ozone	8 Hour	Nonattainment	Nonattainment	
	1 Hour	Nonattainment		
Carbon Monoxide	8 Hour	Attainment	Attainment	
	1 Hour	Attainment	Attainment	
Nitrogen Dioxide	1 Hour	Attainment		
	Annual Arithmetic Mean		Attainment	
Sulfur Dioxide	24 Hour	Attainment		
	1 Hour	Attainment		
	Annual Arithmetic Mean			
Respirable Particulate Matter (PM <sub>10</sub> )	Annual Arithmetic Mean	Nonattainment		
	24 Hour	Nonattainment	Unclassified	
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Arithmetic Mean	Nonattainment	Unclassified/Attainment	
	24 Hour		Nonattainment	
Sulfates	24 Hour	Attainment		
Lead	30 Day Average		Attainment	
	Calendar Quarter		Attainment	
	Rolling Month Average			
Hydrogen Sulfide	1 Hour	Unclassified		
Vinyl Chloride	24 Hour	No information available		
Visibility Reducing Particles	8 Hour	Unclassified		

SOURCE: BAAQMD, 2017a.

The most recent update to the Title 24 energy efficiency standards (2019 standards) went into effect on January 1, 2020. On August 11, 2021, the CEC adopted the next update, the 2022 Energy Code which was approved by the California Building Standards Commission for inclusion into the California Building Standards Code (CEC, 2022). The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic (PV) and battery storage standards, strengthens ventilation standards, and more. Buildings permit applications submitted on or after January 1, 2023, must comply with the 2022 Energy Code. The 2022 Update includes measures that will reduce energy use in single family, multifamily, and nonresidential buildings. These measures will:

- 1. Affect newly constructed buildings by adding new prescriptive and performance standards for electric heat pumps for space conditioning and water heating, as appropriate for the various climate zones in California;
- 2. Require PV and battery storage systems for newly constructed multifamily and selected nonresidential buildings;

- 3. Update efficiency measures for lighting, building envelope, heating, ventilation, and air conditioning (HVAC); and
- 4. Make improvements to reduce the energy loads of certain equipment covered by (i.e., subject to the requirements of) the Energy Code that perform a commercial process that is not related to the occupant needs in the building (such as refrigeration equipment in refrigerated warehouses, or air conditioning for computer equipment in data processing centers).

As future updates to the Title 24 standards are rolled out, development within the Transit District area would be required to adhere to the current version of Title 24 at that time, as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits.

### California Green Building Standards Code

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The CALGreen Code is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment.

Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. Like the Title 24 Part 6 standards, compliance with the CALGreen Code also reduces criteria pollutant and TAC emissions. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and non-residential uses; the new measures took effect on January 1, 2020 (California Building Standards Commission [CBSC], 2019). The 2019 standards prescribe Electric Vehicle (EV) charging requirements for residential and non-residential buildings.

The next, 2022 CALGreen update simplifies the code and its application in several ways. It offers new voluntary prerequisites for builders to choose from, such as battery storage system controls and heat pump space, and water heating, to encourage building electrification. While the 2019 CALGreen Code only requires provision of EV Capable spaces with no requirement for chargers to be installed at multifamily dwellings, the 2022 CALGreen code mandates chargers (California Housing and Community Development, n.d.).

### 12.2.2 Regional Plans and Regulations

### **BAAQMD Clean Air Plan**

Since the DTPP Final EIR, the regional air quality plan for the SFBAAB has been updated twice pursuant to air quality planning requirements defined in the California Health & Safety Code, with the most recent update in 2017. The 2017 Clean Air Plan: Spare the Air, Cool the Climate (2017 Clean Air Plan; BAAQMD 2017c) was adopted on April 19, 2017 by the BAAQMD in cooperation with the MTC, the San Francisco Bay Conservation and Development Commission,

and the ABAG to provide a regional strategy focusing on two closely-related goals: protecting public health and protecting the climate.

To fulfill state ozone planning requirements, the 2017 Clean Air Plan includes all feasible measures to reduce emissions of ozone precursors ROG and NOx, and reduce transport of ozone and its precursors to neighboring air basins. In addition, the plan builds upon and enhances the BAAQMD's efforts to reduce emissions of PM<sub>10</sub>, PM<sub>2.5</sub>, and TACs. The 2017 Clean Air Plan contains 85 control measures categorized based on the economic sector framework including stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, and water measures.

### **BAAQMD CEQA Guidelines and Thresholds of Significance**

The BAAQMD CEQA Air Quality Guidelines is an advisory document that provides lead agencies, consultants, and project proponents with procedures for assessing air quality impacts and preparing environmental review documents. The document describes the criteria that BAAQMD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds for use in determining whether projects and plans would have significant adverse environmental impacts, identifies methods for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts.

BAAQMD updated the 1999 CEQA Air Quality Guidelines in 2010. In May 2011, BAAQMD adopted an updated version of its thresholds of significance for use in determining the significance of environmental effects under CEQA, and published its CEQA Guidelines for consideration by lead agencies. The 2011 CEQA Guidelines thresholds lowered the previous (1999) thresholds of significance for annual emissions of ROG, NO<sub>X</sub>, and PM<sub>10</sub>, and set a standard for PM<sub>2.5</sub> and fugitive dust. The 2011 CEQA Guidelines also included methods for evaluating risks and hazards for the siting of stationary sources and of sensitive receptors.

The BAAQMD resolution adopting the significance thresholds in 2011 was set aside by the Alameda County Superior Court on March 5, 2012. On August 13, 2013, the California Court of Appeals issued a full reversal of the Superior Court's judgment, and on December 17, 2015, the California Supreme Court reversed in part the appellate court's judgment and remanded the case for further consideration consistent with the Supreme Court opinion. The California Supreme Court ruled unanimously that CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project" (*California Building Industry Association v. Bay Area Air Quality Management District* [December 17, 2015] 62 Cal.4th 369). The Supreme Court confirmed that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future residents or users." The Court also held that when a project has "potentially significant exacerbating effects on existing environmental hazards" those impacts are properly within the scope of CEQA because they can be viewed as impacts of the project on "existing conditions" rather than impacts of the environment on the project.

BAAQMD most recently updated its *CEQA Air Quality Guidelines* in May 2017 (BAAQMD, 2017b). These guidelines provide recommended quantitative significance thresholds along with

direction on recommended analysis methods. BAAQMD states that the quantitative significance thresholds are "advisory and should be followed by local governments at their own discretion," and that lead agencies are fully within their authority to develop their own thresholds of significance. However, BAAQMD offers these thresholds for lead agencies to use in order to inform environmental review for development projects in the Bay Area. Lead agencies may also reference the *CEQA Thresholds Options and Justification Report* developed by BAAQMD staff in 2009. This option provides lead agencies with a justification for continuing to rely on the BAAQMD 2011 thresholds.

### **BAAQMD** Rules and Regulations

As discussed earlier, the BAAQMD is the regional agency responsible for rulemaking, permitting and enforcement activities affecting stationary sources in the Bay Area. Specific rules and regulations adopted by the BAAQMD limit the emissions that can be generated by various uses and/or activities, and identify specific pollution reduction measures that must be implemented in association with various uses and activities. These rules regulate not only emissions of the six criteria air pollutants, but also toxic emissions and acutely hazardous non-radioactive materials emissions. Emissions sources subject to these rules are regulated through the BAAQMD's permitting process and standards of operation. Through this permitting process, including an annual permit review, the BAAQMD monitors generation of emissions from stationary sources and uses this information in developing its air quality plans. Any stationary sources of emissions proposed as part of the Transit District DTPP Amendments would be subject to applicable BAAQMD Rules and Regulations. Both federal and state ozone plans rely heavily upon stationary source control measures set forth in BAAQMD's Rules and Regulations.

The BAAQMD Rules and Regulations applicable to the proposed Transit District DTPP Amendments include, but are not limited to, the following:

- Regulation 2, Rule 1 (General Permit Requirements), Rule 2 (New Source Review), and Rule 5 (New Source Review of Toxic Air Contaminants). Under these rules, all stationary sources (e.g., diesel-powered generators and fire pumps) that have the potential to emit TACs above a certain level are required to obtain permits from BAAQMD. These rules provide guidance for the review of new and modified stationary sources of TAC emissions, including evaluation of health risks and potential mitigation measures. Sources of HAPs may also be required to implement Maximum Achievable Control Technology. The California Building Code Section 2702.2.15 requires emergency and standby power (frequently accomplished by installation of diesel generators) to be provided in buildings with occupied floors located more than 75 feet above the lowest level of fire department vehicle access. The BAAQMD recently updated its BACT requirement for emergency generators greater than 1,000 horsepower (hp) to achieve EPA Tier 4 standards (BAAQMD, 2021b). Fire pumps, also often diesel-powered, are essential components of a building's fire protection system, especially in taller structures and are critical in distributing water through sprinkler systems where water pressure from water mains and firefighting equipment cannot reach.
- Regulation 6, Rule 2 (Commercial Cooking Equipment). This rule applies to operators of both chain-driven and under-fired char broilers; it includes requirements for the installation of emission control devices and imposes emissions limits for PM<sub>10</sub> and organic compounds per pounds of beef cooked. This rule also includes requirements for the maintenance of emissions

- control devices installed or operated under this rule. Food service establishments proposed under the Transit District DTPP Amendments would be subject to this rule.
- Regulation 6, Rule 6 (Prohibition of Trackout). This measure controls trackout of solid material onto public paved roads from large bulk material sites, large construction sites, and large disturbed area sites. Under this regulation, the owners and operators of a construction site are required to clean up trackout on public roadways within four hours of identification and at the conclusion of each workday. The rule also includes requirements regarding the emission of fugitive dust during cleanup of trackout, and requirements for monitoring and reporting trackout at regulated sites. Construction activities associated with development under the proposed Transit District DTPP Amendments would be subject to this rule.
- Regulation 7 (Odorous Substances). This regulation specifies limits for the discharge of odorous substances where BAAQMD receives complaints from 10 or more complainants within a 90-day period. Among other things, Regulation 7 prohibits the discharge of an odorous substance that causes the ambient air at or beyond the property line to be odorous after dilution with four parts of odor-free air (i.e., 5 D/T), and specifies maximum limits on the emission of certain odorous compounds. Food service establishments proposed under the proposed Transit District DTPP Amendments would be subject to this rule, although it would apply to any sources of odor that leads to public complaints.
- Regulation 8, Rule 3 (Architectural Coatings). Through this rule the BAAQMD regulates the quantity of VOCs in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured. This rule imposes VOC content limits on architectural coatings and includes requirements for painting practices, solvent usage and storage, and compliance monitoring and reporting practices. Application of architectural coatings associated with new construction and maintenance activities resulting from the proposed Transit District DTPP Amendments would be subject to this rule.
- Regulation 9, Rule 8 (Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines). This rule regulates emissions of NO<sub>X</sub> and CO from stationary internal combustion engines and imposes emissions limits on spark-ignited engines powered by waste and fossil-derived fuels, compression-ignited engines, and dual fuel pilot compression-ignited engines. The rule also limits the hours of operation for emergency standby engines, which must be equipped with a non-resettable totalizing meter that measures either hours of operation or fuel usage. Usage records must be kept for two years and be available for inspection by BAAQMD. Any emergency generators proposed as part development within the Transit District area would be subject to this rule.
- Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing). This rule regulates emissions of asbestos to the atmosphere during demolition, renovation, milling, and manufacturing. It prohibits the use of asbestos on certain roadways, in molded insulating materials, and on buildings during construction, alteration, and/or repair. The rule also prohibits visible emissions from any operation involving the demolition, renovation, removal, manufacture, or fabrication of asbestos-containing products and includes required procedures for waste disposal and requirements for waste disposal sites to prevent emissions from asbestos-containing materials. This rule applies to demolition activities undertaken as part of development occurring as a result of the proposed Transit District DTPP Amendments.
- Regulation 14, Rule 1 (Bay Area Commuter Benefits Program). BAAQMD aims to improve air quality, reduce emissions of GHGs and other air pollutants, and decrease traffic congestion through this rule. This program encourages employees to commute to work using

alternative transportation modes by requiring employers to offer commuter benefits to all covered employees. Employers comply with this rule by offering a pre-tax benefit, and employer-paid benefit, or employer-provided transit. Alternatively, employers can comply with this rule through an alternative commuter benefit program that must be proposed in writing, must comply with the guidelines issued by the Air Pollution Control Officer, and must be approved in writing by the Air Pollution Control Officer. Employers are required to notify employees of which benefits will be offered and how to obtain these benefits. This rule applies to employers with 50 or more full-time employees.

### **Planning Healthy Places**

In 2016, BAAQMD prepared its *Planning Healthy Places* guidebook to assist local governments, planners, elected officials, developers, community groups, and other parties in addressing and minimizing potential air quality issues associated with local sources of air pollutants, especially TACs and PM. The guidebook provides best management strategies to reduce emissions and human exposure to pollutants that can be implemented in city or county general plans, neighborhood or specific plans, land use development ordinances, or individual projects.

BAAQMD has developed a map identifying areas where best management practices should be applied, and where further study is needed (BAAQMD, 2016b). As shown on the Planning Healthy Places map, the Transit District area is located in an area where the recommended best management practices should be applied to reduce exposure and subsequent health impacts associated with air pollution. Best management practices recommended by the Planning Healthy Places guidebook include a number of emissions reduction strategies. The goals and policies in the City's General Plan that address air quality and health risk exposure are consistent with these recommendations.

### MTC/ABAG Sustainable Communities Strategy

The MTC is the federally recognized Metropolitan Planning Organization for the nine-county Bay Area, which includes Santa Mateo County and Redwood City. On July 18, 2013, *Plan Bay Area* was jointly approved by the ABAG's Executive Board and by MTC (MTC & ABAG, 2013). The plan includes the region's Sustainable Communities Strategy (SCS), as required under SB 375, and the 2040 Regional Transportation Plan. Though the purpose of the SCS is to lay out how the region will meet GHG emissions reduction targets set by CARB, by concentrating future growth within Priority Development Areas (PDAs) and Transit Priority Areas (TPAs), the reduction in VMT will also reduce associated air pollutant emissions.<sup>3</sup> The entire Transit District area is located within both a Priority Development Area and a Transit Priority Area (MTC, 2022).

On July 26, 2017, MTC adopted *Plan Bay Area 2040*, a focused update that builds upon the growth pattern and strategies developed in the original *Plan Bay Area* (2013), but with updated

To be eligible for designation as a Priority Development Area, an area must be within an existing community, near existing or planned fixed transit or served by comparable bus service, and planned for more housing. A Transit Priority Area is an area within one-half mile of an existing or planned major transit stop such as a rail transit station, a ferry terminal served by transit, or the intersection of two or more major bus routes.

planning assumptions that incorporate key economic, demographic, and financial trends since the original plan was adopted (MTC & ABAG, 2017).

Most recently, on October 21, 2021, the MTC and ABAG jointly adopted Plan Bay Area 2050 as the official regional long-range plan for the Bay Area. Plan Bay Area 2050 connects the elements of housing, the economy, transportation and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. In the short-term, the plan's Implementation Plan identifies more than 80 specific actions for MTC, ABAG and partner organizations to take over the next five years to make headway on each of the 35 strategies (MTC & ABAG, 2021). It will be several years before the regional transportation model and county transportation models are updated to reflect Plan Bay Area 2050 (the models currently incorporate data from Plan Bay Area 2040).

### 12.2.3 Toxic Air Contaminants

The Health and Safety Code defines TACs as air pollutants that may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. The State Air Toxics Program was established in 1983 under AB 1807 (Tanner). A total of 243 substances have been designated TACs under California law, including the 189 (federal) Hazardous Air Pollutants.

The CARB In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) applies to all self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles (except on-road two-engine sweepers). This includes vehicles that are rented or leased (rental or leased fleets). CARB's goal is to gradually reduce the state-wide construction vehicle fleet's emissions through turnover, repower, or retrofits. New engine emissions requirements were grouped into tiers based on the year in which the engine was built (CARB 2022a). In 2014, new engines were required to meet Tier 4 Final standards, which to date are the most stringent emissions standards for off-road vehicle engines. The goal of the In-Use Off-Road Diesel-Fueled Fleets Regulation is to reduce particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and NO<sub>x</sub> emissions from off-road heavy-duty diesel vehicles in California (CARB 2022e). This regulation also limits idling to 5 minutes, requires a written idling policy for larger vehicle fleets, and requires that fleet operators provide information on their engines to CARB and label vehicles with a CARB-issued vehicle identification number.

CARB recommends that proximity to sources of DPM emissions be considered in the siting of new sensitive land uses. As discussed above, CARB published Air Quality and Land Use Handbook: A Community Health Perspective in April 2005. This handbook is intended to give guidance to local governments in the siting of sensitive land uses near sources of air pollution. Recent studies have shown that public exposure to air pollution can be substantially elevated near freeways and certain other facilities such as ports, rail yards, and distribution centers. Sensitive receptor siting recommendations for applicable uses in the City of Redwood City are listed in **Table 12-7** below. CARB notes that these recommendations are advisory and should not be interpreted as defined "buffer zones," and that local agencies must balance other considerations, including transportation needs, the benefits of urban infill, community economic development

priorities, and other quality of life issues. With careful evaluation of exposure, health risks, and affirmative steps to reduce risk where necessary CARB's position is that infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level (CARB, 2005).

TABLE 12-7
RECOMMENDATIONS FOR SITING NEW SENSITIVE LAND USES

Source Category	Advisory Recommendations of Locations to Avoid
Freeways and High- Traffic Roads	500' of a freeway or urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.
Dry Cleaners Using Perchloroethylene	300' of any dry cleaning operation. For operations with two or more machines, provide 500'. For operations with three or more machines, consult the local air district. Also, do not site new sensitive receptors in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	300' of a large gas station, defined as a facility with a throughput of 3.6 million gallons per year or greater. A 50' separation is recommended for typical gas dispensing facilities.

### Redwood City General Plan

Goals, policies and programs related to air quality in the current 2010 Redwood City General Plan (City of Redwood City, 2010) were included in the DTPP Final EIR. There have been no changes to them since the DTPP Final EIR.

### **Redwood City 2030 Climate Action Plan**

The City of Redwood City *Climate Action Plan* (CAP; City of Redwood City, 2020a) was developed as the community's roadmap for addressing climate change and increasing resiliency in adapting to the impacts of climate change. In California, aggressive climate change goals have been set by the State to curb GHG emissions, with local governments implementing much of the policy. The CAP establishes the goal of reducing carbon emissions 50 percent below 2005 levels by 2030, an interim step toward the ultimate goal of achieving carbon neutrality well before 2045. The CAP identifies 33 quantifiable emissions reduction measures in four sectors for Redwood City to reduce GHG emissions to achieve the 2030 and 2045 targets:

- Transportation & Land Use. Strategies encourage public transit use, changing commuting
  habits, and promoting transit-oriented land use planning to help reduce GHG emissions by
  reducing the number of miles driven by single passenger vehicles, and increasing housing
  near transit.
- Energy & Water. Strategies address energy that is used in community and public facilities, as well as in water treatment and transportation and provide opportunities to reduce energy use, shift from natural gas to electricity, and reduce water consumption.
- **Solid Waste.** This includes emissions from solid waste generation and disposal. The primary goal is to reduce emissions by encouraging the community to reduce waste. The secondary goal is to divert it from the landfill through recycling and composting.

• Food & Consumption. This includes the goods and services bought from outside San Mateo County. This strategy explores how to reduce food waste, shop local, and curb unnecessary air travel.

### **Redwood City Reach Codes**

Reach Codes are amendments to the Energy and Green Building Standards Codes to reduce GHGs. Adopting Reach Codes create opportunities for local governments to lead initiatives on climate change solutions, clean air, and renewable energy. In September 2020, the Redwood City Council approved the Reach Codes ordinance (Ordinance No. 2487; City of Redwood City, 2020b) that mandates electrification, solar readiness of buildings, provision of EV charging infrastructure, and energy efficiency for all new construction projects. The Reach Codes establish higher standards for new construction to provide environmental and health benefits to the community. The Redwood City Reach Codes focus on new residential, commercial, and multifamily buildings that will be seeking building permits after December 9, 2020. The ordinance does not apply to additions or alterations.

### Redwood City Transportation Demand Management (TDM) Ordinance

In December 2021, the City adopted a Transportation Demand Management (TDM) ordinance. The TDM ordinance requires all new development in the City that meet specified development thresholds (generally 25 or more units and/or 10,000 square feet or more commercial development, including office development) to develop a TDM plan and requires annual monitoring with financial incentives to meet specified targets. Implementation of the City's TDM ordinance by development proposed under the proposed Transit District DTPP Amendments would further reduce VMT and associated air pollutants generated by incentivizing reduced vehicle trips and increased multimodal trips.

### 12.3 Impacts and Mitigation Measures

### 12.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe air quality impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the certified DTPP Final EIR.

#### Criteria Air Pollutants

The analysis of criteria air pollutants on regional air quality has been conducted at a plan-level using significance thresholds recommended by the BAAQMD for programs and plans (BAAQMD 2017b), and also considers whether future projects that implement the plan could result in significant impacts. For programs and plans, the BAAQMD recommends that the analysis consider a comparison of the rate of increase in VMT to the rate of population growth to assess impact on regional air quality. Projects are generally compared to the BAAQMD's project-level thresholds for criteria pollutants for construction and operation.

### **Toxic Air Contaminants**

The BAAQMD's current plan-level thresholds for health risks focus on avoiding or minimizing exposure of future sensitive receptors proposed as part of a plan to existing health risks. However, as detailed below, impacts of the environment on a project are no longer required to be analyzed under CEQA unless a project exacerbates existing impacts (see Non-CEQA Impacts of the Environment on the Project below). The BAAQMD does not provide guidance or thresholds for the analysis of health risks of a plan on existing sensitive receptors. In the absence of guidance from the BAAQMD, the analysis presented below uses an evaluation of the largest potential project anticipated in the Transit District area to inform the assessment of potential impacts and identification of mitigation measures for the Transit District DTPP Amendments.

#### **Health Effects of Criteria Air Pollutants**

In a 2018 decision (Sierra Club V. County of Fresno, 6 Cal.5th 502, also referred to as Friant Ranch), the California Supreme Court decided that CEQA requires disclosure of the potential for a project's emissions to affect human health when the project's criteria air pollutant emissions exceed applicable thresholds and contribute considerably to a significant cumulative impact. The decision requires EIRs to either: (1) make a "reasonable effort" to substantively connect the estimated amount of a given air pollutant a project will produce and the health effects associated with that pollutant, or (2) explain why such an analysis is infeasible.<sup>4</sup>

The Court also clarified that CEQA "does not mandate" that EIRs include "an in-depth risk assessment" that provides "a detailed comprehensive analysis ... to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population wide health risks associated with those levels of exposure." 5

Typically, the health impact of a particular criteria pollutant is analyzed by air districts on a regional scale, based on how close the area is to attaining the ambient air quality standards. Because BAAQMD's attainment plans and supporting air quality modeling tools are regional in nature, they are not typically used to evaluate the impacts of individual projects and plans on ambient concentrations of criteria air pollutants, or to correlate those impacts to potential resultant effects on public health. The complex nature of dispersion of criteria air pollutants and the complex atmospheric chemistry (especially in the case of ozone and fine particulate matter) limit the usefulness of applying the available models to predict health impacts on a project level. The accumulation and dispersion of air pollutant emissions within an air basin depends on the size and distribution of emission sources in the region and meteorological factors such as wind, sunlight, temperature, humidity, rainfall, atmospheric pressure, and topography. Various air districts in California agree that it is very difficult to quantify health impacts and that the specific tools and methods to use are still under development. Therefore, the health effects of criteria pollutants

<sup>&</sup>lt;sup>4</sup> Sierra Club V. County of Fresno, 6 Cal.5th at 510–511.

<sup>&</sup>lt;sup>5</sup> Sierra Club V. County of Fresno, 6 Cal.5th at 521.

generated by the implementation of the proposed Transit District DTPP Amendments are discussed qualitatively in this analysis.

### Non-CEQA Impacts of the Environment on the Project

As discussed in the Regulatory Setting,<sup>6</sup> CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's users or residents, except where a project would exacerbate an existing environmental condition. This analysis focuses on air quality impacts on the existing sensitive receptors from new emissions from the proposed Transit District DTPP Amendments, during both construction and operational phases. Existing emissions from off-site sources are addressed under cumulative conditions.

### 12.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) conflict with or obstruct implementation of the applicable air quality plan; or
- b) result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard; or
- c) expose sensitive receptors to substantial pollutant concentrations; or
- d) result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

### 12.3.3 Impacts and Mitigation Measures

Impacts to air quality in the Transit District area would be somewhat different than those presented in the DTPP Final EIR because of changes to CEQA practice, which no longer considers impacts of the environment (e.g., existing air pollution emission sources) on proposed projects, and because of the desire to consider the potential impacts of development that may occur as a result of the Transit District DTPP Amendments and provide for programmatic mitigation.

Impact AQ-1: Adoption of the proposed Transit District DTPP Amendments would not conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant)

### **DTPP Impact Summary**

The DTPP Final EIR found the DTPP to be consistent with the Clean Air Plan applicable at the time (the Bay Area 2005 Ozone Strategy) resulting in a *less-than-significant* impact.

<sup>6</sup> California Building Industry Association V. Bay Area Air Quality Management District, 62 Cal.4th 369. Opinion Filed December 17, 2015.

### **Project Impacts**

In determining consistency with the Clean Air Plan, BAAQMD recommends that the analysis consider whether the project would:

- Support the primary goals of the Clean Air Plan;
- Include applicable control measures of the Clean Air Plan; and
- Avoid disrupting or hindering implementation of control measures identified in the Clean Air Plan.

The primary goals of the 2017 Clean Air Plan are to protect air quality and public health at the regional and local scale and protect the climate by reducing regional criteria air pollutant emissions and reducing local air quality-related health risks (by meeting state and national ambient air quality standards). To meet these goals, the 2017 Clean Air Plan includes 85 control measures aimed at reducing air pollutants in the SFBAAB (BAAQMD, 2017c). These control measures are grouped into the following sectors: stationary (industrial) sources, transportation, energy, buildings, agriculture, natural and working lands, and waste management.

The vast majority of the control measures included in the 2017 Clean Air Plan do not apply directly to the proposed Transit District DTPP Amendments and subsequent projects proposed as part of the Transit District DTPP Amendments because they target facilities or land uses that do not currently exist and are not proposed in the Transit District area (e.g., energy generation, waste management, agricultural, forest or pasture lands); vehicles or equipment that would not be employed in the Transit District area (e.g., airplanes, farming equipment); and/or involve rulemaking or other actions under the jurisdiction of agencies not directly involved with design and approval of the proposed Transit District DTPP Amendments and its related actions. For example, the Agriculture, Natural and Working Lands, and Water measures address emissions sources not applicable to the proposed Transit District DTPP Amendments, but rather the BAAQMD's own programs and regional air quality planning, and are less applicable to local agencies' decisions and projects. In addition, 40 of these measures address stationary sources (such as oil refineries and cement kilns, and large boilers used in commercial and industrial facilities) and will be implemented by the BAAQMD using its permit authority and are therefore not suited to implementation through local planning efforts.

Most of the control measures identified in the Clean Air Plan fall under the implementation responsibility of the BAAQMD and would not be directly applicable to the development of the Transit District area. However, subsequent projects proposed as part of the Transit District DTPP Amendments would include features, either by design, required as part of compliance with regulations or their location close to transit facilities, that support implementation of transportation-, energy-, building-, waste-, and water conservation-related measures included in the 2017 Clean Air Plan. **Table 12-8** provides a consistency analysis of the proposed Transit District DTPP Amendments with applicable control measures of the 2017 Clean Air Plan.

# TABLE 12-8 CONSISTENCY WITH POTENTIALLY APPLICABLE CONTROL MEASURES IN 2017 CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Description	Consistency Analysis	
Stationary Source Co	ontrol Measures		
SS21: New Source Review for Air Toxics	SS21 addresses air toxics emissions through BAAQMD Rule 2-5, New Source Review of Toxic Air Contaminants.	Consistent. Any stationary sources such as emergency generators proposed as part of the development in the Transit District area would be required to comply with BAAQMD Rule 2-5 at the time of project review.	
SS25: Coating, Solvents, Lubricants, Sealants and Adhesives	SS25 will reduce emissions of ROG from architectural coatings and other materials by proposing more stringent ROG limits as appropriate.	Consistent. All subsequent projects in the Transit District area would comply with all applicable BAAQMD rules and regulations regarding ROG emission limits.	
SS30: Residential Fan Type Furnaces	SS30 will reduce emissions of NOx by creating more stringent limits on new and replacement central furnace installations. Strategies may include regulations regarding sale of fossil fuel-based space and water heating systems for residential and commercial use.	ment Transit District area would be required to use all-electric space and water heating systems for residential and commercial use, consistent	
SS32: Emergency Backup Generators	S32 will reduce emissions of DPM, TACs, and criteria pollutants from emergency backup generators by enforcing Rule 11- 18, resulting in reduced health risks to impacted individuals. This measure will also have climate protection benefits through reduces GHG emissions.	Consistent. Any emergency backup generators proposed would be compliant with the regulations set forth in BAAQMD Rule 11-18.	
SS36: PM from Trackout	SS36 developed Regulation 6, Particulate Matter; Rule 6: Trackout (Rule 6-6) to address mud and dirt that can be "tracked out" from construction sites, bulk material storage, and disturbed surfaces onto public paved roads where vehicle traffic will pulverize the mud and dirt into fine particles and entrain them into the air.	Consistent. All future construction activities associated with the proposed Transit District DTPP Amendments would implement BMPs required by the BAAQMD, as part of Mitigation Measure AQ-2a, Best Management Practices Required for all Subsequent Projects, which would reduce trackout of PM from construction sites.	
SS38 Fugitive Dust	SS38 reduces particulate matter (PM <sub>10</sub> & PM <sub>2.5</sub> ) fugitive dust emissions from traffic and other operations on construction sites, large disturbed surfaces, and other sources of fugitive PM emissions.  Consistent. All future construct pursuant to the proposed Trans Amendments would implement BMPs required by the BAAQME Mitigation Measure AQ-2a, Best Practices Required for all Subset to reduce fugitive dust.		
Transportation Cont	rol Measures		
TR2: Trip Reduction Programs	TR2 includes a mandatory and voluntary trip reduction program. The regional Commuter Benefits Program, resulting from SB 1339, and similar local programs in jurisdictions with ordinances that require employers to offer pre-tax transit benefits to their employees are mandatory programs. Voluntary programs include outreach to employers to encourage them to implement strategies that encourage their employees to use alternatives to driving alone.	у	
TR5: Transit Efficiency and Use	TR5 will improve transit efficiency and make transit more convenient for riders through continued operation of 511 Transit, full implementation of Clipper® fare payment system and the Transit Hub Signage Program.	Consistent. Projects would be located adjacent to Redwood City Caltrain Station, where the Clipper® fare payment system can be used on various transit operators. It is noted that 511 no longer provides trip planner service or transit agency schedules.	

### Table 12-8 (Continued) Consistency with Potentially Applicable Control Measures IN 2017 CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Description	Consistency Analysis		
Transportation Control Measures (cont.)				
TR8: Ridesharing	TR8 promotes ridesharing services and incentives through the implementation of the 511 Regional Rideshare Program, as well as local rideshare programs implemented by Congestion Management Agencies. These activities will include marketing rideshare services, operating a rideshare information call center and website, and provide vanpool support services. In addition, this measure includes provisions for encouraging car sharing programs.	Consistent. Ridesharing services to the Transit District area are available through the 511 Regional Rideshare Program as well as other private rideshare programs.		
TR9: Bicycle and Pedestrian Access and Facilities	The bicycle component of TR9 strives to expand bicycle facilities serving employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers. Typical improvements include bike lanes, routes, paths, and bicycle parking facilities. The bicycle component also includes a bike share pilot project that was developed to assess the feasibility of bicycle sharing as a first-and last-mile transit option.  The pedestrian component of this measure is intended to improve pedestrian facilities and encourage walking by funding projects that improve pedestrian access to transit, employment sites, and major activity centers. Improvements may include sidewalks/paths, benches, reduced street width and intersection turning radii, crosswalks with activated signals, curb extensions/bulbs, buffers between sidewalks and traffic lanes, and street trees.	Consistent. As discussed in Section 9, Transportation and Circulation, the proposed Transit District DTPP Amendments are consistent with the General Plan transportation goals by maintaining and enhancing bicycle and pedestrian friendly facilities within the Project. Specifically, the proposed Transit District DTPP Amendments propose pedestrian, bicycle, and transit enhancements to improve safety and connectivity to and from the relocated Redwood City Transit Center, including an expanded Caltrain Station, and the greater Downtown and surrounding neighborhoods. Among these would be a requirement for protected bike lanes and potential improvements to bus loading along El Camino Real. These pedestrian, bicycle, and transit improvements would be consistent with the circulation plan set forth in the DTPP area and are consistent with the City's General Plan goals.		
TR10: Land Use Strategies	This measure supports land use patterns that reduce VMT and associated emissions and exposure to TACs, especially within infill locations and impacted communities.	Consistent. The proposed Transit District DTPP Amendments would comply with this measure as it would locate high density, transit-oriented, mixed-use development of land uses in an infill location. It would evaluate a mix of land uses including residential, office, and retail uses in close proximity of existing transit services, thereby reducing the number of vehicle trips and VMT. The Transit District area is also located in a Priority Development Area and Transit Priority Area adjacent to the Transit Center which includes a regional Caltrain station SamTrans bus depot, and shuttle services.		
Energy Control Measures				
EN1: Decarbonize Electricity Production	EN1 focuses on lowering carbon emissions by switching the fuel sources used in electricity generation. The measure would promote and expedite a transition away from fossil fuels used in electricity generation (i.e., natural gas) to a greater reliance on renewable energy sources (e.g., wind, solar). In addition, this measure would promote an increase in cogeneration, which results in useful heat in addition to electricity generation from a single fuel source.	Consistent. Electricity supplied to development in the Transit District area would be provided by Pacific Gas and Electric (PG&E) and Peninsula Clean Energy (PCE). PG&E and PCE are required to comply with SB 100 and the RPS.		

### Table 12-8 (Continued) Consistency with Potentially Applicable Control Measures IN 2017 CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Description	Consistency Analysis		
Energy Control Measures (cont.)				
EN2: Decrease Electricity Demand	EN2 would decrease electricity demand through the adoption of additional energy efficiency policies and programs.  Consistent. Development under Transit District DTPP Amendment subject to energy efficiency start through the California Building E Standards (CCR, Title 24, Part Green Building Standards Code Part 11 - CALGreen) and the Reach Codes. Buildings construct the proposed Transit District DT Amendments would be designed the most recent version of Title Energy Efficiency Standards an CALGreen measures.			
<b>Buildings Control Me</b>	easures			
BL1: Green Buildings	BL1 seeks to increase energy efficiency and the use of on-site renewable energy for all types of existing and future buildings. The measure includes policy assistance, incentives, diffusion of public information, and targeted engagement and facilitation of partnerships in order to increase energy efficiency and on-site renewable energy in the buildings sector.	Consistent. In addition to compliance with the most recent version of Title 24 Building Energy Efficiency Standards and mandatory CALGreen measures, subsequent development in the Transit District area would be subject to the Redwood City Reach Codes, which requires, among other things, photovoltaic (PV) requirements.		
BL2: Decarbonize Buildings	BL2 seeks to reduce GHG emissions, criteria pollutants and TACs by limiting the installation of space- and water-heating systems and appliances powered by fossil fuels. This measure is to be implemented by developing model policies for local governments that support low- and zero-carbon technologies as well as potentially developing a rule limiting the sale of natural-gas furnaces and water heaters.	Consistent. Subsequent development pursuant to the proposed Transit District DTPP Amendments would be subject to the Redwood City Reach Codes, which requires, among other things, all-electric construction for new residential and non-residential buildings with no natural gas infrastructure, and photovoltaic (PV) requirements, with certain exceptions (including for affordable housing and commercial kitchens). In addition, PCE, a community choice aggregation, offers clean energy to City residents, and would be available to future residents of development proposed as part of the Transit District DTPP Amendments.		
BL4: Urban Heat Island Mitigation	This control measure aims to reduce the "urban heat island" phenomenon by increasing the application of "cool roofing" and "cool paving" technologies, as well as increasing the prevalence of urban forests and vegetation, through voluntary approaches and educational outreach.	Consistent. Development in the Transit District area would be required to be consistent with the Redwood City Tree Preservation Ordinance.		
Natural and Working Lands Control Measures				
NW2: Urban Street Planting	NW2 promotes the planting of trees in urbanized settings to take advantage of the myriad benefits provided by these trees, including: shading to reduce both the "urban heat island" phenomenon and the need for space cooling, and the absorption of ambient criteria air pollutants as well as carbon dioxide.	<b>Consistent.</b> Development in the Transit District area would be required to be consistent with the Redwood City Tree Preservation Ordinance.		

# TABLE 12-8 (CONTINUED) CONSISTENCY WITH POTENTIALLY APPLICABLE CONTROL MEASURES IN 2017 CLEAN AIR PLAN CONTROL MEASURES

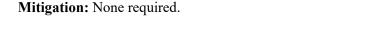
Control Measure	Description Consistency Analysis			
Waste Management Control Measures				
WA3: Green Waste Diversion	WA3 seeks to reduce the total amount of green waste being disposed in landfills by supporting the diversion of green waste to other uses.	Consistent. Subsequent projects in the Transit District area would be serviced by a waste hauler that offers residential and commercial composting services and that would be required to comply with the requirements of the California Integrated Waste Management Act and AB 341.		
WA4: Recycling and Waste Reduction	WA4 seeks to reduce GHG emissions by diverting recyclables and other materials from landfills.	Consistent with AB 341 - Commercial Recycling and AB 1826 - Commercial Organics, commercial, business, or multifamily establishments that generate two cubic yards or more of solid and organic waste per week will be required to have a recycling and/or organics program.		
Water Control Measu	ires			
WR2: Support Water Conservation	WR2 seeks to promote water conservation, including reduced water consumption and increased on-site water recycling, in residential, commercial and industrial buildings for the purpose of reducing GHG emissions.	Consistent. To advance this measure, BAAQMD supports efforts of local governments to achieve and exceed state water use reduction goals by: disseminating best practices that reduce water consumption and increase on-site water recycling; encouraging the adoption of water conservation ordinances; and incorporating public outreach and education on water conservation into BAAQMD's outreach programs. BAAQMD also incorporates best practices for water use into local plan guidance, CEQA guidance, and other resources for cities and counties.		
Solid Waste				
California Integrated Waste Management Act (IWMA) of 1989 and AB 341	IWMA requires all California cities to divert 50-percent of all solid waste from landfill disposal through source reduction, recycling, and composting activities. AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a statewide goal for 75 percent disposal reduction by the year 2020.	Consistent. Recology San Mateo County is under contract with the City to provide solid waste and residential recycling services to Redwood City and is responsible for recycling and solid waste management in the City. Recology's services yield waste diversion results consistent with citywide recycling targets. These services would be supplied to all future development under the proposed Transit District DTPP Amendments. Consistent with AB 341 - Commercial Recycling and AB 1826 - Commercial Organics, all commercial, business, and multifamily establishments that generate enough solid and organic waste are required to have a recycling and/or organics program.		

As shown in Table 12-8, required compliance with regulations from various agencies as well as the City, and implementation of new Mitigation Measures AQ-2a and AQ-2b required to mitigate Impact AQ-2 discussed below, would ensure that implementation of the proposed Transit District DTPP Amendments would be consistent and support all applicable control measures from the 2017 Clean Air Plan.

Further, the proposed Transit District DTPP Amendments would not cause the disruption or delay in the implementation of Clean Air Plan control measures. Projects that would hinder implementation of control measures are projects that would preclude the extension of a transit line or bike path or projects that propose excessive parking beyond City parking requirements. The Transit District DTPP Amendments propose development that would be a dense, walkable urban area near a concentration of regional and local transit services, including Redwood City Station, which is currently served by Caltrain and bus services from SamTrans.

In addition, the Transit District area is located within a Priority Development Area pursuant to the Association of Bay Area Governments' Sustainable Communities Strategy: Plan Bay Area 2050. This designation applies to new development areas that would support the day-to-day needs of residents and workers in a pedestrian-friendly environment served by transit. The proposed Transit District DTPP Amendments would include pedestrian, bicycle, and transit enhancements to improve safety and connectivity to and from the relocated Redwood City Transit Center, including an expanded Caltrain Station, and the greater Downtown and surrounding neighborhoods. In addition, many of the proposed Transit District DTPP Amendments would reduce single-occupancy vehicle trips and be complimentary to the City's TDM Ordinance goals. Specifically, the proposed amendments to right-size/reduce parking ratios, incentivize shared parking, increase bicycle parking ratios, improve access to long-term and short-term bicycle parking, and improve multimodal access to the Transit District area would support the City's goal to increase multimodal access and reduce single-occupancy vehicle trips.

These amendments would advance and would not obstruct implementation of any measures in the 2017 Clean Air Plan that aim to improve connectivity and reduce transportation-related emissions. Therefore, the proposed Transit District DTPP Amendments would not hinder or delay implementation of any control measures contained in the 2017 Clean Air Plan. Development proposed as part of the Transit District DTPP Amendments would therefore be consistent with the BAAQMD's 2017 Clean Air Plan and would not result in new or more severe impacts than what was identified in the DTPP Final EIR. Therefore, this impact would be *less than significant*.



Impact AQ-2: Adoption of the proposed Transit District DTPP Amendments would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. (Significant and Unavoidable with Mitigation)

#### **DTPP Impact Summary**

The DTPP Final EIR found that the projected rate of increase in vehicle trips under the DTPP would be less than the rate of increase in population. Therefore, the regional air quality impacts from criteria pollutant and ozone precursor emissions associated with the DTPP were found to be *less than significant*.

#### **Project Impacts**

For a plan-level analysis, the BAAQMD recommends that the significance of the impact of criteria air pollutant emissions generated be based on consistency with regional air quality planning, including an evaluation of population growth and growth in VMT (BAAQMD, 2017b). For a proposed plan to result in a less-than-significant impact from criteria air pollutants, an analysis must demonstrate that the plan's growth in VMT would not exceed the plan's population growth. This analysis is presented below, followed by an analysis that considers whether development allowed by the proposed Transit District DTPP Amendments could exceed quantitative (project-level) thresholds of significance for criteria pollutants, requiring mitigation.

#### Comparison of Growth in VMT with Growth in Population

Based on the transportation analysis, the service population (residents plus employees) of the area due to development proposed as part of the Transit District DTPP Amendments would increase by approximately 284 percent, from the Existing scenario to 2040 with buildout of development allowed under the proposed Transit District DTPP Amendments, as shown in Table 12-9.

**TABLE 12-9** INCREASE IN VMT VERSUS SERVICE POPULATION GROWTH

	Existing	2040 Transit District DTPP Amendments Buildout	Difference between Existing and Transit District DTPP Amendments Buildout	% Increase
Service Population	1,120	10,708	9,588	284%
VMT <sup>a</sup>	65,098	463,423	398,325	265%

SOURCE: Table compiled by ESA in 2022

The transportation analysis also estimates that VMT associated with the implementation of the Transit District DTPP Amendments would increase by approximately 398,325 miles from the Existing scenario of approximately 65,098, as shown in Table 12-9. This overestimates the likely increase in VMT attributable to the proposed Transit District DTPP Amendments because it does not quantify reductions attributable to the City's TDM policy. Nonetheless, the rate of increase in VMT would be less than the rate of population growth with the implementation of the proposed Transit District DTPP Amendments.

The BAAOMD Justification Report<sup>7</sup> explains that the impact to air quality is not necessarily growth but where that growth is located. Because transportation sources typically constitute the largest percent of air quality emissions generated from land use development projects and plans, a comparison of the rate of increase in VMT to the growth rate (represented by the service

a VMT data provided by Fehr & Peers.

BAAQMD staff analyzed various options for CEQA air quality thresholds of significance for use within BAAQMD's jurisdiction. The analysis and evaluation undertaken by BAAQMD staff is documented in the Revised Draft Options and Justification Report - California Environmental Quality Act Thresholds of Significance (Draft Options Report) (BAAQMD October 2009).

population growth that includes residential population and employment growth), will determine if planned growth will impact air quality of the area. Compact infill development in proximity to transit services, such as the proposed Transit District DTPP Amendments, inherently generate less vehicle travel and more transit opportunities than suburban sprawl to accommodate the same amount of growth. Because the rate of increase in VMT would be less than the rate of service population growth, the proposed Transit District DTPP Amendments would result in a *less-than-significant* impact with respect to regional criteria air pollutants when analyzed by comparing the rate of population growth to the rate of VMT growth.

Nonetheless, the proposed Transit District DTPP Amendments would allow for development of new residential and office uses, and replace existing retail uses in the area, which would generate emissions. This development would entail demolition and removal of existing structures, excavation, site preparation, and construction of new buildings. Emissions generated during construction activities would include exhaust emissions from the use of heavy-duty off-road diesel equipment, on-road diesel trucks, and employee vehicles; fugitive dust emissions associated with earth-disturbing activities and other demolition and construction work; and fugitive ROG emissions from paving and architectural coatings. Emissions generated during operation of new development would include emissions from motor vehicle trips to and from the proposed uses, building energy use, any stationary sources such as backup generators and area sources (landscaping equipment, consumer products and architectural coatings associated with maintenance activities).

Screening criteria based on development type and size (Table 3-1 of the 2017 BAAQMD CEQA Air Quality Guidelines) are generally used to determine if construction or operational emissions from individual projects would likely result in a cumulatively considerable net increase in non-attainment criteria air pollutants. A project that exceeds the screening criteria generally requires a detailed air quality assessment to determine whether criteria air pollutant emissions would exceed significance thresholds (BAAQMD, 2017b). Projects below the screening criteria do not require future analysis and the impact of criteria pollutant emissions from those projects are presumed to be less than significant.

#### **Construction Emissions**

Activities that generate dust include demolition, grading and excavation, and equipment movement on unpaved construction areas. Dust can be an irritant causing watering eyes or irritation to the lungs, nose, and throat. Fugitive dust from construction activities can also be wind-blown and that adds to the particulate matter concentrations in the local atmosphere leading to *potentially significant* impacts.

The BAAQMD has taken a qualitative approach to addressing fugitive dust emissions from construction activities and considers any project that implements the BAAQMD Basic Construction Mitigation Measures Recommended for All Projects (Best Management Practices) to not result in a significant impact with respect to fugitive dust. Implementation of new Mitigation Measure AQ-2a: Best Management Practices for Construction Dust Suppression, provided below, includes BAAQMD recommended measures to address

construction dust and would apply to all subsequent projects developed as part of the proposed Transit District DTPP Amendments.

Estimating exhaust emissions generated by construction activities (i.e., construction equipment and vehicles) requires project-specific data regarding the construction schedule and phasing, and equipment needs (equipment type and number, horsepower, activity level). If estimated emissions are found to exceed the BAAQMD's project-level significance thresholds for construction, they would contribute to a cumulatively considerable net increase in criteria pollutants for which the SFBAAB is in nonattainment. Projects requiring substantial ground disturbance, constructed on extremely compressed construction schedules, or requiring specialty equipment could lead to exceedance of the significance thresholds. Because at least some development allowed by the Transit District DTPP Amendments would likely exceed BAAQMD screening criteria and the specific characteristics of each subsequent project are not currently known, this impact is conservatively considered to be *potentially significant*.

#### **Operational Emissions**

Individual projects allowed by the Transit District DTPP Amendments would generate operational emissions from a variety of sources. The primary operational sources of emissions are motor vehicle trips generated by the proposed land uses, energy use in buildings, area sources (landscaping equipment, use of consumer products, re-application of architectural coatings as part of maintenance activities, etc.), and any stationary sources such as diesel fueled fire pumps and emergency generators. As described below, exceedances of the significance thresholds in larger projects are likely to result from NOx and PM emissions from transportation sources, NOx emissions from energy use, and ROG emissions from area sources, specifically consumer products.

The primary source of operational criteria pollutant emissions would be motor vehicle trips generated by new development, although the proximity of transit facilities in the area would help reduce vehicle trips, VMT, and associated air pollutant emissions, as would Redwood City's TDM requirements. In addition, Redwood City has adopted Ordinance 2487 approving "Reach Codes" that amend the State's Title 24 Energy and Green Building Standards Codes and specify EV charging requirements for new construction to facilitate future installation and use of electric chargers. Reach codes are local building energy-related codes that "reach" beyond the state minimum requirements for energy use in building design and construction. The Redwood City Reach Codes apply to all new residential, commercial, and multifamily buildings. Mitigation Measure CC-1 would require that EV charging infrastructure be provided consistent with the applicable Tier 2 CALGreen standards in effect at the time. The provision of EV charging would encourage use of electric vehicles and reduce associated emissions from gasoline-fueled vehicles.

The second major source of criteria pollutant emissions in land use development projects is energy use in buildings from the combustion of natural gas for space and water heating. However, consistent with the City's Reach Codes, all newly constructed buildings would be required to be all-electric buildings. An all-electric building is a building that has no natural gas or propane plumbing installed within the building and that uses electricity as the source of energy for its space

conditioning, water heating (including pools and spas), cooking appliances, and clothes drying appliances (City of Redwood City, 2020b). Exceptions may be granted to non-residential buildings containing kitchens and residential buildings that contain only low-income units as long as the natural gas burning devices do not have a continuously burning pilot light. Other buildings eligible for exceptions include accessory dwelling units, non-residential buildings constructed to Office of Statewide Health Planning and Development Hospital standards, factories/industrial buildings, high-hazard buildings, and scientific laboratory areas. Implementation of Mitigation Measure CC-1 in the Climate Change section of this SEIR would require all future projects in the Plan-wide amendments area to be all-electric and to be constructed without natural gas infrastructure. This would eliminate direct air pollutant emissions from building energy use. However, as explained in Chapter 13, Climate Change, implementation of Mitigation Measure CC-1 may not be feasible.

ROG emissions from projects that include a substantial residential component may also potentially exceed the BAAQMD thresholds. ROG emissions from residential uses are primarily generated from the use of consumer products which are chemically formulated products used by household and institutional consumers, including, but not limited to, degreasers, fertilizers/pesticides, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. With transportation-related emissions of ROG decreasing over time owing to stricter controls on air pollution, the relative importance of emissions from consumer products has increased. Studies estimate that consumer products now contribute as much to urban air pollution as tailpipe emissions from vehicles despite the fact that people use a lot more fuel than they use consumer products—about 15 times more by weight (Fell, 2018).

Current methodology for estimating ROG emissions from consumer products uses the most recent version of the California Emissions Estimator Model (CalEEMod 2020.4.0) which relies on the 2008 CARB Consumer Product Emission Inventory (CARB, 2009). These emission factors have not been updated recently to reflect low emission products available in the market and are therefore conservative. In addition, consumer product emissions are largely based on personal choices and usage patterns of consumers that the city does not have control over. Hence, there are no effective mitigation measures restricting the use of certain consumer products or limiting the choice. ROG emissions from consumer products is regulated by CARB through the California Consumer Products Regulations (Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5).

Based on the potential for NOx, PM, and ROG emissions from development projects allowed by the Transit District DTPP Amendments to exceed significance thresholds, operational emissions of criteria pollutants are considered potentially significant.

Mitigation Measure AQ-2a, below, would ensure implementation of best management practices consistent with BAAOMD recommendations to reduce fugitive dust emissions during construction to less than significant levels. Implementation of new Mitigation Measure AQ-2b would require a quantitative analysis of projects exceeding the BAAQMD's screening criteria for criterial pollutant emissions, and specifies emission reduction measures that shall be implemented if significance thresholds for criteria pollutants are exceeded.

### Mitigation Measure AO-2a: Best Management Practices for Construction Dust Suppression.

All subsequent projects, regardless of size, shall implement best management practices to reduce construction impacts, particularly fugitive dust, to a less-than-significant level.

Specifically, the project applicant for any subsequent development project in the Transit District area shall require all construction plans to specify implementation of the following best management practices:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

### Mitigation Measure AQ-2b: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants.

Project applicants proposing projects that exceed BAAQMD screening levels shall prepare a project-level criteria air pollutant assessment of construction and operational emissions at the time the project is proposed. The project-level assessment shall either include a comparison of the project with other similar projects where a quantitative analysis has been conducted, or shall provide a project-specific criteria air pollutant analysis to determine whether the project exceeds the BAAQMD's criteria air pollutant thresholds.

In the event that a project-specific analysis finds that the project could result in criteria air pollutant emissions that exceed BAAQMD significance thresholds, the project applicant shall implement the following emission reduction measures to the degree necessary to reduce the impact to less than the significance thresholds, and shall implement additional feasible measures if necessary to reduce the impact to less than the significance thresholds.

#### Clean Construction Equipment

- 1. The project applicant shall use electric construction equipment when feasible.
- The project applicant shall ensure that all diesel off-road equipment shall have engines that meet the Tier 4 Final off-road emission standards, as certified by CARB, except as provided for in this section. This requirement shall be verified through submittal of an equipment inventory that includes the following information: (1) Type of Equipment, (2) Engine Year and Age, (3) Number of Years Since Rebuild of Engine (if applicable), (4) Type of Fuel Used, (5) Engine HP, (6) Verified Diesel Emission Control Strategy (VDECS) information if applicable and other related equipment data. A Certification Statement is also required to be made by the Contractor for documentation of compliance and for future review by the BAAQMD as necessary. The Certification Statement shall state that the Contractor agrees to compliance and acknowledges that a violation of this requirement shall constitute a material breach of contract.

The City may waive the requirement for Tier 4 Final equipment only under the following unusual circumstances: if a particular piece of off-road equipment with Tier 4 Final standards is technically not feasible or not commercially available; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or there is a compelling emergency need to use other alternate off-road equipment. For purposes of this mitigation measure, "commercially available" shall mean the availability of Tier 4 Final engines similar to the availability for other large-scale construction projects in the region occurring at the same time and taking into consideration factors such as (i) potential significant delays to critical-path timing of construction for the project and (ii) geographic proximity to the project site of Tier 4 Final equipment.

3. The project applicant shall require the idling time for off-road and on-road equipment be limited to no more than 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment. Legible and visible signs shall be posted in multiple languages (English, Spanish, Chinese) in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit.

#### **Operational Emission Reductions**

- 1. As required by Mitigation Measure CC-1 (if feasible), projects shall be constructed without natural gas infrastructure and shall be "all electric."
- 2. As required by Mitigation Measure CC-1, projects shall provide EV charging infrastructure consistent with the applicable Tier 2 CALGreen standards in effect at the time.
- 3. All newly constructed loading docks on commercial properties that can accommodate trucks with Transport Refrigeration Units (TRUs) shall be equipped with EV charging equipment to power TRUs during loading and unloading at docks. This measure does not apply to temporary street parking for loading or unloading.

#### **Emission Offsets**

If a project-specific analysis finds that the project could result in criteria air pollutant emissions that exceed BAAQMD significance thresholds despite implementation of the above emission reduction measures, the project applicant shall pay mitigation offset fees to the BAAQMD's Bay Area Clean Air Foundation or other governmental entity. The mitigation offset fee shall fund one or more emissions reduction projects within the San Francisco Bay Area Air Basin. The fee will be determined by the City, the project applicant, and the BAAQMD or other governmental entity, and be based on the type of projects available at the time of the payment. The fee is intended to fund emissions reduction projects to achieve annual reductions of ROG, NO<sub>X</sub>, and PM<sub>10</sub> equal to the amount required to reduce emissions below significance levels after implementation of other emission reduction strategies identified above.

**Significance after Mitigation.** The BAAQMD has taken a qualitative approach to addressing fugitive dust emissions from construction activities and considers any project that implements the best management practices in Mitigation Measure AQ-2a to not result in a significant impact with respect to fugitive dust.

Mitigation Measure AO-2b is expected to be effective at reducing criteria pollutant emissions from construction and operation of individual projects developed in the Transit District area to below the BAAQMD thresholds; however, the specific emissions associated with future projects are not currently known, and therefore the effectiveness of emission reduction measures cannot be definitively determined. It is possible that projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could exceed construction significance thresholds. Also, ROG emissions from consumer products used during project operations may remain significant because use of such products is a function of consumer choice and commercial availability. Finally, although the mitigation measure would require emissions offsets required to reduce any criteria pollutant emissions that would exceed the thresholds of significance for these pollutants after implementation of all other feasible emission reduction measures, implementation of any emissions reduction project(s) that may be developed would be undertaken by BAAOMD and is outside the jurisdiction and control of the City and not fully within the control of the project applicants. For these reasons, criteria air pollutants from construction and operation of subsequent projects developed under the proposed Transit District DTPP Amendments would result in a new and more severe impact than the impact identified in the DTPP Final EIR. This impact would conservatively be significant and unavoidable with mitigation.

The identification of this significant and unavoidable impact does not preclude the finding of a less-than-significant or less-than-significant-with-mitigation impact for subsequent projects that are below the applicable screening criteria or that meet the criteria air pollutant thresholds of significance with implementation of Mitigation Measure AQ-2b.

#### Health Implications of Significant Impacts Related to Ozone Precursors

The health effects associated with emissions of criteria pollutants and ozone precursors are described in Table 12.1 under Section 12.1, *Environmental Setting* above. The main health concern of exposure to ground-level ozone formed from ROG and NO<sub>X</sub>, the ozone precursors, is the effect on the respiratory system, especially on lung function.

As discussed above, individual projects developed under the Transit District DTPP Amendments could generate criteria pollutant emissions ROG, NOx, and particulate matter during construction and/or operation that exceed the BAAQMD's project-level thresholds. In the absence of project-specific information, it would be speculative to quantify criteria pollutant emissions and these impacts have been assessed qualitatively, resulting in programmatic mitigation measures that would apply to future development projects. Without quantification of criteria pollutant emissions, it is not possible to quantify the health impacts of these emissions on sensitive receptors. There is also currently no guidance or thresholds for a significance determination regarding health effects from criteria pollutant emissions.<sup>8</sup>

Impact AQ-3: Adoption of the proposed Transit District DTPP Amendments would not expose sensitive receptors to substantial pollutant concentrations. (*Less than Significant with Mitigation*)

### **DTPP Impact Summary**

The DTPP Final EIR analyzed the impact of existing sources of TAC emissions in Redwood City on future receptors that would be introduced to the area by the DTPP. The 2010 General Plan, in its draft form at the time of DTPP CEQA review, included policies and programs that discouraged new development in areas where sensitive receptors could be exposed to significant TAC levels. Because the 2010 draft General Plan was not yet adopted, the impact of the DTPP related to exposure to TACs was concluded as potentially significant with Mitigation Measure 12-1 providing guidance for siting future sensitive receptors with respect to existing sources of pollution to reduce the impact to a less than significant level. Exposure of existing sensitive receptors to TAC emissions generated by construction and operation of the DTPP were not analyzed.

### **Project Impacts**

Since the DTPP Final EIR, the 2010 General Plan has been adopted and Policy PS-2.6 of the Public Safety element includes the same requirements as DTPP Mitigation Measure 12-1.

The BAAQMD 2017 Guidelines recommend analysis of local community risk and hazards of plans by establishing overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) and overlay zones of at least 500 feet from all freeways and high-volume roadways. These requirements are included in the City's 2010 General Plan as Policies PS-2.4 and PS-2.7 and development pursuant to the proposed Transit District DTPP Amendments would be subject to these policies. As discussed under *Scope of Analysis* above, CEQA no longer

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It is noted that complex health impact analyses for recent projects that are or comparable scale or larger than the amount of development that could be permitted pursuant to the proposed Transit District DTPP Amendments have found that health impacts of criteria pollutants would be relatively minimal. See, for example, the Final EIRs for the Downtown West Mixed-Use Project in San José (https://www.sanjoseca.gov/your-government/department-directory/planning-building-code-enforcement/planning-division/environmental-planning/environmental-review/active-eirs/downtown-west-mixed-use-plan/-fsiteid-1) and the Oakland A's Waterfront Ballpark District Project (https://www.oaklandca.gov/documents/draft-eir-for-the-oakland-as-waterfront-ballpark-district-project).

requires the analysis of the impact of the environment on the project pursuant to the CBIA decision; therefore, this impact is not analyzed further.

The BAAQMD does not provide any guidance to analyze health risk impacts of plans on the environment. Nonetheless, subsequent projects developed under the proposed Transit District DTPP Amendments would generate TACs, primarily DPM, during construction and operation. DPM emissions would be generated from the combustion of diesel fuel in construction equipment and heavy-duty trucks transporting materials and equipment to and from individual project sites. Based on the land uses proposed in the Transit District DTPP Amendments, the likely sources of operational TAC emissions would be any proposed emergency generators (required for residential structures over 75-feet) and truck traffic serving the commercial uses in the Transit District area.

As the specific characteristics of each subsequent project proposed under the Transit District DTPP Amendments and the required construction equipment information (year and duration of construction, equipment type, operating hours, horsepower, etc.) are not known, it is not possible to quantify construction-related health risks from exposure to TAC emissions from all projects in the Transit District area. Therefore, this analysis uses preliminary data and assumptions regarding the largest potential project that could be developed under the proposed Transit District DTPP Amendments to inform a conclusion regarding potential impacts and to allow for formulation of mitigation measures to address any significant impacts. Sequoia Station is the largest potential project located at the southern end of the Transit District area. Sensitive receptors in the form of residential uses are located directly downwind and less than 75 feet from the Sequoia Station site across Jefferson Avenue. Based on the potential project's relative location and size, impacts from other subsequent projects developed as part of the proposed Transit District DTPP Amendments would most likely have impacts less than the Sequoia Station.

#### **Construction Health Risk**

Preliminary construction data currently available for the Sequoia Station project in conjunction with default CalEEMod inputs were used to prepare a construction HRA using the U.S. EPA's AERMOD dispersion model and HRA guidelines from OEHHA. Emission rates derived from the CalEEMod (version 2020.4.0) were input into AERMOD to derive concentrations across a 20 meter by 20-meter receptor grid that covered all receptors within 1,000 feet of the potential Sequoia Station site. The BAAQMD considers 1,000 feet around sources as the zone of influence for assessing health risk impacts (BAAQMD, 2017b). The concentrations estimated in AERMOD were then used to calculate health risks using health risk parameters and equations from the OEHHA guidelines for HRAs (OEHHA, 2015).

The results of the HRA for construction of the potential Sequoia Station are shown in **Table 12-10**. As shown, the unmitigated cancer risk at the maximally exposed individual receptor (MEIR) would exceed the BAAQMD's project-level threshold of 10 in one million. The MEIR would be located at the Cardinal Apartments at 1 Franklin Street to the east and downwind of the Sequoia Station site. The Cardinal Apartments provide housing to Stanford graduate students and staff and housing units are located on the second floor and above. As there are no housing units on the ground floor, a

receptor height of 7.5 meters (20 feet or 6 meter above-grade elevation of the first residential level plus a breathing height of 1.5 m) was used to model concentrations in AERMOD.

TABLE 12-10

CONSTRUCTION HEALTH RISKS AT THE MEIR FOR THE SEQUOIA STATION PROJECT

Receptor	Location	Cancer Risk (in a million)	Hazard Index (unit-less)	Annual PM <sub>2.5</sub> Concentration (μg/m³)
Unmitigated				
Residential Receptor <sup>a</sup> – infant	2nd floor of 1 Franklin Street	127.8	0.06	0.31
School <sup>b</sup> – child	North Star Academy	0.17	<0.01	0.01
Daycare <sup>c</sup> – infant	Little Steps Daycare, 213 Jackson Avenue	11.0	<0.01	0.04
BAAQMD Thresholds		10.0	1.0	0.3
Significant?		Yes	No	Yes
Mitigated <sup>d</sup>				
Residential Receptor <sup>a</sup> – infant	2nd floor of 1 Franklin Street	9.2	<0.01	0.03
School <sup>b</sup> – child	North Star Academy	0.01	<0.01	<0.01
Daycare <sup>c</sup> – infant	Little Steps Daycare, 213 Jackson Avenue	0.95	<0.01	<0.01
BAAQMD Thresholds		10.0	1.0	0.3
Significant?		No	No	No

NOTES: Values shown in **bold** are in excess of thresholds.

SOURCE: Table compiled by ESA in 2022 based on Appendix D of this SEIR.

As shown in Table 12-10, the unmitigated construction risk and annual PM<sub>2.5</sub> concentration at the residential MEIR at 1 Franklin Street would exceed the project-level incremental cancer risk and annual PM<sub>2.5</sub> thresholds specified by the BAAQMD, resulting in a *significant* health risk impact. The non-cancer Hazard Index at the residential MEIR would be below the BAAQMD threshold. All health risks at nearby schools and daycare centers would be below BAAQMD thresholds.

The proposed Transit District DTPP Amendments would result in new and more severe air quality impacts than the impacts identified in the DTPP Final EIR. However, as shown in Table 12-10, mitigation would reduce the cancer risk and annual PM<sub>2.5</sub> concentration to below significance thresholds by implementation of new Mitigation Measure AQ-3, discussed below.

<sup>&</sup>lt;sup>a</sup> Health risks estimated based on concentrations modeled at a residential receptor height of 7.5 m representing second floor receptors at Cardinal Apartments, 1 Franklin Street.

b Health risks estimated based on concentrations modeled at a receptor height of 1.5 m representing breathing height of first floor school receptors at North Star Academy.

<sup>&</sup>lt;sup>c</sup> Health risks estimated based on concentrations modeled at a receptor height of 1.5 m representing breathing height of first floor receptors at Little Steps Daycare. Exposure is assumed to begin at 3 months of age.

d Mitigated health risks are based on use of electric equipment for all tower cranes, and man- and material- lifts, electric or LNG powered forklifts, and Tier 4 Final equipment for all other construction equipment, as required under Mitigation Measure AQ-3.

#### **Operational Health Risk**

Operational sources of health risk in the Transit District area would primarily include emergency generators fire pumps required in taller buildings as part of the emergency power systems and standby power systems requirement of the California Building Code for high-rise buildings with occupied floors located more than 75 feet from the lowest level of fire department vehicle access. Installation and operation of fire pumps and emergency diesel generators would require an Authority to Construct and Permit to Operate from the BAAQMD, who would evaluate emissions based on size and require Best Available Control Technology, if warranted. Per its Policy and Procedure Manual, the BAAQMD would deny an Authority to Construct or a Permit to Operate for any new or modified source of TACs that exceeds a cancer risk of 10 in one million or a chronic or acute Hazard Index of 1.0, the BAAQMD's thresholds for health risk impacts. Therefore, health risks associated with operational sources proposed as part of the Transit District Amendment would not result in new or more severe impacts than what was identified in the DTPP Final EIR. Therefore, operational health risks would be *less than significant*.

## Mitigation Measure AQ-3: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction.

Project applicants within the Transit District area proposing projects within 1,000 feet of existing or approved sensitive receptors shall prepare a project-level HRA of construction impacts at the time the project is proposed. The HRA shall be based on project-specific construction schedule, equipment and activity data and shall be conducted using methods and models approved by the BAAQMD, CARB, OEHHA and U.S. EPA. Estimated project-level health risks shall be compared to the BAAQMD's health risk significance thresholds for projects.

In the event that a project-specific HRA finds that the project could result in significant construction health risks that exceed BAAQMD significance thresholds, the project applicant shall implement Mitigation Measure AQ-2b's requirement for the use of all Tier 4 Final construction equipment to reduce project-level health risks to a less than significant level. In addition, all tower cranes and man- and material- lifts shall be electric powered and forklifts shall be electric or LNG powered.

**Significance After Mitigation:** Mitigation Measure AQ-3 would require subsequent projects within 1,000 feet of existing or approved sensitive receptors to undergo a project-level HRA at the time the project is proposed and to utilize the clean construction equipment required by Mitigation Measure AQ-2b if the project-specific health risk thresholds are exceeded. Based on the analysis of Sequoia Station, and as shown in Table 12-10 implementation of Mitigation Measure AQ-3 would reduce construction health risk impacts to *less than significant with mitigation* by use of clean construction equipment that meet the Tier 4 Final off-road emission standards, or equivalent VDECS, as certified by CARB.

Impact AQ-4: Adoption of the proposed Transit District DTPP Amendments would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant)

### **DTPP Impact Summary**

The DTPP Final EIR concluded that development facilitated by the DTPP could result in food service uses (e.g., restaurants) in close proximity or in the same building as residential or other odor-sensitive uses, which could, if not properly mitigated, result in a potentially significant impact. The DTPP Final EIR identified Mitigation Measure 12-2 requiring future food service establishments to implement odor control measures to the City's satisfaction and found that the impact would be reduced to a *less than significant level with mitigation*.

### **Project Impacts**

The use of construction equipment at future construction sites in the Transit District area could potentially create objectionable odors that may affect receptors in the immediate vicinity. Construction-related odors would be localized and temporary, and the use of low-VOC surface coating materials in accordance with BAAQMD Rules would reduce potentially objectionable odors from painting operations.

Land uses proposed as part of the Transit District DTPP Amendments would not include any major sources of odor. Certain commercial land uses, for example, restaurants, emit cooking odors while in operation that may be deemed objectionable. This includes odors associated with any char broilers. DTPP Final EIR Mitigation Measure 12-2 would apply to all subsequent food service establishments in the DTPP planning area including the Transit District area and includes measures requiring integral grease filtration or grease removal systems, baffle filters, electrostatic precipitators, water cooling/cleaning units, disposable pleated or bag filters, activated carbon filters, oxidizing pellet beds, catalytic conversion, proper packaging and frequency of food waste disposal, and exhaust stack and vent location with respect to receptors. However, these requirements are also enforced through compliance with BAAQMD Rule 6-2 (Commercial Cooking Equipment) making Mitigation Measure 12-2 redundant and hence not necessary.

Land uses proposed as part of the Transit District DTPP Amendments are not expected to generate odors that would adversely affect a substantial number of people and would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. The impact would be *less than significant* and no mitigation measures would be required.

Mitigation: None required.	

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12. Air Quality

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# **CHAPTER 13**

# Climate Change

This SEIR chapter analyzes the effects to climate change (i.e., greenhouse gas emissions, energy consumption/efficiency, and sea-level rise) that would result from implementation of the proposed Transit District DTPP Amendments, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

## Findings of the DTPP Final EIR

The DTPP Final EIR identified a less than significant impact with respect to generation of greenhouse gas (GHG) emissions that could have a significant impact on the environment. The analysis found that GHG emissions generated by the DTPP would be less than the emissions per service population threshold recommended by the BAAQMD at the time. No significant impact was identified and hence, no mitigation required.

The DTPP Final EIR identified a potentially significant impact with respect to sea level rise associated with the effect of increased GHG emissions on global climate change. Mitigation Measure 13-1 was identified requiring preparation of response strategies that address sea level rise and increased flooding. The DTPP Final EIR further concluded that, given the uncertainty surrounding climate change, Mitigation Measure 13-1 would not reduce this potential impact to a less-than-significant level and the impacts related to flooding caused by sea level rise would remain significant and unavoidable.

The DTPP Final EIR did not analyze impacts related to energy use and conservation as significance criteria for energy use were introduced to Appendix G of the CEQA Guidelines in 2018.

# 13.1 Environmental Setting

## 13.1.1 Climate Science

"Global warming" and "climate change" are common terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century. Natural processes and human actions have been identified as affecting the climate. The Intergovernmental Panel on Climate Change (IPCC) has concluded that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward.

However, increasing GHG concentrations resulting from human activity since the 19th century, such as fossil fuel combustion, deforestation, and other activities, are believed to be a major factor in climate change. GHGs in the atmosphere naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space—a phenomenon referred to as the "greenhouse effect." Some GHGs occur naturally and are necessary for keeping the Earth's surface habitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have trapped solar radiation and decreased the amount that is reflected into space, intensifying the natural greenhouse effect, and resulting in the increase of global average temperature.

Carbon dioxide (CO2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are the principal GHGs. When concentrations of these gases exceed historical concentrations in the atmosphere, the greenhouse effect is intensified. CO2, methane, and nitrous oxide occur naturally and are also generated through human activity. Emissions of CO2 are largely by-products of fossil fuel combustion, whereas methane results from off-gassing, natural gas leaks from pipelines and industrial processes, and incomplete combustion associated with agricultural practices, landfills, energy providers, and other industrial facilities. Nitrous oxide emissions are also largely attributable to agricultural practices and soil management. CO2 sinks include vegetation and the ocean, which absorb CO2 through sequestration and dissolution, and are two of the largest reservoirs of CO2 sequestration. Other human-generated GHGs include fluorinated gases such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, which have much higher heat-absorption potential than CO2 and are byproducts of certain industrial processes.

CO<sub>2</sub> is the reference gas for climate change, as it is the GHG emitted in the highest volume. The effect that each of the GHGs have on global warming is the product of the mass of their emissions and their global warming potential (GWP). GWP indicates how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO<sub>2</sub>. For example, methane and nitrous oxide are substantially more potent GHGs than CO<sub>2</sub>, with GWPs of 25 and 298 times that of CO<sub>2</sub> respectively, which has a GWP of 1 (CARB, 2022).

In emissions inventories, GHG emissions are typically reported as metric tons of CO<sub>2</sub> equivalent (MTCO<sub>2</sub>e). CO<sub>2</sub>e is calculated as the product of the mass emitted of a given GHG and its specific GWP. While methane and nitrous oxide have much higher GWPs than CO<sub>2</sub>, CO<sub>2</sub> is emitted in higher quantities and it accounts for the majority of GHG emissions in CO<sub>2</sub>e, both from commercial developments and human activity in general.

# 13.1.2 Effects of Global Climate Change

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain scientific uncertainties in, for example, predictions of local effects of climate change, occurrence, frequency, and magnitude of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of and inability to accurately model the Earth's

climate system, the uncertainty surrounding climate change may never be eliminated completely. Nonetheless, the IPCC's AR5 states that is extremely likely that the dominant cause of the observed warming since the mid-20th century is the anthropogenic increase in GHG concentrations (IPCC, 2014). The National Academies of Science from 80 countries have issued statements endorsing the consensus position that humans are the dominant cause for global warming since the mid-20th century (Cook et al., 2016).

The Fourth California Climate Change Assessment (Fourth Assessment), published in 2018, found that the potential impacts in California due to global climate change include: loss in snow pack; sea-level rise; more extreme heat days per year; more high ozone days; more extreme forest fires; more severe droughts punctuated by extreme precipitation events; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation (California Office of Planning and Research [OPR], California Energy Commission [CEC] & California Natural Resources Agency [CNRA], 2018). The Fourth Assessment's findings are consistent with climate change studies published by the CNRA since 2009, starting with the *California Climate Adaptation Strategy* (CNRA, 2009) as a response to the Governor's Executive Order S-13-2008. In 2014, the CNRA rebranded the first update of the 2009 adaptation strategy as the *Safeguarding California Plan* (CNRA, 2014). The 2018 update to *Safeguarding California Plan* identifies hundreds of ongoing actions and next steps state agencies are taking to safeguard Californians from climate impacts within a framework of 81 policy principles and recommendations (CNRA, 2018).

In 2016, the CNRA released Safeguarding California: Implementation Action Plans in accordance with Executive Order B-30-15, identifying a lead agency to lead adaptation efforts in each sector (CNRA, 2016). In accordance with the 2009 California Climate Adaptation Strategy, the CEC was directed to develop a website on climate change scenarios and impacts that would be beneficial for local decision makers. The website, known as Cal-Adapt, became operational in 2011. The information provided on the Cal-Adapt website represents a projection of potential future climate scenarios comprised of local average values for temperature, sea-level rise, snowpack and other data representative of a variety of models and scenarios, including potential social and economic factors. Below is a summary of some of the potential effects that could be experienced in California as a result of global warming and climate change.

# **Temperature Increase**

The primary effect of adding GHGs to the atmosphere has been a rise in the average global temperature. The impact of human activities on global temperature is readily apparent in the observational record. Since 1895, the contiguous US has observed an average temperature increase of 1.5°F per century (National Oceanic and Atmospheric Association [NOAA], 2019). The 5-year period from 2014–2018 was the warmest on record for the contiguous U.S. (NOAA, 2019); of the top 10 hottest years on record in the U.S., seven have occurred since the year 2000, with the top six years all occurring since 2012 (Climate Central, 2022). The Fourth Assessment indicates that average temperatures in California cold rise 5.6°F to 8.8°F by the end of the century, depending on the global trajectory of GHG emissions (OPR, CEC & CNRA, 2018). According to the Cal-Adapt website, the portion of the state in which the Transit District area is

located could result in an increase in annual average maximum temperature of approximately 4.6° to 7.4°F by 2070–2090, compared to the baseline period of 1961–1990 (Cal Adapt, 2022).

With climate change, extreme heat conditions and heat waves are predicted to impact larger areas, last longer, and have higher temperatures. Heat waves, defined as three or more days with temperatures above 90°F, are projected to occur more frequently by the end of the century. Extreme heat days and heat waves can negatively impact human health. Heat-related illnesses include a spectrum of illnesses ranging from heat cramps to severe heat exhaustion and life-threatening heat stroke (Red Cross Red Climate Crescent Center [RCCC], 2019).

### Wildfires

The hotter and dryer conditions expected with climate change will make forests more susceptible to extreme wildfires. The Fourth Assessment found that if GHG emissions continue to rise, the frequency of extreme wildfires burning over approximately 25,000 acres would increase by nearly 50 percent, and the average area burned statewide each year would increase by 77 percent, by the year 2100. In the areas that have the highest fire risk, wildfire insurance is estimated to see costs rise by 18 percent by 2055 and the fraction of property insured would decrease (Westerling, 2018).

# Air Quality

Higher temperatures, conducive to air pollution formation, could worsen air quality in California and make it more difficult for the state to achieve air quality standards. Climate change may increase the concentration of ground-level ozone, which can cause breathing problems, aggravate lung diseases such as asthma, emphysema, chronic bronchitis, and cause chronic obstructive pulmonary disease, but the magnitude of the effect, and therefore, its indirect effects, are uncertain. Emissions from wildfires can lead to excessive levels of particulate matter, ozone, and volatile organic compounds (NOAA, 2022). Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (RCCC, 2019).

# **Precipitation and Water Supply**

There is a high degree of uncertainty with respect to the overall impact of global climate change on future water supplies in California. Studies indicate considerable variability in predicting precise impacts of climate change on California's hydrology and water resources. Increasing uncertainty in the timing and intensity of precipitation will challenge the operational flexibility of California's water management systems. Warmer and wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full. Conversely, reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge (CNRA, 2018).

# **Hydrology and Sea-Level Rise**

As discussed above, climate changes could potentially affect: the amount of snowfall, rainfall and snowpack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea-level rise and coastal flooding; coastal erosion; and the potential for saltwater intrusion. Sea-level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply. Sea level has risen eight to nine inches (21–24 centimeters) since 1880. In 2020, global sea level set a new record high of 91.3 mm (3.6 inches) above 1993 levels. The rate of sea level rise is accelerating; it has more than doubled from 0.06 inches (1.4 millimeters) per year throughout most of the twentieth century to 0.14 inches (3.6 millimeters) per year from 2006–2015. In many locations along the U.S. coastline, high-tide flooding is now 300 percent to more than 900 percent more frequent than it was 50 years ago. Sea level could rise as much as 8.2 feet (2.5 meters) above 2000 levels by 2100 (NOAA, 2021). Rising seas could impact transportation infrastructure, utilities, and regional industries.

The San Francisco Bay Area is one of the top hotspots for sea-level rise in the nation. The economic value of San Mateo County property at risk from sea-level rise exceeds that of any other county in the Bay Area. The assessed value of parcels in the Transit District area exposed to near-term (present-day) flooding exceeds \$1 billion, and the assessed value of parcels exposed to erosion and flooding in the long term (50 to 100 years) totals roughly \$39.1 billion. When population projections are taken into account, San Mateo County is one of six counties with more than 100,000 people in the nation (and the only one on the West Coast) that will be affected by three feet of sea-level rise (City of Redwood City, 2020a).

# **Agriculture**

California has a massive agricultural industry that represents over 13 percent of total U.S. agricultural revenue (California Department of Food and Agriculture [CDFA], 2020). Higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-use efficiency. However, a changing climate presents significant risks to agriculture due to changes in maximum and minimum temperatures, reduction of winter chill hours, extreme heat leading to additional costs for livestock cooling and losses in production, and declines in water quality, groundwater security, soil health, and pollinator species, and increased pest pressures (CNRA, 2018).

# **Ecosystems and Wildlife**

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increased concentrations of GHGs are likely to accelerate the rate of climate change. As stated in the *Safeguarding California Plan*, "species and ecosystems in California are valued both for their intrinsic worth and for the services they provide to society. Air purification, water filtration, flood attenuation, food provision, recreational opportunities such as fishing, hunting, wildlife viewing, and more are all services provided by ecosystems. These services can only be maintained if ecosystems are healthy and robust, and continue to function properly under the impacts of climate change. A recent study examined the

vulnerability of all vegetation communities statewide in California and found that 16 of 29 were highly or nearly highly vulnerable to climate change, including Western North American freshwater marsh, Rocky Mountain subalpine and high montane conifer forest, North American Pacific coastal salt marsh, and more." Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. With climate change, ecosystems and wildlife will be challenged by the spread of invasive species, barriers to species migration or movement in response to changing climatic conditions, direct impacts to species health, and mismatches in timing between seasonal life-cycle events such as species migration and food availability (CNRA, 2018).

## 13.1.3 GHG Emissions Inventories

### **U.S. GHG Emissions**

In 2019, the United States emitted about 6,558 million metric tons of CO<sub>2</sub>e (MMTCO<sub>2</sub>e), with 76 percent of those emissions coming from fossil fuel combustion for electricity, heat and transportation. Of the major sectors nationwide, transportation accounts for the highest volume of GHG emissions (approximately 29 percent), followed by electricity (25 percent), industry (23 percent), commercial and residential (13 percent), and agriculture (10 percent). Between 1990 and 2019, total U.S. GHG emissions have increased by 1.8 percent, but emissions have generally decreased since peaking in 2007 (U.S. EPA, 2021).

### State of California GHG Emissions

The California Air Resources Board (CARB) compiles GHG inventories for the state. Based on the 2019 GHG inventory data (i.e., the latest year for which data are available from CARB), emissions from GHG emitting activities statewide were 418.1 MMTCO<sub>2</sub>e (CARB, 2021a). Between 1990 and 2021, the population of California grew by approximately 10 million from 29.6 to 39.5 million (California Department of Finance [CDF], 2022a). This represents an increase of approximately 34 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from \$773 billion in 1990 to \$3.14 trillion in 2019, representing an increase of approximately 306 percent (more than three times the 1990 gross state product) in today's dollars (CDF, 2022b).

Despite the population and economic growth, CARB's 2019 statewide inventory indicated that California's net GHG emissions in 2019 were 13 MMTCO<sub>2</sub>e below 1990 levels, which is the 2020 GHG reduction target codified in California Health and Safety Code Division 25.5, also known as the Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32). **Table 13-1** identifies and quantifies statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2019. As shown in the table, the transportation sector is the largest contributor to statewide GHG emissions at approximately 39.7 percent in 2019.

TABLE 13-1
STATE OF CALIFORNIA GREENHOUSE GAS EMISSIONS

Category	Total 1990 Emissions using IPCC SAR (MMTCO₂e)	Percent of Total 1990 Emissions <sup>e</sup> SAR/AR4	Total 2019 Emissions using IPCC AR4 (MMTCO₂e)	Percent of Total 2019 Emissions
Transportation	150.7	35%/35%	166.1	39.7%
Electric Power	110.6	26%/26%	58.8	14.1%
Commercial & Residential Fuel Use	44.1	10%/10%	43.8	10.5%
Industrial	103.0	24%/24%	88.2	21.1%
Recycling and Waste <sup>a</sup>	_	_	8.9	2.1%
High GWP/Non-Specified <sup>b</sup>	1.3	<1%/<1%	20.6	4.9%
Agriculture/Forestry	23.6	6%/5%	31.8	7.6%
Forestry Sinks	-6.7		c	-
Net Total (IPCC SAR)	426.6	100% <sup>e</sup>		
Net Total (IPCC AR4) <sup>d</sup>	431	100%	418.2	100%

NOTES: IPCC = Intergovernmental Panel on Climate Change; SAR = Second Assessment Report; AR4 = Fourth Assessment Report.

SOURCES: CARB, 2007; CARB, 2021.

# 13.1.4 Bay Area GHG Emissions

Based on 2015 data, in the nine-county San Francisco Bay Area, GHG emissions from the transportation sector represented the largest source of GHG emissions at 41 percent, followed by the stationary industrial sources at 26 percent, electricity generation and co-generation at 14 percent, and fuel use (primarily natural gas) by buildings at 10 percent. The remaining 8 percent of emissions is composed of fluorinated gas emissions and emissions from solid waste and agriculture. According to the Bay Area Air Quality Management District (BAAQMD), of the total transportation emissions in 2015, on-road sources accounted for approximately 87 percent, while off-road sources accounted for the remainder (BAAQMD, 2017a).

# 13.1.5 City of Redwood City GHG Emissions

Redwood City's first generation-based GHG inventory was completed for 2005 (the baseline year). Beginning in 2010, new community GHG inventories have been completed annually, enabling Redwood City to track progress over time. In 2017, Redwood City emitted an estimated 494,944 MTCO<sub>2</sub>e from the residential, commercial, industrial, transportation, waste, and municipal sectors. In comparison to the base year of 2005, that is a 22.7 percent decrease in total community emissions (City of Redwood City, 2020a). The two largest categories of emissions are transportation (including highway travel, local travel, and off-road equipment) and building energy use (including residential and commercial/industrial). The residential and commercial/industrial sectors represent emissions that result from electricity and natural gas used in both private and

a Included in other categories for the 1990 emissions inventory.

b High global warming potential (GWP) gases are not specifically called out in the 1990 emissions inventory.

<sup>&</sup>lt;sup>c</sup> Revised methodology under development (not reported for 2019).

d CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

e Values may not total to 100% due to rounding

public sector buildings and facilities. The transportation sector includes emissions from private, commercial, and fleet vehicles driven within the City's geographical boundaries, as well as the emissions from public transit vehicles and the City-owned fleet. **Table 13-2** provides sector-by-sector summary of 2017 community-wide GHG emissions in Redwood City.

TABLE 13-2
REDWOOD CITY 2017 GHG EMISSIONS BY SECTOR

Sector	MTCO₂e
Residential Energy	68,032
Commercial/Industrial Energy	132,994
Transportation	279,087
Solid Waste	11,924
Water & Wastewater	2,908
Total	494,944

NOTE: MTCO2e = metric tons of carbon dioxide equivalent

SOURCE: City of Redwood City, 2020a

# 13.1.6 State Energy Profile

In 2019, total energy usage in California was 7,802 trillion British thermal units (Btu) (the most recent year for which these data are available), which equates to an average of 198 million Btu per capita per year. These figures place California second among the 50 states in total energy use and 50th in per-capita consumption. Of California's total energy usage, the breakdown by sector is roughly 39.4 percent transportation, 23.1 percent industrial, 18.8 percent commercial, and 18.7 percent residential. Electricity and natural gas in California are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum-based fuel consumption is generally accounted for by transportation-related energy use (United States Energy Information Administration [USEIA], 2022).

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, coal, and nuclear gas generation resources. Approximately 70 percent of the electrical power needed to meet California's demand is produced in the state; the balance, approximately 30 percent, is imported from the Pacific Northwest and the Southwest. In 2020, California's in-state electricity use was derived from natural gas (48 percent); coal (< 1 percent); large hydroelectric resources (9 percent); nuclear sources (9 percent); renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (33 percent) (CEC, 2022a).

# 13.1.7 Regional Setting

# **Electricity**

Electricity, as a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of resources—including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources—into useable energy. The delivery of electricity involves

several system components for distribution and use. Electricity is distributed through a network of transmission and distribution lines commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours. For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for one hour would be 100 watt-hours. If ten 100 W bulbs were on for one hour, the energy required would be 1,000 watt-hours or 1 kilowatt-hour (kWh). On a utility scale, the capacity of a generator is typically rated in megawatts (MW), which is 1 million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours, which is one billion watt-hours.

Pacific Gas and Electric Company (PG&E) provides electrical and natural gas services to approximately 16 million people throughout its 70,000-square-mile service area in northern and central California, from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east (PG&E, 2022a). PG&E produces and purchases energy from a mix of conventional and renewable generating sources. Approximately 31 percent of PG&E's 2020 electricity purchases were from renewable sources (PG&E, 2022b). **Table 13-3** provides a summary of electricity use in the state and PG&E service area.

TABLE 13-3
EXISTING ANNUAL STATE AND REGIONAL ENERGY USE

Source	Amount	
Electricity (State/PG&E service area) <sup>a</sup>	279,510 GWh / 78,519 GWh	
Natural Gas (State/PG&E service area) <sup>a</sup>	1,232,858,394 MMBtu / 450,746,500 MMBtu	
Gasoline (Statewide/San Mateo County)b	12,572 million gallons / 238 million gallons	
Diesel (Statewide/San Mateo County)b	4,254 million gallons / 27 million gallons	

NOTES: MMBtu = million British thermal units; MWh = megawatt-hours; PG&E = Pacific Gas and Electric Company. SOURCES: <sup>a</sup> CEC, 2022b; <sup>b</sup> CEC, 2020

## **Natural Gas**

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines. Natural gas provides almost one-third of California's total energy requirements and is measured in terms of both cubic feet and Btu.

PG&E provides natural gas conveyance services to "core" customers and to "non-core" customers (industrial, large commercial, and natural gas—fired electric generation facilities) that are connected to its gas system in its service territory. Core customers can purchase natural gas procurement service (natural gas supply) from either PG&E or non-utility third-party gas procurement service providers (referred to as "core transport agents"). When core customers purchase gas supply from a core transport agent, PG&E still provides gas delivery, metering, and

billing services to those customers. When PG&E provides both transportation and procurement services, PG&E refers to the combined service as "bundled" natural gas service.

PG&E does not provide procurement service to non-core customers, who must purchase their gas supplies from third-party suppliers. PG&E offers backbone gas transmission, gas delivery (local transmission and distribution), and gas storage services as separate and distinct services to its non-core customers. Access to PG&E's backbone gas transmission system is available for all natural gas marketers and shippers, as well as non-core customers. PG&E also delivers gas to off-system customers (i.e., outside of PG&E's service territory) and to third-party natural gas storage customers. 2020 natural gas usage for the state and the PG&E service region are also shown in Table 13-3.

# **Transportation Energy**

In 2021, 11.5 billion gallons of gasoline and 2.6 billion gallons of diesel fuel were consumed in California (CDTFA, 2022a, 2022b). Petroleum-based fuels currently account for more than 85 percent of ground transportation fuel use in California (USEIA, 2021).

The State is now working on developing flexible strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, total gasoline consumption in California has declined. According to fuel sales data from the CEC, fuel consumption in San Mateo County was approximately 238 million gallons of gasoline and 27 million gallons of diesel fuel in 2020 (CEC, 2020). Refer to Table 13-3 for a summary of statewide fossil fuel consumption in 2020.

# 13.1.8 Local Setting

The City of Redwood City aims to increase its energy efficiency and renewable energy use to help reduce communitywide GHG emissions and provides various options and incentives for homes and businesses within the City to save energy and lower GHG emissions.

Under the Community Choice Aggregation (CCA) program, San Mateo County and all 20 of its cities and towns voted unanimously to form Peninsula Clean Energy (PCE), a community-controlled, not-for-profit, joint powers agency. As a CCA, PCE offers many environmental and economic benefits to its residential and business customers. Since 2016, residents and businesses of Redwood City have the option to choose between PG&E or PCE as a provider to supply their power. PCE customers have a choice in the amount of electricity that comes from renewable energy with two different options. By default, consumers in Redwood City are enrolled in PCE's "ECOplus" option, which is made up of 50 percent renewable power and 75 percent carbon-free electricity. PCE customers can also choose to opt-up to PCE's "ECO100" made of 100 percent renewable energy (City of Redwood City, 2022). PG&E owns the power lines and is responsible for natural gas service, maintaining infrastructure, and electricity transmission and distribution to homes and businesses throughout Redwood City. Consumers can also opt to keep PG&E as their energy provider, whose energy includes approximately 30 percent renewables.

Redwood City customers are eligible for a number of energy efficiency programs, including:

- Home Upgrade Energy Upgrade California
- San Mateo County Energy Watch
- PG&E rebates and incentives
- PACE financing for energy efficiency and water conservation projects
- Electric Vehicle (EV) charging
- Solar installations
- Seismic upgrades

Go solar with Sunshares is a program administered by the Business Council on Climate Change on behalf of a coalition of Bay Area cities, municipal agencies and major employers that makes it simpler and more affordable for Bay Area residents to go solar + storage, with the goal of accelerating clean energy adoption and building regional resilience to climate change. Redwood City has been recognized as a leader in advancing solar energy by SolSmart, a U.S. Department of Energy SunShot Initiative. The City has been recognized for streamlining the solar permitting and inspection process, updating its solar codes, providing PACE financing options, and supporting Bay Area Sunshares.

# 13.2 Regulatory Setting

The regulatory setting has evolved significantly since certification of the DTPP Final EIR. The following section provides an overview of the overall regulatory context for GHG and energy, focusing on changes to the regulatory setting that have occurred since certification of the DTPP Final EIR or that relate to energy (which was not analyzed in the DTPP Final EIR). Section 13.2 of DTPP Final EIR Chapter 13, *Climate Change*, is still current for this SEIR, except as noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

# 13.2.1 Federal Regulations

### Vehicle Emissions Standards

In 1975, Congress enacted the Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are responsible for establishing additional vehicle standards. In August 2012, standards were adopted for model years 2017 through 2025 for passenger cars and light-duty trucks. According to EPA, a model year 2025 vehicle would emit half the GHG emissions of a model year 2010 vehicle (EPA and NHTSA, 2010). Notably, the State of California harmonized its vehicle efficiency standards through 2025 with the federal standards at this time (see *Advanced Clean Cars Program* below).

In August 2018, EPA and the NHTSA proposed maintaining the 2020 corporate average fuel economy (CAFE) and CO<sub>2</sub> standards for model years 2021 through 2026. The estimated CAFE

and CO<sub>2</sub> standards for model year 2020 are 43.7 miles per gallon (mpg) and 204 grams of CO<sub>2</sub> per mile for passenger cars and 31.3 mpg and 284 grams of CO<sub>2</sub> per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. In September 2019, EPA finalized the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program and announced its decision to withdraw the Clean Air Act preemption waiver granted to the State of California in 2013 (USEPA & NHTSA, 2019).

# **Energy Policy Act of 1992**

The Energy Policy Act of 1992 was enacted to reduce U.S. dependence on foreign petroleum and improve air quality. This law includes several provisions intended to build an inventory of alternative-fueled vehicles in large, centrally-fueled fleets in metropolitan areas. The Energy Policy Act of 1992 requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty alternative fuel vehicles capable of running on alternative fuels each year. Financial incentives are also included. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of alternative fuel vehicles. The Energy Policy Act of 1992 also requires states to consider a variety of incentive programs to help promote alternative-fuel vehicles.

# **Energy Policy Act of 2005**

The Energy Policy Act of 2005 includes provisions for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Executive Order 13423 (Strengthening Federal Environmental, Energy, and Transportation Management), signed in 2007, strengthens the key energy management goals for the federal government and sets more challenging goals than the Energy Policy Act of 2005. The energy reduction and environmental performance requirements of Executive Order 13423 were expanded upon in Executive Order 13514 (Federal Leadership in Environmental, Energy, and Economic Performance), which was signed in 2009.

# 13.2.2 State Regulations

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs within the State. The major components of California's climate protection initiative are reviewed below.

CARB is the agency with regulatory authority over air quality issues in California. CARB adopts regulations designed to reduce criteria pollutants, toxic air contaminants, and GHG emissions; and establishes vehicle emission standards. As discussed earlier, CARB is responsible for preparing, adopting, and updating California's GHG inventory. Additional responsibilities of CARB with respect to specific State mandates are discussed below.

### **CEQA Guidelines**

The CEQA Guidelines are embodied in the California Code of Regulations (CCR), Title 14, beginning with Section 15000. The current CEQA Guidelines Section 15064.4 states that "a lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project." Section 15064.4 further states:

A lead agency should consider the following factors, when determining the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see e.g., section 15183.5(b)).

The CEQA Guidelines also state that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of GHG emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (CEQA Guidelines Section 15064(h)(3)).

The CEQA Guidelines do not require or recommend a specific analytical method or provide quantitative criteria for determining the significance of GHG emissions, nor do they set a numerical threshold of significance for GHG emissions. Section 15064.7(c) clarifies that "when adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

When GHG emissions are found to be significant, CEQA Guidelines Section 15126.4(c) includes the following direction on measures to mitigate GHG emissions:

Consistent with Section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

- (1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision.
- (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures.
- (3) Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions.

- (4) Measures that sequester greenhouse gases.
- (5) In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.

### State of California Executive Orders

### Executive Order B-16-12

In March 2012, then-Governor Jerry Brown issued an executive order establishing a goal of 1.5 million zero-emission vehicles (ZEVs) on California roads by 2025. In addition to the ZEV goal, Executive Order B-16-12 stipulated that by 2015 all major cities in California will have adequate infrastructure and be "zero-emission vehicle ready"; that by 2020 the state will have established adequate infrastructure to support 1 million ZEVs; that by 2050, virtually all personal transportation in the state will be based on ZEVs; and that GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

### **Executive Order B-30-15**

Governor Brown signed Executive Order B-30-15 on April 29, 2015, which:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030;
- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets; and
- Directed CARB to update the Climate Change Scoping Plan (Scoping Plan) to express the 2030 target in terms of MMTCO<sub>2</sub>e.

### Executive Order B-48-18

On January 26, 2018, Governor Brown issued an executive order establishing a goal of 5 million ZEVs on California roads by 2030.

### Executive Order B-55-18

On September 10, 2018, Governor Brown signed Executive Order B-55-18, committing California to total, economy-wide carbon neutrality by 2045. Executive Order B-55-18 directs CARB to work with relevant state agencies to develop a framework to implement and accounting to track progress toward this goal.

#### Executive Order N-79-20

On September 23, 2020, Governor Newsom signed Executive Order N-79-20, which sets new statewide goals for phasing out gasoline-powered cars and trucks in California. EO N-79-20

requires that 100 percent of in-state sales of new passenger cars and trucks are to be zero-emission by 2035; 100 percent of in-state sales of medium- and heavy-duty trucks and busses are to be zero-emission by 2045 where feasible; and 100 percent of off-road vehicles and equipment sales are to be zero-emission by 2035 where feasible.

# State of California Policy and Legislation

## Assembly Bill 117 and Senate Bill 790

In 2002, the State of California passed AB 117, enabling public agencies and joint power authorities to form a Community Choice Aggregation (CCA). SB 790 strengthened it by creating a "code of conduct" that the incumbent utilities must adhere to in their activities relative to CCAs. CCAs allow a city, county, or group of cities and counties to pool electricity demand and purchase/generate power on behalf of customers within their jurisdictions in order to provide local choice. CCAs work with PG&E to deliver power to its service area. The CCA is responsible for the electric generation (procure or develop power) while PG&E is responsible for electric delivery, power line maintenance, and monthly billing.

### Senate Bills 1078 and 107

SB 1078 (Chapter 516, Statutes of 2002) required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

## Assembly Bill 32 and Senate Bill 32

As discussed in the DTPP Final EIR, the California Global Warming Solutions Act of 2006 (AB 32) required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was to be accomplished by enforcing a statewide cap on GHG emissions that would be phased in starting in 2012.

In 2016, SB 32 and its companion bill AB 197 amended Health and Safety Code Division 25.5, establishing a new climate pollution reduction target of 40 percent below 1990 levels by 2030, and included provisions to ensure that the benefits of state climate policies reach disadvantaged communities.

## Climate Change Scoping Plan

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. CARB developed and approved the initial scoping plan in 2008, outlining the regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs that would be needed to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives (CARB, 2008).

CARB approved the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update) in December 2017. The 2017 Scoping Plan Update outlines the proposed framework of action for achieving the 2030 GHG target of 40 percent reduction in GHG emissions relative to 1990 levels (CARB, 2017). Through a combination of data synthesis and modeling, CARB determined that the target statewide 2030 emissions limit is 260 MMTCO<sub>2</sub>e, and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO<sub>2</sub>e beyond current policies and programs. The cornerstone of the 2017 Scoping Plan Update is an expansion of the cap-and-trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2030 limit set forth by Executive Order B-30-15.

In the 2017 Scoping Plan Update, CARB recommends statewide targets of no more than 6 MTCO<sub>2</sub>e per capita by 2030 and no more than 2 MTCO<sub>2</sub>e per capita by 2050. CARB acknowledges that because the statewide per-capita targets are based on the statewide GHG emissions inventory that includes all emissions sectors in the state, it is appropriate for local jurisdictions to derive evidence-based local per-capita goals based on local emissions sectors and growth projections.

To demonstrate how a local jurisdiction can achieve its long-term GHG goals at the community plan level, CARB recommends developing a geographically specific GHG reduction plan (i.e., climate action plan) consistent with the requirements of CEQA Section 15183.5(b). A so-called "CEQA-qualified" GHG reduction plan, once adopted, can provide local governments with a streamlining tool for project-level environmental review of GHG emissions, provided there are adequate performance metrics for determining project consistency with the plan. Absent conformity with such a plan, CARB recommends "that projects incorporate design features and GHG reduction measures, to the degree feasible, to minimize GHG emissions. Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." While acknowledging that recent land use development projects in California have demonstrated the feasibility to achieve zero net additional GHG emissions (e.g., Newhall Ranch Resource Management and Development Plan), the 2017 Scoping Plan Update states that:

Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term GHG goals, and climate change science...To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT [vehicle miles traveled], and direct investments in GHG reductions within the project's region that contribute potential air quality, health, and economic co-benefits locally.

### Cap-and-Trade Program

Initially authorized by AB 32 and extended through the year 2030 with the passage of AB 398 (2017), the California Cap-and-Trade Program is a core strategy that the state is using to meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from

1990 levels by 2050. CARB designed and adopted the California Cap-and-Trade Program to reduce GHG emissions from "covered entities" (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 MTCO<sub>2</sub>e per year), setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve reductions. Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors. The statewide cap for GHG emissions from the capped sectors commenced in 2013. The cap declines over time. Facilities subject to the cap can trade offsets and allowances to emit GHGs.

### Senate Bill 375

Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations. The target reductions for the Bay Area are a regional reduction of per-capita GHG emissions from cars and light-duty trucks by 7 percent by 2020 and by 15 percent by 2035, compared to a 2005 baseline.

The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) address these goals in *Plan Bay Area 2040*, which identifies Priority Development Areas (PDAs) near transit options to reduce the use of on-road vehicles. By focusing and incentivizing future growth in PDAs, *Plan Bay Area 2040* demonstrates how the nine-county Bay Area can reduce per-capita CO<sub>2</sub> emissions by 16 percent by 2035 (MTC & ABAG, 2017). In a March 2018 hearing, CARB approved revised targets: to reduce per-capita emissions 10 percent by 2020 and 19 percent by 2035 (CARB, 2018a). MTC and ABAG adopted *Plan Bay Area 2050* in October 2021, but CARB has not made a determination yet on whether the plan achieves the required targets. As such, the currently applicable plan is still *Plan Bay Area 2040*.

### California Renewables Portfolio Standard (RPS)

#### Senate Bills 1078 and 107

SB 1078 (Chapter 516, Statutes of 2002) required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

### Senate Bill X 1-2

SB X 1-2, signed by Governor Brown in April 2011, enacted the California Renewable Energy Resources Act. The law obligated all California electricity providers, including investor-owned

<sup>&</sup>quot;Covered entity" means an entity in California that has one or more of the processes or operations and has a compliance obligation as specified in Sub article 7 of the Cap-and-Trade Regulation; and that has emitted, produced, imported, manufactured, or delivered in 2008 or any subsequent year more than the applicable threshold level specified in section 95812(a) of the Regulation.

<sup>&</sup>lt;sup>2</sup> 17 CCR 95800–96023.

<sup>&</sup>lt;sup>3</sup> See generally 17 CCR 95811 and 95812.

and publicly owned utilities, to obtain at least 33 percent of their energy from renewable resources by the year 2020.

#### Senate Bill 350

SB 350, the Clean Energy and Pollution Reduction Act of 2015 (Chapter 547, Statutes of 2015), was approved by Governor Brown on October 7, 2015. SB 350 increased the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased from 33 percent to 50 percent by December 31, 2030. The act requires the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in existing electricity and natural gas final end uses of retail customers by January 1, 2030.

#### Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the RPS goals that were established by SB 350 in 2015. Specifically, the law increases the percentage of energy that both investor-owned utilities and publicly owned utilities must obtain from renewable sources from 50 percent to 60 percent by 2030. Incrementally, these energy providers must also have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, because many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

## Advanced Clean Cars Program

In January 2012, pursuant to Recommended Measures T-1 and T-4 of the Scoping Plan, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZEVs. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

In response to a midterm review of the standards in March 2017, CARB directed staff to begin working on post-2025 model year vehicle regulations (Advanced Clean Cars II) to research additional measures to reduce air pollution from light-duty and medium-duty vehicles. Additionally, as described earlier, in September 2020, Governor Newsom signed Executive Order N-79-20 that established a goal that 100 percent of California sales of new passenger car and trucks be zero-emission by 2035 and directed CARB to develop and propose regulations toward this goal. The primary mechanism for achieving these targets for passenger cars and light trucks is the Advanced Clean Cars II Program.

## Mobile Source Strategy

In May 2016, CARB released the updated Mobile Source Strategy that demonstrates how the state can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next 15 years. The strategy promotes a transition to zero-emission and low-emission vehicles, cleaner transit systems and reduction of VMT. The Mobile Source Strategy calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) by 2025 and 4.2 million ZEVs by 2030. The strategy also calls for more-stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero emission trucks primarily for class 3–7 "last mile" delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions from mobile sources and a 50 percent reduction in the consumption of petroleum-based fuels (CARB, 2016).

Similar to the 2016 Mobile Source Strategy, the 2020 Strategy is a framework that identifies the levels of cleaner technologies necessary to meet the many goals and high-level regulatory concepts that would allow the State to achieve the levels of cleaner technology. The 2020 Strategy will inform the development of other planning efforts including the State Implementation Plan (SIP) which will translate the concepts included into concrete measures and commitments for specific levels of emissions reductions, the 2022 Climate Change Scoping Plan (2022 Scoping Plan Update), and Community Emissions Reduction Plans (CERPs) required for communities selected as a part of CARB's Community Air Protection Program. Central to all of these planning efforts, and CARB actions on mobile sources going forward, will be environmental justice as CARB strives to address longstanding environmental and health inequities from elevated levels of toxics, criteria pollutants, and secondary impacts of climate change (CARB, 2021b). The 2020 Mobile Source Strategy illustrates that an aggressive deployment of ZEVs will be needed for the State to meet federal air quality requirements and the State's climate change targets.

# Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted the Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling to reduce public exposure to diesel particulate matter emissions (13 CCR Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure prohibits diesel-fueled commercial vehicles from idling for more than 5 minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in GHG reduction and energy savings in the form of reduced fuel consumption from unnecessary idling.

## Airborne Toxic Control Measure for Stationary Compression Ignition Engines

In 2004, CARB adopted an Airborne Toxic Control Measure to reduce public exposure to emissions of diesel particulate matter and criteria pollutants from stationary diesel-fueled compression ignition engines (17 CCR Section 93115). The measure applies to any person who

owns or operates a stationary compression ignition engine in California with a rated brake horsepower greater than 50, or to anyone who either sells, offers for sale, leases, or purchases a stationary compression ignition engine. This measure outlines fuel and fuel additive requirements; emissions standards; recordkeeping, reporting and monitoring requirements; and compliance schedules for compression ignition engines.

## Truck and Bus Regulation

In addition to limiting exhaust from idling trucks, in 2008 CARB approved the Truck and Bus Regulation to reduce the emissions of oxides of nitrogen and particulate matter from existing diesel vehicles operating in California (13 CCR Section 2025). The phased regulation aims to reduce emissions by requiring installation of diesel soot filters and encouraging the retirement, replacement, or retrofit of older engines with newer emission-controlled models. This regulation will be implemented in phases, with full implementation by 2023.

CARB also promulgated emissions standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007, aims to reduce emissions by installing diesel soot filters and encouraging the retirement, replacement, or repowering of older, dirtier engines with newer emissions-controlled models (13 CCR Section 2449). The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

## Advanced Clean Trucks Program

On June 25, 2020, CARB adopted the Advanced Clean Trucks rule, which requires truck manufacturers to transition from diesel vehicles to electric ZEVs beginning in 2024, with the goal of reaching 100 percent ZEVs by 2045. The goal of the legislation is to help California meet its climate targets of a 40 percent reduction in GHG emissions and a 50 percent reduction in petroleum use by 2030, and an 80 percent reduction in GHG emissions by 2050.

Truck manufacturers will be required to sell ZEVs as an increasing percentage of their annual sales from 2024 through 2035. Companies with large distribution fleets (50 or more trucks) will be required to report information about their existing fleet operations in an effort to identify future strategies for increasing zero-emission fleets statewide (CARB, 2021b).

ZEVs are two to five times more energy efficient than diesel vehicles, and the Advanced Clean Trucks rule will reduce GHG emissions with the co-benefit of reducing dependence on petroleum fuels.

### Senate Bill 743

In 2013, Governor Brown signed SB 743, which added Public Resources Code Section 21099 to CEQA. SB 743 changed the way that transportation impacts are analyzed under CEQA, better aligning local environmental review with statewide objectives to reduce GHG emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl development, and reduce VMT in California.

As required under SB 743, OPR developed potential metrics to measure transportation impacts that may include, but are not limited to, VMT, VMT per capita, automobile trip generation rates, or automobile trips generated. The new VMT metric is intended to replace the use of automobile delay and level of service as the metric to analyze transportation impacts under CEQA.

In its 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA*, OPR recommends different thresholds of significance for projects depending on land use types (OPR, 2018).

## Senate Bill 1383 (Short-Lived Climate Pollutants)

SB 1383, enacted in 2016, requires statewide reductions in short-lived climate pollutants across various industry sectors. The climate pollutants covered under SB 1383 include methane, fluorinated gases, and black carbon—all GHGs with a much higher warming impact than CO<sub>2</sub> and with the potential to have detrimental effects on human health. SB 1383 requires CARB to adopt a strategy to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The methane emissions reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025.

## Assembly Bill 341

AB 341, which became law in 2011, established a new statewide goal of 75 percent recycling through source reduction, recycling, and composting by 2020. The new law changed the way that the state measures progress toward the 75 percent recycling goal, focusing on source reduction, recycling, and composting. AB 341 also requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The purpose of the law is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and expand the opportunity for additional recycling services and recycling manufacturing facilities in California (California Department of Resources Recycling and Recovery, 2020).

## Assembly Bill 1826

AB 1826, known as the Commercial Organic Waste Recycling Law, became effective on January 1, 2016, and requires businesses and multi-family complexes (with five units or more) that generate specified amounts of organic waste (compost) to arrange for organics collection services. The law phases in the requirements on businesses with full implementation realized in 2019:

- **First Tier:** Commenced in April 2016, the first tier of affected businesses included those that generate 8 or more cubic yards of organic materials per week.
- **Second Tier:** In January 2017, the affected businesses expanded to include those that generate 4 or more cubic yards of organic materials per week.
- Third Tier: In January 2019, the affected businesses expanded further to include those that generate 4 or more cubic yards of commercial solid waste per week.

# State of California Building Codes

## California Building and Energy Efficiency Standards (Title 24)

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although the standards were not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and non-residential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The current Title 24, Part 6 standards (2019 standards; CEC, 2018) were made effective on January 1, 2020.

On August 11, 2021, the CEC adopted the 2022 Energy Code and was approved by the California Building Standards Commission for inclusion into the California Building Standards Code (CEC, 2021). The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for or after January 1, 2023, must comply with the 2022 Energy Code. The 2022 Update includes measures that will reduce energy use in single family, multifamily, and nonresidential buildings. These measures will affect newly constructed buildings and:

- Add new prescriptive and performance standards for electric heat pumps for space conditioning and water heating, as appropriate for the various climate zones in California;
- Require photovoltaic and battery storage systems for newly constructed multifamily and selected nonresidential buildings;
- Establish efficiency measures for lighting, building envelope, HVAC, and ventilation for indoor air quality; and
- Make improvements to reduce the energy loads of certain equipment covered by (i.e., subject
  to the requirements of) the Energy Code that perform a commercial process that is not related
  to the occupant needs in the building (such as refrigeration equipment in refrigerated
  warehouses, or air conditioning for computer equipment in data processing centers).

## California Green Building Standards Code

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution-emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment. CALGreen covers a number of fields, with regulations encompassing energy efficiency, water conservation, sustainable building materials, site design, and air quality.

Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state. Such mandatory measures include energy efficiency, water

conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code is reviewed and updated on a three-year cycle.

The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and non-residential uses; the new measures took effect on January 1, 2020 (California Building Standards Commission [CBSC], 2019). The 2019 standards prescribe EV charging requirements for residential and non-residential buildings.

The 2022 CALGreen update simplifies the code and its application in several ways. It offers new voluntary prerequisites for builders to choose from, such as battery storage system controls and heat pump space, and water heating, to encourage building electrification. While the 2019 CALGreen Code only requires provision of EV Capable spaces with no requirement for chargers to be installed at multifamily dwellings, the 2022 CALGreen code mandates chargers (California Housing and Community Development, n.d.).

# **Regional Regulations and Plans**

The BAAQMD is the regional government agency that regulates stationary sources of air pollution in the nine San Francisco Bay Area counties. BAAQMD regulates GHG emissions through the following plans, programs, and guidelines.

### BAAQMD Clean Air Plan

BAAQMD and other air districts prepare clean air plans in accordance with the federal and state Clean Air Acts. On April 19, 2017, the BAAQMD Board of Directors adopted the 2017 *Clean Air Plan: Spare the Air, Cool the Climate*, an update to the 2010 Clean Air Plan (BAAQMD, 2017a). The 2017 Clean Air Plan is a comprehensive plan that focuses on the closely related goals of protecting public health and protecting the climate. Consistent with the State's GHG reduction targets, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

## **BAAQMD Climate Protection Program**

BAAQMD established a climate protection program (Program) to reduce pollutants that contribute to global climate change and affect air quality in the San Francisco Bay Area Air Basin. The Program is focused on meeting the 2050 target, as the 2017 Clean Air Plan discussed above is focused on the interim 2030 target. The Program includes measures that promote energy efficiency, reduce VMT, and develop alternative sources of energy, all of which assist in reducing GHG emissions and reducing air pollutants that affect the health of residents. BAAQMD also seeks to support other climate protection programs in the region and to stimulate additional efforts through public education and outreach, technical assistance to local governments and other interested parties, and promotion of collaborative efforts among stakeholders.

### BAAQMD CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines were prepared to assist in the evaluation of air quality impacts of projects and plans proposed in the Bay Area. The guidelines also include

recommended assessment methodologies for air toxics, odors, and GHG emissions. In June 2010, BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of the BAAQMD CEQA Guidelines, which included significance thresholds for GHG emissions based on the emission reduction goals for 2020 articulated by the California Legislature in AB 32. The first threshold, 1,100 MTCO<sub>2</sub>e per year, is a numeric emissions level below which a project's contribution to global climate change would be less than cumulatively considerable. For larger and mixed-use projects, the guidelines state that emissions would be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 MTCO<sub>2</sub>e per service population or better. Because these thresholds are based on a 2020 GHG target they are no longer relevant for current and future projects. Under the current BAAQMD Air Quality Guidelines, a local government may prepare a qualified GHG reduction strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG reduction strategy and general plan that addresses the project's GHG emissions, it can be presumed that the project will not have significant GHG emissions under CEQA (BAAQMD, 2017b).

In April 2022, in response to SB 32 and 2017 Scoping Plan Update targets for 2030 and EO B-15 target for carbon neutrality no later than 2045, the BAAQMD adopted new CEQA significance thresholds for GHGs and published a Justification Report (BAAQMD, 2022).

### Plan Bay Area

The MTC is the federally recognized Metropolitan Planning Organization for the nine-county Bay Area, which includes San Mateo County and the city of Redwood City. On July 18, 2013, Plan Bay Area was jointly approved by ABAG's Executive Board and the MTC. The plan includes the region's Sustainable Communities Strategy, as required under SB 375, and the 2040 Regional Transportation Plan. The Sustainable Communities Strategy lays out how the region will meet GHG reduction targets set by CARB. CARB's current targets call for the region to reduce per-capita vehicular GHG emissions 10 percent by 2020 and 19 percent by 2035 from a 2005 baseline (CARB, 2018b).

A central GHG reduction strategy of Plan Bay Area is the concentration of future growth in PDAs and Transit Priority Areas (TPAs). To be eligible for PDA designation, an area must be within an existing community, near existing or planned fixed transit or served by comparable bus service and planned for more housing. A TPA is an area within 0.5 miles of an existing or planned major transit stop such as a rail transit station, a ferry terminal served by transit, or the intersection of two or more major bus routes (MTC, 2013).

On July 26, 2017, MTC adopted *Plan Bay Area 2040*, a focused update that builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate key economic, demographic, and financial trends since the original plan was adopted (MTC & ABAG, 2017).

On October 21, 2021, the MTC and the Executive Board of the ABAG jointly adopted Plan Bay Area 2050 and its related supplemental reports. Plan Bay Area 2050 connects the elements of housing, the economy, transportation and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face of unexpected

challenges. In the short-term, the plan's Implementation Plan identifies more than 80 specific actions for MTC, ABAG and partner organizations to take over the next five years to make headway on each of the 35 strategies (MTC & ABAG, 2021). The Transit District area is located within both a PDA and a TPA. It will be several years before the regional transportation model and county transportation models are updated to reflect Plan Bay Area 2050 (the models currently incorporate data from Plan Bay Area 2040).

# 13.2.3 Local Regulations and Plans

## **Redwood City General Plan**

Goals, policies and programs related to GHGs, energy conservation and sea level rise in the current 2010 Redwood City General Plan (City of Redwood City, 2010) were included in the DTPP Final EIR. There have been no changes to them since the DTPP Final EIR.

## **Redwood City Climate Action Plan**

The City of Redwood City *Climate Action Plan* (CAP; City of Redwood City, 2020a) was developed as the community's roadmap for addressing climate change and increasing resiliency in adapting to the impacts of climate change. In California, aggressive climate change goals have been set by the State to curb GHG emissions, with local governments implementing much of the policy. The CAP establishes the goal of reducing carbon emissions 50 percent below 2005 levels by 2030, an interim step toward the ultimate goal of achieving carbon neutrality well before 2045. The CAP identifies 33 quantifiable emissions reduction measures in four sectors for Redwood City to reduce GHG emissions to achieve the 2030 and 2045 targets:

- Transportation & Land Use Strategies aim to encourage public transit use, change
  commuting habits, and promote transit-oriented land use planning to help reduce GHG
  emissions by reducing the number of miles driven by single passenger vehicles, and
  increasing housing near transit.
- Energy & Water Strategies address energy that is used in community and public facilities, as well as in water treatment and transportation and provide opportunities to reduce energy use, shift from natural gas to electricity, and reduce water consumption.
- **Solid Waste** This includes emissions from solid waste generation and disposal. The primary goal is to reduce emissions by encouraging the community to reduce waste. The secondary goal is to divert it from the landfill through recycling and composting.
- Food & Consumption This includes the goods and services bought from outside San Mateo County. This strategy explores how to reduce food waste, shop local, and curb unnecessary air travel.

# **Redwood City Reach Codes**

Reach Codes are amendments to the Energy and Green Building Standards Codes to reduce GHGs. Adopting Reach Codes create opportunities for local governments to lead initiatives on climate change solutions, clean air, and renewable energy. In September 2020, the Redwood City Council approved the Reach Codes ordinance (Ordinance No. 2487; City of Redwood City,

2020b) that mandates electrification, solar readiness of buildings, provision of EV charging infrastructure, and energy efficiency for all new construction projects. The Reach Codes establish higher standards for new construction to provide environmental and health benefits to the community. The Redwood City Reach Codes focus on new residential, commercial, and multifamily buildings that will be seeking building permits after December 9, 2020. The ordinance does not apply to additions or alterations.

Specifically, the Reach Codes requires all new construction to be all-electric buildings with no natural gas or propane plumbing installed within the building. The Codes allow for certain exceptions subject to the discretion of the City's Community Development and Transportation Department. Exceptions to the all-electric requirement may be granted to accessory dwelling units, non-residential buildings constructed to Office of Statewide Health Planning and Development Hospital standards, factories/industrial buildings, high-hazard buildings, scientific laboratory areas, commercial kitchens, and new residential structures that designate 100 percent of the dwelling units to be affordable. In addition, the Reach Codes include mandatory requirements for solar ready buildings and EV charging infrastructure, with certain exceptions (City of Redwood City, 2020b).

# **Redwood City Transportation Demand Management Ordinance**

In December 2021, the City adopted a Transportation Demand Management (TDM) ordinance. The TDM ordinance requires all new development in the City that meet specified development thresholds (generally 25 or more units and/or 10,000 square feet or more commercial development, including offices development) to develop a TDM plan and requires annual monitoring with financial incentives to meet specified targets. This ordinance would further reduce VMT from development allowed under the proposed Transit District DTPP Amendments by incentivizing reduced vehicle trips and increased multimodal trips.

# 13.3 Impacts and Mitigation Measures

# 13.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe climate change impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the DTPP Final EIR, certified in 2011.

# **GHG Impacts**

GHG emissions and global climate change represent cumulative impacts from human activities and development projects locally, regionally, statewide, nationally, and worldwide. GHG emissions from all of these sources cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the combination of GHG emissions from past, present, and future projects around the world have contributed and will continue to contribute to global climate change and its associated environmental impacts. There are currently no established

thresholds for assessing whether the GHG emissions of a project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA, 2008), GHG emissions impacts must also be evaluated on a project-level under CEQA. The method for evaluating GHG impacts in this SEIR uses a qualitative consistency determination of the proposed Transit District DTPP Amendments with the BAAQMD's adopted project-level GHG thresholds as discussed below. This evaluation is considered in a cumulative context, and because the analysis of GHG emissions is only relevant in a cumulative context, a project-specific impact assessment is not required.

## Impact on Sea Level Rise

The DTPP Final EIR identified potential flooding due to sea level rise as a potentially significant impact. However, California Supreme Court's decision in California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (2015) confirmed that CEQA, with several certain exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Consequently, the sea level rise assessment in this SEIR focuses on whether the proposed Transit District DTPP Amendments may exacerbate the effects of sea level rise.

# **Energy Impacts**

Significance criteria for the evaluation of energy impacts were introduced to Appendix G of the CEQA Guidelines in 2018. Therefore, energy impacts were not analyzed in the DTPP Final EIR and would be considered new impacts not previously identified in the DTPP Final EIR. The analysis presented below provides a qualitative assessment of whether energy use associated with development allowed under the proposed Transit District DTPP Amendments would result in wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

# 13.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- e) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- f) conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases; or
- g) cause wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- h) conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

In addition, because the DTPP Final EIR analyzed impacts related to climate change, including sea level rise, this SEIR considers the following additional criterion. The proposed Transit District DTPP Amendments would result in a significant impact to climate change if it would:

exacerbate impacts related to sea level rise.

The CEQA Guidelines do not prescribe specific methods for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methods and thresholds of significance consistent with various factors prescribed by CEQA Guideline 15064.4. The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor's Office of Planning and Research's Technical Advisory, titled Discussion Draft CEQA and Climate Change Advisory (OPR, 2018), states that:

[N]either the CEOA statute nor the CEOA Guidelines prescribe thresholds of significance or particular methodologies for perming an impact analysis. This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable. Even in the absence of clearly defined thresholds for GHG emissions, such emissions must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact.

Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice." Section 15064.7(c) of the CEQA Guidelines specifies that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

### GHG Emissions

As discussed earlier, in April 2022, the BAAQMD adopted new GHG significance thresholds to address SB 32's GHG reduction goal for 2030 and the State carbon neutrality goal for 2045, as stipulated in Executive Order B-55-18.

As lead agency, the city has discretion to choose thresholds of significance, including thresholds adopted or recommended by other agencies or recommended by experts, such as those recommended by the BAAQMD, provided the lead agency's decision to use such thresholds is supported by substantial evidence (OPR, 2018). Given absence of adopted guidance or established thresholds of significance from the City with respect to SB 32, the GHG impacts of the proposed Transit District Amendments are evaluated in this SEIR based on the BAAQMD's recommended significance thresholds for GHG emissions adopted in April 2022 as part of its CEQA Guidelines Update. These thresholds address the SB 32 GHG reduction target and the EO-B-55-18 carbon neutrality goal by 2045 and represent the most recent and best available science

and information about GHG thresholds. The BAAQMD has also published the Justification Report for their new GHG thresholds (BAAQMD, 2022).

The recommended <u>plan-level</u> GHG thresholds adopted by the BAAQMD are as follows:

- A. Meet State's goals to achieve emissions 40 percent below 1990 levels by 2030, and carbon neutrality by 2045; OR
- B. Be consistent with a local GHG Reduction Strategy that meets the criteria under CEQA Guidelines section 15183.5(b).

The recommended <u>project-level</u> GHG thresholds adopted by the BAAQMD are as follows:

- A. Projects must include, at a minimum, the following project design elements:
  - 1. Buildings
    - a. The project will not include natural gas appliances or natural gas plumbing (in both residential and non-residential development)
    - b. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

### 2. Transportation

- a. Achieve compliance with EV requirements in the most recently adopted version of CALGreen Tier 2
- b. Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent)

OR

Meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:

- i. Residential projects: 15 percent below the existing VMT per capita
- ii. Office projects: 15 percent below the existing VMT per employee
- iii. Retail projects: no net increase in existing VMT

OR

B. Be consistent with a local GHG Reduction Strategy that meets the criteria under the CEQA Guidelines section 15183.5(b).

The BAAQMD has developed these thresholds of significance based on typical residential and commercial land use projects and typical long-term communitywide planning documents such as general plans and similar long-range development plans and would be applicable to future projects proposed under the Transit District Amendments. The BAAQMD's adopted plan-level thresholds consider planning documents to have a less-than-significant climate impact if they

demonstrate that GHG emissions from the jurisdiction will decline in accordance with California's GHG reduction targets of 40 percent below 1990 levels by 2030 and carbon neutrality by 2045 with the full implementation of the plan. This BAAQMD threshold merely reiterates the GHG reduction and carbon neutrality goals adopted by the State but does not provide a mechanism or metrics for plans to evaluate consistency with these goals. To ensure consistency with State goals, project-level thresholds have been used for this analysis. Specifically, option (A) of the project-level thresholds is used as the significance threshold in this SEIR. Applying the BAAQMD's adopted project-level thresholds to the proposed Transit District Amendments in this SEIR evaluates the capacity for all future projects proposed for development under the Transit District Amendments to contribute their fair share GHG emission reductions to achieving the State's goals to achieve emissions 40 percent below 1990 levels by 2030 and carbon neutrality by 2045, as stipulated in BAAQMD's adopted plan-level threshold (A). This is the same logic that the BAAQMD is employing to determine the significance of project-level GHG emissions. In other words, if all future projects proposed for development under the Transit District Amendments consume no natural gas (1)(a), avoid wasteful, inefficient, or unnecessary electrical usage (1)(b), comply with EV requirements in CALGreen Tier 2 (2)(a), and achieve the SB 743 target of 15 percent reduction in VMT per capita below the regional average (2)(b), then collectively all projects would a have less-than-significant impact on climate change and would be consistent with the statewide targets for 2030 and 2045. The BAAQMD has provided the required substantial evidence for this argument in their justification report (BAAQMD, 2022). To summarize,

If a project is designed and built to incorporate these design elements, then it will contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an agency reviewing the project under CEQA can conclude that the project will not make a cumulatively considerable contribution to global climate change. If the project does not incorporate these design elements, then it should be found to make a significant climate impact because it will hinder California's efforts to address climate change.

Thus, the proposed Transit District DTPP Amendments itself would a have less-than-significant impact on climate change.

In summary, for purposes of this SEIR, a significant GHG impact would be identified if development allowed under the proposed Transit District Amendments does not incorporate the following performance standards adopted by the BAAQMD:

- 1. No natural gas to all projects proposed for development within the Transit District area;
- 2. Avoid wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines;
- 3. Compliance with EV requirements in the most recently adopted version of CALGreen Tier 2; and
- 4. Consistency with the SB 743 target of at least 15 percent reduction in VMT per capita below regional average. This amounts to 10.5 miles per resident and 15.0 miles per employee,

which is 85 percent of the baseline countywide average of 12.3 miles per resident and 17.6 miles per employee.

# Consistency with Plans, Policies, and Regulations for GHG Reduction

GHG impacts are also evaluated by assessing whether the proposed Transit District DTPP Amendments conflict with applicable GHG reduction strategies and local actions approved or adopted by CARB, SCAG, and the County. The 2017 Scoping Plan Update, ABAG's Plan Bay Area 2040, the City of Redwood City Climate Action Plan, and City General Plan policies and goals all apply to the proposed Transit District DTPP Amendments and all are intended to reduce GHG emissions to meet the Statewide targets set forth in AB 32, as amended by SB 32. Thus, the significance of the proposed Transit District DTPP Amendments' GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the proposed Transit District DTPP Amendments would conflict with applicable plans, policies, regulations adopted for the purpose of reducing GHG emissions, including CARB's 2017 Scoping Plan Update, SB 37 and E-3-05, Plan Bay Area 2040, the City of Redwood City Climate Action Plan, and the CALGreen Code and City Green Building Codes.

# Consumption of Energy Resources and Consistency with Plans, Policies and Regulations for Energy

The analysis of energy impacts considers the State CEQA Guidelines Appendix G thresholds, as described above, in determining whether the proposed Transit District DTPP Amendments would result in the inefficient, wasteful, or unnecessary use of energy. The evaluation is based on a review of regulations and determining their applicability to the proposed Transit District DTPP Amendments. As discussed earlier, there are several plans and policies at the federal, state and local levels to increase energy conservation and the use of renewable energy. Consistency of the proposed Transit District DTPP Amendments with these regulations would also ensure that energy use associated with the proposed Transit District DTPP Amendments would not result in the inefficient, wasteful, or unnecessary use of energy. Therefore, impacts with respect to both energy criteria are discussed together.

### Sea Level Rise

Sea level rise and the related potential for increased flooding are impacts of climate change from increased GHG emissions. The proposed Transit District DTPP Amendments would have a significant impact if resulting GHG emissions or other features of the project would exacerbate effects of sea level rise. GHG emissions would not exacerbate effects of sea level rise if GHG impacts as determined with respect to Appendix G significance criteria (a) and (b) are found to be less than significant.<sup>4</sup>

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<sup>&</sup>lt;sup>4</sup> As noted earlier, the first two criteria included in Appendix G of the State CEQA Guidelines for this topic ask whether the project would (a) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or (b) conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

# 13.3.3 Impacts and Mitigation Measures

Overall, even with changes to the regulatory requirements addressing GHGs and recommended significance thresholds, impacts of the proposed Transit District DTPP Amendments to climate change would be similar to the DTPP Final EIR. Impacts related to sea level rise would be reduced compared to the DTPP Final EIR. Impacts related to energy use and conservation discussed below were not evaluated in the DTPP Final EIR.

Impact CC-1: Implementation of the proposed Transit District DTPP Amendments would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (Significant and Unavoidable with Mitigation)

### **DTPP Impact Summary**

The DTPP Final EIR found that GHG emissions generated by the implementation of the DTPP would be less than the BAAQMD's then applicable threshold of 4.6 MTCO<sub>2</sub>e per service population and would therefore result in a *less than significant* impact.

### **Project Impacts**

GHG emissions from development allowed as part of the Transit District DTPP Amendments would result in both direct and indirect emissions from construction and operational activities. Direct GHG emissions would be generated during construction would include emissions from the combustion of fuel (e.g., gasoline and diesel) in construction equipment and vehicles. Indirect GHG emissions during construction would be generated from electricity used to power any electric construction equipment, lighting at construction sites and for conveyance of water used for dust suppression activities. Upon completion of construction, development projects would generate direct GHG emissions from area sources (such as landscaping equipment) and on-road motor vehicle trips. No direct GHG emissions would be generated from energy use in buildings for space and water heating because the City's Reach Codes require all new construction, with certain exceptions, to be all-electric buildings with no natural gas infrastructure. Indirect operational GHG emissions would be generated from the increase in electricity use associated with building energy use along with water and wastewater treatment and conveyance.

For the evaluation of GHG impacts, the BAAQMD's adopted GHG thresholds address the two main direct sources of GHG emissions in land use development projects: building energy use and motor vehicle trips.

### **Compliance with No Natural Gas Requirement**

As detailed in the Regulatory Setting, the City of Redwood City has adopted Reach Codes as part of Ordinance 2487. Reach Codes are amendments to the Energy and Green Building Standards Codes to reduce GHG emissions and include requirements beyond those required by the current Energy Code. Reach Codes adopted by the City of Redwood City include a requirement for all buildings seeking building permits after December 9, 2020 to be "all-electric buildings." An "all-electric" building as defined in Section 9.250 of Ordinance 2487 is a building that has no natural gas or propane plumbing installed within the building and that uses electricity as the

source of energy for its space conditioning, water heating (including pools and spas), cooking and clothes drying appliances. These Reach Codes go beyond the requirements in the 2022 Update to the Title 24 standards that will go into effect on January 1, 2023. The Title 24 standards establish electric-ready requirements in new homes, but do not explicitly prohibit natural gas. Exceptions to the all-electric requirement may be granted, subject to the discretion of the City's Community Development and Transportation Department, for accessory dwelling units, non-residential buildings constructed to Office of Statewide Health Planning and Development Hospital standards, scientific laboratory areas, commercial kitchens, and new residential structures that designate 100 percent of the dwelling units to be affordable.

## Avoid wasteful, inefficient, or unnecessary electrical usage

As discussed under Impact CC-3 below, development in the Transit District area would not result in wasteful, inefficient, or unnecessary use of electricity. Compliance with the all-electric requirement in the City's Reach Codes and Tier 2 EV Requirements in CALGreen discussed below would result in an increase in electricity use; however, as these requirements are in place to ensure that development proposed in the Transit District area and the region's compliance with the State's GHG reduction goals, the increase would not be considered wasteful, inefficient or unnecessary. In addition, the Reach Codes also include requirements for onsite photovoltaic systems to offset part of this increase. Compliance with Title 24 energy efficiency standards and the inherent location of the Transit District area in close proximity to transit facilities would also ensure that electricity usage associated with development in the Transit District area would not be wasteful, inefficient or unnecessary.

Future development proposed as part of the Transit District DTPP Amendments would be served by PCE, a CCA that provides electricity with at least 50 percent and up to 100 percent from renewable resources. Although using a CCA does not affect the amount of electricity used, the purpose of this requirement is to reduce electricity-related GHG emissions, which a CCA would lessen or avoid independent of the amount of electricity consumed.

### Compliance with Tier 2 EV Requirements in CALGreen

The 2019 California Green Building Standards Code ("CALGreen", Title 24, Part 11) requires that new construction and major alterations include "EV Capable" parking spaces which have electrical panel capacity, a dedicated branch circuit, and a raceway to the EV parking spot to support future installation of charging stations. All new construction and qualifying additions or alterations must comply with mandatory 2019 CALGreen requirements.

In addition to the mandatory requirements, the 2019 CALGreen Code encourages local jurisdictions to raise the sustainable goals by publishing two "voluntary" tiers of additional requirements, referred to as Tier 1 and Tier 2. Tier 1 adds additional requirements beyond the mandatory measures. Tier 2 further increases the requirements. The CALGreen tiers are only mandatory where local ordinances have specifically adopted them. Tier 2 EV requirements for residential uses include the provision of at least 20 percent of the total parking spaces as "EV

Capable."<sup>5</sup> For non-residential uses, CALGreen Tier 2 requires 10 to 20 percent of the total parking spaces to be EV Capable depending on the number of parking spaces provided.

In October 2021, the CEC approved the 2022 CALGreen Building Standards Code which added to the 2019 CALGreen mandatory requirements. The 2022 CALGreen Code does not change the EV Capable percentages required for voluntary Tier 2 from the 2019 standards, but adds the requirement for chargers to be installed. For example, for multifamily buildings with 20 or more units, the 2022 CALGreen Code Tier 2 requires 15 percent of total parking spaces to have EVCS (Electric Vehicle Charging Stations) (California Housing and Community Development, n.d.).

As part of the Reach Codes, the City has adopted requirements beyond mandatory 2019 CALGreen requirements. Multifamily residential buildings with more than 20 dwelling units are required to have at least 25 percent of the parking spaces to be Level 2 EV Ready<sup>6</sup> with the remaining 75 percent required to be Level 1 EV Ready<sup>7</sup>. For non-residential buildings with more than 10 parking spaces, 10 percent of the total spaces are required to be equipped with Level 2 EVCS, 10 percent are required to be Level 1 EV Ready and 30 percent are required to be EV capable. These requirements in the City's Reach Codes exceed the EV Capable requirements set forth in the 2019 CALGreen Tier 2 standards. However, the City Reach Codes would not be consistent with 2022 CALGreen Tier 2 and may not be consistent with future CALGreen updates. According to the BAAQMD's adopted GHG thresholds, subsequent projects in the Transit District area would be required to show compliance with EV requirements in the version of CALGreen Tier 2 adopted at the time of project review. As discussed earlier, the CALGreen standards will continue to be updated on a triennial basis with evolving requirements for EV charging. Therefore, compliance with requirements in the City's Reach Codes would not ensure compliance with Tier 2 CALGreen requirements in future updates.

# Consistency with SB 743 VMT Reduction Target of 15 percent below the regional average

As detailed earlier, with the adoption of SB 743, the State of California changed the method of traffic analysis required through CEQA for publicly- and privately-initiated projects. SB 743 requires project reviews under CEQA to evaluate the transportation impacts of new developments in terms of VMT, rather than on-road congestion and automobile delay. Based on the County's travel demand forecasting model, the analysis in Chapter 9, *Transportation and Circulation*, estimates the VMT per capita generated by the Transit District area to be 8.1 miles per resident and 11.4 miles per employee, although these results are conservative, as they do not incorporate trip reductions as a result of the City's TDM ordinance. The Countywide average is estimated to be 12.3 miles per resident and 17.6 miles per employee.

<sup>&</sup>lt;sup>5</sup> "EV Capable" refers to a parking space that is linked to a listed electrical panel with sufficient capacity to provide at least 110/120 volts and 20 amperes to the parking space.

<sup>6 &</sup>quot;Level 2 EV Ready" refers to a parking space served by a complete electrical circuit with 208/240 volt, 40-ampere capacity. The electric circuit would have sufficient capacity to support EV charging in the future when it is linked to the EV Ready space.

<sup>&</sup>quot;Level 1 EV Ready" refers to a parking space served by, but not linked to a complete electrical circuit with a minimum of 110/120 volt, 20 ampere capacity.

Based on these findings, the VMT generated per capita with the implementation of the proposed Transit District Amendments is 34 percent below the countywide average VMT per resident and 35 percent below the countywide average VMT per employee. Therefore, the proposed Transit District Amendments would exceed the 15 percent requirement stipulated in the BAAQMD's adopted GHG threshold for VMT.

Because compliance with the City's Reach Codes allows exceptions to the No Natural Gas standard, and does not ensure compliance with future updates to the CALGreen Tier 2 EV requirements, the proposed Transit District DTPP Amendments would not comply with BAAQMD's adopted GHG thresholds, and thus would result in a new *potentially significant* impact that was not identified in the DTPP Final EIR, requiring mitigation.

# Mitigation Measure CC-1: Enforce No Natural Gas Requirement and Require Compliance with EV Requirements in CALGreen Tier 2.

Subsequent development projects proposed as part of the Transit District DTPP Amendments shall not be eligible for exceptions from the "all electric" requirement in the City's Reach Codes, and shall comply with EV requirements in the most recently adopted version of CALGreen Tier 2 at the time that a building permit application is filed.

Significance After Mitigation: With the implementation of Mitigation Measure CC-1, all future projects proposed for development within the Transit District area would be consistent with the BAAQMD's adopted GHG significance thresholds. Compliance with these thresholds would mean that these projects would not generate GHG emissions either directly or indirectly, that would have a significant impact on the environment. However, as explained above, the City's Reach Codes, adopted in September 2020, allow for certain exceptions to the no-natural gas requirement, including for affordable housing and commercial kitchens. While Mitigation Measure CC-1 would disallow these exceptions within the Transit District area, this mitigation measure may not be feasible for economic or other reasons. As detailed in the staff report for the September 14, 2020, City Council meeting, in order for local communities to adopt local amendments to state energy-related codes, "the additional requirements must be cost effective pursuant to [California] Public Resources Code 25402."8 The staff report explains that the California Energy Commission "considers an energy efficiency measure cost effective if the total utility savings over the estimated useful life of the energy efficiency measure exceeds the difference of costs between the measure and the base line measure of mixed-fuel energy usage. For example, requiring all-electric space conditioning in single-family homes would be considered cost effective, if the total utility savings over 30 years exceeds the additional cost of the all-electric equipment when compared to the cost of a natural gaspowered space conditioner."

In developing the Reach Codes, staff relied on widely cited studies conducted by Southern California Edison Company in coordination with PG&E, and conducted community and stakeholder outreach, and also considered Reach Codes adopted by other cities. In regard to commercial kitchens, the staff report explained that restaurant industry professionals had expressed concern about the current heat limitations of all-electric commercial cooking equipment and potential increased costs, particularly in light of the effect that the COVID-19 pandemic has had on the restaurant industry. Staff also noted

This requirement is pursuant to Public Resources Code Section 25402.1(h)(2).

that a number of other local cities have provided for similar exceptions. Regarding affordable housing, the staff report explained that funding sources for affordable housing developments—notably, tax credits—are subject to a maximum allowable cost per unit, meaning that added costs of electric space heating could render such projects ineligible for funding. Staff opined that this would encourage developers to exceed the City's Affordable Housing Ordinance requirements and provide units at deeper affordability levels than they might otherwise. Staff also noted that this exception would not preclude fully electric affordable housing and that affordable housing developers would be encouraged to explore this possibility.

In summary, the City Council adopted the Redwood City Reach Codes as local policy following staff's extensive outreach, consideration of other examples, and public input. Because the Redwood City Reach Codes are less than two years old, and are, as such, a recently adopted statement of City policy, this SEIR considers that the full implementation of Mitigation Measure CC-1 may not be feasible. Accordingly, this impact is conservatively determined to be *significant and unavoidable with mitigation*.

Impact CC-2: Implementation of the proposed Transit District DTPP Amendments would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (Significant and Unavoidable with Mitigation)

### **DTPP Impact Summary**

The DTPP Final EIR did not explicitly analyze consistency of the DTPP with plans, policies, and regulations applicable at the time of review for the purpose of reducing GHG emissions. The analysis concluded that the DTPP would generate emissions less than the BAAQMD's threshold at the time for consistency with the State's GHG reduction goals for 2020.

## **Project Impacts**

### CARB 2017 Scoping Plan Update, SB 32 and EO S-3-05

The 2017 Scoping Plan Update adopted by CARB establishes the framework for achieving the 2030 statewide GHG reduction target of 40 percent below 1990 levels. The 2017 Scoping Plan Update includes local actions that land use development projects and municipalities can implement to support the statewide goal. The 2017 Scoping Plan Update also illustrates in Figure 5 that achieving the 2030 target is consistent with progress toward achieving the 2050 level included in EO S-3-05 and that depending on the success in achieving the 2030 target, it may be possible to achieve the 2050 target earlier than EO S-3-05 (CARB, 2017). The BAAQMD's adopted project-level GHG CEQA thresholds are designed to demonstrate consistency with CARB's 2017 Scoping Plan Update and the statewide goal of carbon neutrality by 2045 pursuant to EO B-55-13 for new projects and plans. As described under Impact CC-1, with the implementation of Mitigation Measure CC-1, the proposed Transit District Amendments would be consistent with all four design elements included in BAAQMD's adopted GHG thresholds. Therefore, implementation of the proposed Transit District Amendments would also be consistent with the statewide emissions reduction goal for 2030 required by SB 32 and achieved through the 2017 Scoping Plan Update.

The 2017 Scoping Plan Update incorporates a broad array of regulations, policies, and state plans designed to reduce GHG emissions. Those that are applicable to the construction and operation of development proposed under the Transit District DTPP Amendments are listed in **Table 13-4**. Actions, plans, and programs that are not under the control or influence of local jurisdictions, such as the Cap-and-Trade program, are not included in the table.

Table 13-4
Consistency with Applicable GHG Reduction Actions in 2017 Scoping Plan Update

Sector / Source	Category / Description	Consistency Analysis
Energy and Water		
California Renewables Portfolio Standard (RPS) and SB 100	SB 100 requires that the proportion of electricity from renewable sources be 60 percent renewable power by 2030 and 100 percent renewable power by 2045.	Consistent. Electricity supplied to development proposed under the Transit District DTPP Amendments would be provided by Pacific Gas and Electric (PG&E) and Peninsula Clean Energy (PCE). PG&E and PCE are required to comply with SB 100 and the RPS.
California Renewables Portfolio Standard and SB 350	SB 350 requires that the proportion of electricity from renewable sources be 50 percent renewable power by 2030 (superseded by SB 100). It also requires the state to double the energy efficiency savings in existing final end uses of electricity and natural gas by retail customers through energy efficiency and conservation.	Consistent. Electricity to development proposed as part of the Transit District DTPP Amendments would be provided through PG&E and PCE. PG&E and PCE are required to comply with both the RPS and SB 350 and will meet these standards.
California Building Efficiency Standards (CCR, Title 24, Part 6)	Energy Efficiency Standards for Residential and Nonresidential Buildings	Consistent. Buildings constructed u the proposed Transit District DTPP Amendments would be designed to comply with the most recent version of Title 24 Building Energy Efficiency Standards at the time of individual project review.
California Green Building Standards Code (CCR, Title 24, Part 11 - CALGreen)	California's Green Building Standards (CALGreen) Code includes energy and water efficiency requirements, as well as waste management and other design regulations that apply to residential and nonresidential buildings.	Consistent. Buildings constructed as part of the proposed Transit District DTPP Amendments would comply with mandatory CALGreen measures. In addition, Mitigation Measure CC-1 would go beyond mandatory CALGreen measures to require voluntary Tier 2 EV charging requirements for all development allowed within the Transit District area.
Senate Bill X7-7	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal.	Consistent. Water to development as part of the proposed Transit District DTPP Amendments would be supplied by the City's Public Works, which is required to comply with SB X7-7 standards.
Mobile Sources		
Advanced Clean Cars Program (ACC) and Mobile Source Strategy (MSS)	In 2012, CARB adopted the ACC program to reduce criteria pollutants and GHG emissions for model year vehicles 2015 through 2025. ACC requires the reduction of criteria pollutants and GHG emissions from light- and medium-duty vehicles. ACC also includes the ZEV regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. The Mobile Source Strategy (2016) calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) on the road by 2025, and 4.2 million ZEVs by 2030.	Consistent. These standards would apply to all vehicles used by future users of development within the Transit District area, and to construction workers traveling to and from the construction sites as required by CALGreen. In addition, Mitigation Measure CC-1 would go beyond mandatory CALGreen regulatory requirements for EV charging infrastructure to require voluntary Tier 2 requirements for all development allowed under the proposed Transit District DTPP Amendments and would therefore accommodate future EV charging stations.

TABLE 13-4 (CONTINUED) CONSISTENCY WITH APPLICABLE GHG REDUCTION ACTIONS IN 2017 SCOPING PLAN UPDATE

Sector / Source	Category / Description	Consistency Analysis	
Mobile Sources (cont.)			
SB 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the state's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. CARB's current targets call for the Bay Area to reduce per-capita vehicular GHG emissions 10 percent by 2020 and 19 percent by 2035 from a 2005 baseline.	Consistent. Development under the proposed Transit District DTPP Amendments would be consistent with MTC and ABAG Plan Bay Area 2040 goals and objectives under SB 375 to implement "smart growth." The proposed housing in an infill location with access to public transportation would reduce reliance on automobiles, thereby reducing VMT and associated GHG emissions. Both the residential and commercial VMT generated per capita with the proposed Transit District DTPP Amendments are projected to be less than 85 percent of their respective countywide averages. The baseline Countywide average is estimated to be 10.5 miles per resident and 15.0 miles per employee. Based on the C/CAG-VTA model, development under the proposed Transit District DTPP Amendments would result in 8.1 miles per resident and 11.4 miles per employee. This would be less than 8.9 and 12.8 miles per resident and employee, respectively, which is 85 percent of the countywide baseline.	
Solid Waste			
California Integrated Waste Management Act (IWMA) of 1989 and AB 341	IWMA requires all California cities to divert 50-percent of all solid waste from landfill disposal through source reduction, recycling, and composting activities. AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a statewide goal for 75 percent disposal reduction by the year 2020.	Consistent. Recology San Mateo County is under contract with the City to provide solid waste and residential recycling services to Redwood City and is responsible for recycling and solid waste management in the City. Recology's services yield waste diversion results consistent with citywide recycling targets. These services would be supplied to all future development under the proposed Transit District DTPP Amendments. Consistent with AB 341 - Commercial Recycling and AB 1826 - Commercial Organics, all commercial, business, and multifamily establishments that generate enough solid and organic waste are required to have a recycling and/or organics program.	

As shown above, the proposed Transit District Amendments would implement all applicable actions identified in the 2017 Scoping Plan Update to reduce energy use, conserve water, reduce waste generation, promote EV use, and reduce vehicle travel consistent with statewide strategies and regulations. In addition, as detailed under Impact CC-1, the proposed Transit District Amendments would be consistent with the BAAQMD's adopted GHG significance thresholds which in turn mean that the proposed Transit District Amendments would be consistent with and contribute its fair share to the BAAQMD's GHG reductions required to meet the statewide GHG reduction goal for 2030 pursuant to SB 32 and the 2017 Scoping Plan Update.

Although the proposed Transit District DTPP Amendments would not meet the EO B-55-13 target of carbon neutrality by 2045, carbon neutrality is not a significance threshold for the purposes of this SEIR because carbon neutrality is not an adopted plan, policy, or regulation of the State that is applicable to the City. In fact, the 2017 Scoping Plan Update explicitly

acknowledges and states that the inability to achieve carbon neutrality or net zero GHG emissions does not imply that a project contributes to a significant impact under CEQA (CARB, 2017):

Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.

As illustrated above in Table 13-4, the proposed Transit District DTPP Amendments would align with the 2017 Scoping Plan Update. Thus, the proposed Transit District DTPP Amendments does not conflict with achieving the SB 32 target or with making progress toward achieving the 2050 reductions included in EO S-3-05. The proposed Transit District DTPP Amendments makes progress towards carbon neutrality; however, its inability to achieve carbon neutrality by 2045 does not conflict with the 2017 Scoping Plan, and thus does not render the impact significant under CEQA.

#### Plan Bay Area 2040

Pursuant to SB 375, ABAG and the MTC adopted *Plan Bay Area 2040* to establish targets and strategies for meeting the region's needs for housing at all income levels, while reducing GHG emissions by private passenger cars and light-duty truck traffic. The core strategy of *Plan Bay Area 2040* is to encourage growth in existing communities along the existing transportation network, focusing new development in PDAs and TPAs in urbanized centers where more public transit and other mobility options are available to reduce the use of cars and light trucks. In addition to encouraging focused growth through significant transit and roadway performance investments, *Plan Bay Area 2040* directs funding to neighborhood active-transportation and complete-streets projects, climate initiatives, lifeline transportation and access initiatives, pedestrian and bicycle safety programs, and PDA planning.

The proposed Transit District DTPP Amendments would locate high density, transit-oriented, mixed-use development of land uses in an infill location. It would place a mix of land uses including residential, office, and retail uses in close proximity of existing transit services, thereby reducing the number of vehicle trips and VMT. The Transit District area is also located in a Priority Development Area and Transit Priority Area adjacent to the Redwood City Station, a regional Caltrain station. The SamTrans bus stop is located within walking distance from the station and also provides shuttle service. As discussed under Impact CC-1, development in the Transit District area would generate fewer miles per capita when compared to the countywide average. The proposed Transit District DTPP Amendments is therefore consistent with *Plan Bay Area 2040*.

#### **Redwood City Climate Action Plan**

The Redwood City Climate Action Plan prescribes programs and policies that give Redwood City a viable path towards reducing GHG emissions that, combined with emissions reductions resulting from state and regional policies, will meet the State's GHG reduction goals. The

analysis presented below discusses the proposed Transit District DTPP Amendments' consistency with measures in three primary sectors the Climate Action Plan relies on to achieve this target:

- **Energy and Water:** Measures in the Climate Action Plan that relate to energy and water use address the Redwood City General Plan's goal (NR-4) to maximize energy conservation and renewable energy production to reduce consumption of natural resources and fossil fuels and goal NR-2 to reduce water consumption through aggressive implementation of conservation policies and programs. The Climate Action Plan relies on energy use in buildings and facilities to provide the greatest opportunity for affordable emissions reductions. Measures focus on reducing energy use by implementing energy efficiency programs while transitioning towards electricity generated from low-carbon fuels and renewable resources. Consistent with these measures, development in the Transit District area would be subject to energy efficiency standards in the most recent update to Title 24 standards and include allelectric electric construction, provide onsite solar generation and EV charging infrastructure as required by the City Reach Codes. In addition, future projects would be served by PCE, that provides electricity with at least 50 percent and up to 100 percent from renewable resources. Future businesses in the Transit District area would have the option to participate in the City's Green Business Program. All projects in the Transit District area would be subject to the City's Recycled Water Use Ordinance and the Water Efficient Landscape Ordinance that help reduce water use. Future residential uses can also participate in the City's residential water conservation rebate programs for high efficiency appliances and drought tolerant landscapes. Therefore, development allowed under the proposed Transit District DTPP Amendments would be consistent with these measures in the Climate Action Plan.
- Transportation and Land Use: Measures in the Climate Action Plan that relate to transportation and land use address the General Plan's goal (BE-31) to encourage development and implementation of strategies that minimize vehicle trips and vehicle miles traveled. Measures aim to continue smart growth policy that prioritizes infill, higher-density, transportation-oriented and mixed-use development focusing on PDAs. The proposed Transit District DTPP Amendments provides for infill, high-density, mixed use development located in a PDA and would therefore be consistent with the Climate Action Plan.
- Solid Waste: Measures in the Climate Action Plan that relate to solid waste address the General Plan's goal (BE-45) to minimize the volume of solid waste that enters regional landfills. To meet the State's solid waste diversion mandates for local jurisdictions, the Climate Action Plan includes measures requiring the City to raise the diversion rate over time by implementing zero waste policies and programs for municipal operations as well as communitywide waste reduction, recycling, and diversion. Programs include implementation of the disposable food ware ordinance and food recovery programs, commercial recycling requirements and other measures such as yard waste ordinances, pay-as-you-throw tiered rate structures, and community outreach programs such as the Zero Waste Party Pack program. Future projects in the Transit District area would be subject to these programs and policies and would therefore be consistent with these measures in the Climate Action Plan. (See Section 10, *Utilities and Infrastructure*, for more information regarding solid waste.)

#### **CALGreen Code and City of Redwood City Reach Codes**

Development proposed within the Transit District area would be required to comply with the most recent update to the CALGreen Code. All projects within the Transit District area would also be required to comply with the City's Reach Codes that aim to achieve energy savings and GHG reductions beyond the state's minimum requirements. In addition, Mitigation Measure CC-1

would require projects to comply with Tier 2 EV charging requirements in the applicable CALGreen code.

#### Conclusion

The proposed Transit District DTPP Amendments would result in a new impact not identified in the DTPP Final EIR. However, with implementation of new Mitigation Measure CC-1, the proposed Transit District DTPP Amendments would not conflict with the GHG reduction targets established by Executive Order S-3-05, and SB 32, or the reduction measures identified in CARB's 2017 Scoping Plan. In addition, the proposed Transit District DTPP Amendments would not conflict with Plan Bay Area or the Redwood City Climate Action Plan, and would be subject to measures in the CALGreen Code and the Redwood City Reach Codes.

Mitigation: Implement Mitigation Measure CC-1.

**Significance After Mitigation:** With the implementation of Mitigation Measure CC-1, all subsequent projects proposed for development within the Transit District area would be consistent with the BAAQMD's adopted GHG significance thresholds. Compliance with these thresholds would mean that these projects would not generate GHG emissions that would conflict with the State's GHG reduction goals or plans and policies in place to achieve these goals. However, as explained above under Impact CC-1, the City Council in 2020 adopted the Redwood City Reach Codes, which permit certain exceptions to prohibitions on the use of natural gas, as local policy following staff's extensive outreach, consideration of other examples, and public input. Therefore, this SEIR considers that the full implementation of Mitigation Measure CC-1 may not be feasible, and, as a result, Impact CC-1 is, conservatively considered to be *significant and unavoidable with mitigation*.

Impact CC-3: Implementation of the proposed Transit District DTPP Amendments would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction and operation or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant)

#### **DTPP Impact Summary**

Significance criteria for energy use were introduced to Appendix G of the CEQA Guidelines in 2018. Therefore, the DTPP Final EIR did not include an assessment of the DTPP's impacts with respect to wasteful, inefficient, or unnecessary energy use or consistency with state or local plans for renewable energy or energy efficiency.

#### **Project Impacts**

Implementation of the proposed Transit District DTPP Amendments would result in the development in the area which would increase energy consumption during both construction and operation. During construction, energy would be consumed to power construction equipment as well as vehicles transporting workers, materials, and equipment to and from construction sites.

Operational energy use would primarily include building energy use and transportation use, with a smaller contribution from area sources.

#### **Construction Equipment and Vehicles**

Energy use during future construction of projects would primarily occur in association with fuel use in construction equipment and vehicles. Energy use would vary throughout the construction period of projects based on the construction activities being performed and would cease upon completion of construction. Fuels used for construction would typically include diesel and gasoline; use of natural gas and electricity would be minimal.

Heavy-duty equipment associated with construction activities associated with development in the Transit District area would rely on diesel fuel, as would vendor trucks involved in delivery of materials to the individual construction sites and haul trucks exporting demolition material or other materials off site. Construction workers travel to and from each construction site would be in light-duty vehicles which are primarily gasoline-powered. Alternative-fueled vehicles powered by natural gas, hydrogen fuel cell and electricity form a small percentage of the current fleet, but are likely to increase in the future.

All development proposed under the Transit District DTPP Amendments would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements.

Construction activities would use fuel-efficient equipment and on-road vehicles consistent with federal and state regulations, such as fuel efficiency regulations in CARB's Pavley Phase II standards for light-duty vehicles like worker commutes and vendor vehicles; the anti-idling regulation in 13 CCR Section 2485; and fuel requirements for stationary equipment in 17 CCR Section 93115 (concerning the Airborne Toxic Control Measures). In accordance with 13 CCR Sections 2485 and 2449, idling by commercial vehicles over 10,000 pounds and off-road equipment over 25 horsepower would be limited to a maximum of five minutes. The intent of these regulations is to reduce construction emissions; however, compliance with the anti-idling and emission reduction regulations discussed above would also result in fuel savings from the more efficient use of equipment.

The use of diesel, gasoline and other alternative fuels for construction activities would be temporary and constitute a small fraction of the regional usage; therefore, the construction energy demand of the proposed Transit District DTPP Amendments would be within the supply and infrastructure service capabilities of PG&E and PCE and would not require additional local or regional capacity.

Overall, construction activities that would be required as part of implementation of the proposed Transit District DTPP Amendments would not be unusual as compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state. Therefore, the proposed Transit District DTPP Amendments would not result in the inefficient, wasteful, or unnecessary consumption of energy during construction.

#### **Operational Building Efficiency**

Buildings constructed as part of subsequent projects in the Transit District area would require electricity for building operation (e.g., appliances, lighting, heating and air conditioning, water heating and cooking). As discussed earlier, per the City's Reach Codes, all proposed development in the Transit District area would be required to be all-electric with no natural gas infrastructure, which eliminates natural gas usage onsite. While this would increase the electricity use associated with the development as compared to development with both electricity and natural gas usage, the increasing percentage of electricity from renewable sources provided by PG&E and PCE in response to RPS standards would result in a transition from the use of non-renewable energy to cleaner, renewable energy sources (see RPS program described above in Section 13.1, *Regulatory Setting*). Provision of EV charging infrastructure as required by the City's Reach Codes would also increase electricity use. The Reach Codes also include onsite photovoltaic requirements for residential and commercial developments which encourage use of renewable solar energy and reduce reliance on the grid.

Prior to development of subsequent projects, applicants would be required to ensure that proposed development would meet Title 24 requirements applicable at that time, as required by state regulations through their plan review process. Title 24 reduces energy use in residential and commercial buildings through progressive updates to both the Green Building Standards Code (Title 24, Part 11) and the Energy Efficiency Standards (Title 24, Part 6). Title 24 standards are updated periodically (every 3 years). Provisions added to Title 24 over the years include consideration and incorporation of new energy efficiency technologies and methods for building features such as space conditioning, water heating, and lighting, as well as construction waste diversion goals. Additionally, some standards focus on larger energy-saving concepts such as reducing loads at peak periods and seasons, improving the quality of energy-saving installations, and performing energy system inspections.

Past updates to the Title 24 standards have proven very effective in reducing building energy use; the 2013 update to the energy efficiency standards was estimated to reduce energy consumption in residential buildings by 25 percent relative to the 2008 standards (CEC, 2012). The current 2019 Title 24 standards further reduce energy use compared to the 2016 standards, with single-family residential savings of 79 percent for electricity and 9 percent for natural gas. For low-rise multifamily buildings, savings are 79 percent for electricity and 5 percent for natural gas by requiring photovoltaic systems for new low-rise residential buildings under three stories (CEC, 2018). The 2022 Update to the Title 24 standards is expected to reduce electricity and fossil fuel natural gas usage when compared to continued compliance with the 2019 requirements. Under the 2022 Update, energy use in buildings in California is expected to decrease by 0.5 percent over the 2019 standards. On a statewide basis in 2023, all measures for newly constructed

buildings and altered components of existing buildings collectively would save approximately 33 million therms of fossil fuel natural gas and 1.3 billion kWh of electricity.

Development allowed under the proposed Transit District DTPP Amendments would occur over a period of at least several years. Thus, further energy use reductions beyond the current 2019 standards can be anticipated from future Title 24 code revision cycles, as building permits are issued at future dates corresponding to those code updates. Goals and policies encouraged by the City, including those set forth in the City's General Plan also support increased energy conservation in new development, such as that in the Transit District area. These requirements would decrease the amount of energy required for building operation and ensure that building energy use related to development within the Transit District area would not be inefficient or wasteful.

In addition, as part of the RPS program described above in Section 13.1, *Regulatory Setting*, electric utilities including investor-owned utilities and community choice aggregators are required to increase the percentage of electricity provided from eligible renewable resources. Though the RPS program does not necessarily increase energy efficiency, implementation of this program reduces the use of non-renewable energy sources such as natural gas and coal. The legislation requires utilities to increase the percentage of electricity obtained from eligible renewable sources to 50 percent by 2030. SB 100 furthered these standards to require electric utilities to procure eligible renewable electricity for 44 percent of retail sales by 2024, 52 percent by 2027, and 60 percent by December 2030. SB 100 also specifies that CARB plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045. CPUC and the CEC jointly implement the RPS program and PG&E and PCE, the electric utility providers to the City of Redwood City, are required to adhere to these standards and deadlines. Therefore, subsequent projects developed as part of the proposed Transit District DTPP Amendments would be consistent with these regulations.

#### **Transportation**

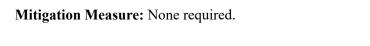
Vehicle trips generated by subsequent projects within the Transit District area would increase use of transportation fuels, primarily gasoline and diesel but also electricity for electric vehicles. Enhanced fuel economies realized pursuant to federal and state regulatory actions such as increasingly stringent CAFE/Pavley standards for vehicle fuel efficiency, and transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would decrease future gasoline fuel demands per VMT but would increase demand for alternative fuels. Provision of EV charging infrastructure as required by Mitigation Measure CC-1 would increase transportation-related electricity use. However, as discussed under Impact CC-1 above and in Section 9 of this SEIR, *Transportation and Circulation*, the location of the Transit District area proximate to transit facilities reduces VMT within the region, acting to also reduce regional vehicle energy demands. Therefore, transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and the proposed Transit District DTPP Amendments would be consistent with regulations to reduce transportation energy use.

#### Conclusion

Considering the factors and requirements described above, energy use associated with the construction and operation of development proposed within the Transit District area would not be considered unnecessary and wasteful and would be consistent with all applicable plans, policies and regulations developed to encourage energy conservation and renewable energy use. Therefore, the proposed Transit District DTPP Amendments would not result in new or more severe impacts than what was previously identified in the DTPP Final EIR. this impact would be *less than significant*.

Though this would be a less than significant impact, Mitigation Measure CC-1 identified under Impact CC-1, would increase the amount of renewable energy used by the Transit District area by reducing the consumption of non-renewable fuels such as natural gas in buildings and petroleum-based transportation fuels. The City's Reach Codes requirement for on-site alternative energy generation would to some extent offset energy use.

In addition, Mitigation Measure AQ-2b, presented in Chapter 12, *Air Quality*, requires the use of cleaner construction equipment meeting the U.S. EPA's Tier 4 Final standards if subsequent projects proposed as part of the Transit District DTPP Amendments are found to generate construction emissions in excess of the BAAQMD's project-level construction thresholds. Over time, the construction equipment fleet would include a greater percentage of newer equipment meeting the Tier 4 Final standards. Newer equipment would also be more energy efficient when compared to older equipment because of advancement in technology to not just reduce emissions, but also reduce fuel use. This would further reduce energy use during construction.



Impact CC-4: Implementation of the proposed Transit District DTPP Amendments would not exacerbate effects of sea level rise. (*Less than Significant*)

#### **DTPP Impact Summary**

The DTPP Final EIR identified potential flooding due to sea level rise as a potentially significant impact, and Mitigation Measure 13-1 was introduced to assist in preparation of response strategies that address sea level rise and increased flooding. The DTPP Final EIR further concluded that, given the uncertainty surrounding climate change, Mitigation Measure 13-1 would not reduce this potential impact to a less-than-significant level. Therefore, impacts related to flooding caused by sea level rise would remain significant and unavoidable.

However, in 2015 the California Supreme Court's decision in California Building Industry Association (CBIA) v. Bay Area Air Quality Management District confirmed that CEQA is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Consequently, the sea level rise assessment in this SEIR focuses on whether the proposed Transit District DTPP Amendments would exacerbate effects of sea level rise.

#### **Project Impacts**

Implementation of the proposed Transit District DTPP Amendments would encourage the development of new residential and office uses, and replace existing retail use. While construction activities associated with future developments would generate GHG emissions, all future developments would be consistent with the City's GHG reduction goals and meet the BAAOMD's adopted thresholds for greenhouse gas emissions (BAAOMD, 2022). These thresholds require project design elements to include no natural gas in residential and nonresidential buildings and provision of EV charging infrastructure in compliance with CALGreen Tier 2 requirements. The VMT per capita associated with the proposed Transit District DTPP Amendments must also meet a 15 percent reduction below the regional average. With implementation of Mitigation Measure CC-1, the proposed Transit District DTPP Amendments would meet all of these thresholds, resulting in an increase in GHG emissions that is not cumulatively considerable, and thus would not exacerbate sea level rise. Also see Section 10, Utilities and Infrastructure, for an analysis of potential flood hazards, which would be less than significant. For these reasons, the proposed Transit District DTPP Amendments would not exacerbate effects of sea level rise and would not result in new or more severe impacts than what was identified in the DTPP Final EIR. Therefore, this impact would be less than significant, and no mitigation is required.

viitigation: None required.	

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13. Climate Change

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# **CHAPTER 14**

# Hazards and Hazardous Materials

This SEIR chapter analyzes the effects of the proposed Transit District DTPP Amendments on hazards and hazardous materials, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

## Findings of the DTPP Final EIR

Impacts related to transporting, routine use and disposal of, and accidental release of hazardous materials was discussed and analyzed in the DTPP Final EIR, including the handling of hazardous materials within one-quarter mile of a school; all of these potential impacts were identified in the DTPP Final EIR as less-than-significant impacts. As explained in the DTPP Final EIR, future residential, retail, and office developments may require the transport, use, or disposal of hazardous materials, either during construction or operation. However, all aspects of handling of hazardous materials are heavily regulated under federal, state, and local laws. Potential impacts associated with these hazards would be adequately mitigated by existing laws, regulations, and policies, and mitigation is not required.

Exposure to existing hazardous materials contamination was analyzed in the DTPP Final EIR and was also identified as a less-than-significant impact. The DTPP Final EIR concluded that due to the large number of contaminated sites in the vicinity, there is the possibility for future construction activities to expose contamination to construction personnel, the public, and the environment. The DTPP Final EIR further concluded that the existing laws and regulations, of which compliance is required, would adequately mitigate the potential impacts related to exposing people and the environment to contamination. No mitigation is required.

Impacts related to the potential exposure to asbestos-containing materials (ACM), polychlorinated biphenyls (PCBs), and lead-based paint (LBP) were analyzed in the DTPP Final EIR, and all were determined to be less-than-significant impacts. Similar to other hazardous materials-related impacts, these hazardous building materials are also regulated by federal, state, and local laws. The DTPP Final EIR further concluded that the existing laws and regulations, of which compliance is required, would adequately mitigate the potential impacts related to expose to hazardous building materials, such as ACM, PCBs, and LBP. No mitigation is required.

Impacts related to consistency with the San Mateo County Comprehensive Airport Land Use Compatibility Plan (ALUCP) were analyzed in the DTPP Final EIR and were determined to be less than significant. The DTPP Final EIR determined that the existing building height requirements are within the designated parameters and that existing regulations adequately

mitigate any potential hazards. No mitigation is required. The proposed Transit District DTPP Amendments would not make any changes in allowable maximum building heights, and therefore this topic does not require additional analysis.

# 14.1 Environmental Setting

Materials and waste may be considered hazardous if they are poisonous (toxic); can be ignited by open flame (ignitable), corrode other materials (corrosive); or react violently, explode, or generate vapors when mixed with water (reactive). The term "hazardous material" is defined in California Health and Safety Code Section 25501(p) as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.

In some cases, past industrial or commercial uses on a site can result in spills or leaks of hazardous materials and petroleum products to the environment, thus resulting in soil and groundwater contamination. Federal and State laws require that soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels must be handled and disposed as hazardous waste during excavation, transportation, and disposal. The California Code of Regulations, Title 22, Section 66261.20-24 contains technical descriptions of characteristics that would cause soil to be classified as a hazardous waste.

Federal and state laws require that hazardous materials be specially managed. California regulations are compliant with federal regulations and in most cases, are more stringent. Regulations also govern the management of potentially hazardous building materials, such as ACM, LABP, and PCBs during demolition activities that could potentially disturb existing building materials.

#### 14.1.1 Hazardous Materials Database Records Search

The DTPP Final EIR identified a number of sites that either used hazardous materials and/or had spills or leaks that were being investigated and remediated. An independent review of the Department of Toxic Substances Control (DTSC) EnviroStor database and the State Water Resources Control Board (SWRCB) GeoTracker database revealed that there are numerous documented hazardous materials sites within the City of Redwood City, as well as within the proposed Transit District boundary (DTSC, 2022; SWRCB; 2022). As of February 4, 2022, there were twelve active Cleanup Program Sites, two active leaking underground storage tank (LUST) sites, seven Department of Toxic Substances Control (DTSC) evaluation sites, and 40 closed LUST sites within the proposed Transit District. The active and evaluation sites are undergoing investigation and cleanup. The closed sites have been investigated and remediated and the overseeing regulatory agency has concluded those sites no longer pose a risk to people or the surrounding properties. Note that closed sites may still have residual contamination that is below regulatory action levels at that time for the land use at that property at that time. Regulatory actions are periodically updated and land uses can change over time.

## 14.1.2 Schools

There are two schools in proximity to the proposed Transit District boundary: Sequoia High School at 1201 Brewster Avenue (immediately adjacent to the proposed Transit District) and McKinley Institute of Technology at 400 Duane Street (approximately 0.23 miles west of the proposed Transit District).

# 14.1.3 Airports

The San Carlos Airport is approximately 1.7 miles northwest of the proposed Transit District boundary.

## 14.1.4 Wildfire Hazards

According to the maps published California Department of Forestry and Fire Protection (CAL FIRE) Forest Resource Assessment Program (FRAP), a majority of the City of Redwood City is not mapped within a Very High Fire Hazard Severity Zone (VHFHSZ). A small portion of the city's limits, in the Emerald Hills area, has been mapped as a VHFHSZ (CAL FIRE, 2008) and is not proximate to the proposed Transit District.

# 14.2 Regulatory Setting

The following section focuses on any changes to the regulatory setting that have occurred since certification of the DTPP Final EIR. Section 14.2 of DTPP Final EIR Chapter 14, *Hazards and Hazardous Materials*, includes the regulatory setting for this topic and is still current for this SEIR, except as noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

# 14.2.1 National Pollutant Discharge Elimination System Construction General Permit

Construction associated with future development within the proposed Transit District would disturb more than one acre of land surface, potentially affecting the quality of stormwater discharges into waters of the United States. Such development would be subject to the National Pollutant Discharge Elimination System (NPDES) *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002, Construction General Permit; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ).

The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the United States from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface. The permit regulates stormwater discharges from construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a risk level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk at the site and the risk to receiving waters during periods of soil exposure (e.g., grading and site stabilization). The sediment risk level reflects the relative amount of sediment that could be discharged to receiving water bodies, and is based on the nature of the construction activities and the location of the site relative to receiving water bodies. The receiving-waters risk level reflects the risk to receiving waters from the sediment discharge. Depending on the risk level, the construction projects could be subject to the following requirements:

- Effluent standards
- Good site management "housekeeping"
- Non-stormwater management
- Erosion and sediment controls

- Run-on and runoff controls
- Inspection, maintenance, and repair
- Monitoring and reporting requirements

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that includes specific best management practices (BMPs) designed to prevent sediment and pollutants from coming into contact with stormwater and moving off-site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management, and good housekeeping. They are intended to protect surface water quality by preventing eroded soil and construction-related pollutants from migrating off-site from the construction area. Routine inspection of all BMPs is required under the Construction General Permit. In addition, the SWPPP must contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The SWPPP must be prepared before construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff.

Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, and washing and fueling of vehicles and equipment. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site after construction).

In the Transit District area, the Construction General Permit is implemented and enforced by the San Francisco Bay Regional Water Quality Control Board, which administers the stormwater permitting program. Dischargers must electronically submit a notice of intent and permit registration documents to obtain coverage under this Construction General Permit. Dischargers are to notify the San Francisco Bay Regional Water Quality Control Board of violations or incidents of non-compliance, and submit annual reports identifying deficiencies in the BMPs and explaining

how the deficiencies were corrected. The risk assessment and SWPPP must be prepared by a State Qualified SWPPP Developer, and implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. A legally responsible person, who is legally authorized to sign and certify permit registration documents, is responsible for obtaining coverage under the permit.

# 14.3 Impacts and Mitigation Measures

## 14.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe hazards and hazardous materials impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the certified DTPP Final EIR.

## 14.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or
- b) create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or
- c) emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; or
- d) be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment; or
- e) for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area; or
- f) impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- g) expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Impacts related to interference with an adopted emergency response or evacuation plan were not evaluated in the Hazards and Hazardous Materials chapter of the DTPP Final EIR; this impact was evaluated in the Public Services chapter. Additionally, impacts related to wildland fires were not addressed in the DTPP Final EIR.

## 14.3.3 Impacts and Mitigation Measures

Overall, the impacts related to implementation of the proposed Transit District DTPP Amendments are the same as those identified in the DTPP Final EIR for reasons explained below. All impacts that were analyzed in the DTPP Final EIR were determined to be less than significant and no mitigation was needed.

Impact HAZ-1: Implementation of the proposed Transit District DTPP Amendments would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (*Less than Significant*)

The DTPP Final EIR found that, while the DTPP would result in future developments that may transport, use, or dispose of hazardous materials, the existing federal, state, and local laws and regulations would be sufficient to mitigate any potential hazards. The impacts related to the transport, use, and disposal of hazardous materials would be less than significant and no mitigations were necessary.

Establishing the Transit District area would allow future development, such as new residential, office, and retail spaces. As discussed in the DTPP Final EIR, all activities associated with handling hazardous materials during future development would be subject to the federal, state, and local laws in place to ensure the safe handling (transport, use, and disposal) of hazardous materials. Compliance with all applicable federal, state, and local laws would ensure that impacts from the proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. Therefore, impacts related to the transport, use, and disposal of hazardous materials would be *less than significant*.

Impact HAZ-2: Implementation of the proposed Transit District DTPP Amendments would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant)

The DTPP Final EIR found that, while the DTPP would result in future developments that may transport, use, or dispose of hazardous materials, the existing federal, state, and local laws and regulations would be sufficient to mitigate any potential hazards. These laws are in place to prevent accidental releases and provide response protocols in the event of an accidental release. The impacts related to the accidental release of hazardous materials would be less than significant and no mitigations were necessary.

The proposed Transit District DTPP Amendments would allow for future development, such as new residential, office, and retail spaces. As discussed in the DTPP Final EIR, all activities associated with handling hazardous materials during future development would be subject to the federal, state, and local laws in place to ensure the proper handling of hazardous materials, in the event of an accidental release. Compliance with all applicable federal, state, and local laws would ensure that impacts from the proposed Transit District DTPP Amendments would not result in

new or more severe impacts than the impacts identified in the DTPP Final EIR. Therefore, impacts related to the accidental release of hazardous materials would be *less than significant*.

Impact HAZ-3: Implementation of the proposed Transit District DTPP Amendments would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (*Less than Significant*)

The DTPP Final EIR found that, while the DTPP would result in future developments that may transport, use, or dispose of hazardous materials within one-quarter mile of a school, the existing federal, state, and local laws and regulations would be sufficient to mitigate any potential hazards. As stated above, these laws are intended to regulate the handling and emission of hazardous materials, prevent accidental releases, and provide response protocols in the event of an accidental release; these laws include specific regulations for handling and emitting hazardous materials in the vicinity of a school. The impacts related handling and emitting of hazardous materials within one-quarter mile of a school would be less than significant and no mitigation was necessary.

The proposed Transit District DTPP Amendments would allow for future development, such as new residential, office, and retail spaces. Future development within the Transit District area would require construction and possibly demolition activities, which would require the emission, transport, use, and disposal of hazardous materials within one-quarter mile of a school. As discussed in the DTPP Final EIR, all activities associated with handling hazardous materials during future development would be subject to the federal, state, and local laws in place to ensure the proper handling of hazardous materials, in the event of an accidental release. Compliance with all applicable federal, state, and local laws would ensure that impacts from the proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. Therefore, impacts related to the accidental release of hazardous materials would be *less than significant*.

Impact HAZ-4: Implementation of the proposed Transit District DTPP Amendments would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, would not create a significant hazard to the public or the environment. (*Less than Significant*)

The DTPP Final EIR concluded that, due to the numerous existing hazardous materials sites in the area, construction activities associated with future development within the Transit District area could expose workers, the public, and/or the environment to contaminated soil and/or groundwater. The DTPP Final EIR further concluded that compliance with existing state and local laws and regulations would adequately mitigate any potential impacts associated with exposure to contaminated soil and/or groundwater and/or hazardous fumes. The DTPP Final EIR determined that the impact would be less than significant, and no mitigation was required.

Establishing the Transit District area would allow for future development, such as new residential, office, and retail spaces. Future development within the Transit District area would require construction and possibly demolition activities, which could expose previously contaminated soil or groundwater. Each new future developer would be subject to the same previously discussed state and local laws and any potential impacts from the proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. Therefore, impacts related to the exposing people and/or the environment to prior contamination associated with existing hazardous materials sites would be *less than significant*.

Impact HAZ-5: Implementation of the proposed Transit District DTPP Amendments would not result in a safety hazard or excessive noise for people residing or working in the project area. (*Less than Significant*)

The DTPP Final EIR determined that, although a portion of the DTPP area would be within the Referral Boundary of the San Carlos ALUCP, it would not exceed any established maximum building height limitations or violate any other established restrictions. The DTPP Final EIR concluded that impacts related to consistency with the San Mateo County ALUCP were less than significant and no mitigation was required.

The proposed Transit District DTPP Amendments would allow for future development, such as new residential, office, and retail spaces, which would not surpass the existing building height restrictions. The proposed Transit District is a sub-area within the DTPP area and is approximately 1.7 miles southeast of the San Carlos Airport of an airport but is not within and noise or safety zones established in the San Mateo County ALUCP. Future development within the Transit District area would be designed consistent with the land use restrictions established in the San Mateo County ALUCP. Therefore, impacts from the proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR. Therefore, impacts related to safety and noise hazards associated with airports would be *less than significant*. See Section 10, *Noise and Vibration*, for additional information.

Impact HAZ-6: Implementation of the proposed Transit District DTPP Amendments would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (*Less than Significant*)

The DTPP Final EIR determined that, because future development would create additional traffic congestion and could possibly interfere with emergency response or evacuation, the DTPP would create a potentially significant impact as it relates to impairment or interference with an adopted emergency response or evacuation plan. The DTPP Final EIR includes Mitigation Measure 8-1, which would address this impact by providing signal prioritization for emergency vehicles at additional intersections where needed. The DTPP Final EIR concluded that implementation of Mitigation Measure 8-1 would reduce the potential impacts to a less-than-significant level.

Since certification of the DTPP Final EIR, the City has implemented signal prioritization at 15 intersections in the Downtown, including around Fire Station No. 9 on Marshall Street and the following intersections within the Transit District area, effectively implementing Mitigation Measure 8-1 in this area:

- El Camino Real/Brewster
- El Camino Real/Broadway
- El Camino Real/James

- El Camino Real Jefferson
- Jefferson/Franklin
- Broadway/Marshall-Arguello

Although development allowed by the proposed Transit District DTPP Amendments would increase traffic volumes on roads in the vicinity, this signal prioritization for emergency vehicles combined with the ability of first responders to use vehicle lights and sirens, would mean that the increased volumes would not substantially impair emergency response. In addition, the urban character of the surrounding area, with a grid of local streets providing multiple access and egress routes in event of an emergency, would mean that the increased volumes would not substantially impair emergency evacuation. Impacts of the proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impacts identified in the DTPP Final EIR because the DTPP Final EIR Mitigation Measure 8-1 has already been implemented and the project does not add any new signals. Therefore, impacts would be *less than significant*.

Impact HAZ-7: Implementation of the proposed Transit District DTPP Amendments would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. (Less than Significant)

The DTPP Final EIR did not analyze the impacts on the DTPP as it relates to wildland fires. According to the published CAL FIRE FRAP map of the City of Redwood City, a majority of the city is not within an established VHFHSZ. A small portion of the southwestern extent of the city's limits, in the Emerald Hills area, has been mapped as a VHFHSZ. This area is approximately 1.2 miles west of the Transit District area.

Future developments within the Transit District area would include construction activities, which would require the use some flammable substances which can be inadvertently ignited. New development may also use flammable substances. However, state and local laws are in effect that are intended to reduce the ignition and spread of wildfire. The Transit District area is within an urbanized area of the city and not within an established VHFHSZ, or immediately adjacent to a VHFHSZ where wildfire is considered a hazard (see Redwood City General Plan pp. PS-37 and 38). For these reasons, the proposed Transit District DTPP Amendments would not result in new impacts and would be *less than significant*.

# 14.4 References

- California Department of Forestry and Fire Protection (CAL FIRE), 2008. Draft Fire Hazard Severity Zones in LRA, Redwood City. Fire and Resource Assessment Program. October 2, 2008. Map. Scale 1:250,000.
- Department of Toxic Substances Control (DTSC), 2022. EnviroStor database. Sites near Redwood City, CA.
- State Water Resources Control Board (SWRCB), 2022. GeoTracker database. Hazardous materials sites near Redwood City, CA.

# **CHAPTER 15**

# **Biological Resources**

This SEIR chapter analyzes the effects of the proposed Transit District DTPP Amendments on biological resources, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

## Findings of the DTPP Final EIR

The DTPP Final EIR found that development in the vicinity of Redwood Creek under the DTPP could harm sensitive salt marsh or aquatic habitat and special-status species that occupy it. This impact was reduced to a less-than-significant level by application of Mitigation Measure 15-1 which required consultation with U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) regarding proposed activities to determine how to avoid impacts to special-status species and communities, and adherence to city setback rules for creekside development. Further, Mitigation Measure 15-2 identified permits and approvals from the U.S. Army Corps of Engineers (USACE), CDFW, and the Regional Water Quality Control Board (RWOCB), which reduced impacts on wetlands and waters to a less-than-significant level. The DTPP Final EIR also found that development in the DTPP area could impact nesting birds and heritage trees. Mitigation Measure 15-3 called for tree removal and trimming, and ground disturbing activities to take place outside of the bird nesting season, or, if this were infeasible, to survey for nests and avoid work around nests with a suitable buffer until nesting was complete. Mitigation Measure 15-4 called for adherence to the Redwood City Tree Preservation Ordinance to ensure protection of heritage trees, and specified planting requirements for replacement trees. With these measures, impacts on nesting birds and heritage trees were reduced to a less-thansignificant level.

# 15.1 Environmental Setting

The Transit District area is located in downtown Redwood City (see Figure 3-2), and contains two types of habitat: urban/disturbed and ornamental vegetation. Because the Transit District area is entirely developed with roads, railways, walkways, and structures, it does not contain any open, undeveloped land or sensitive biological communities, such as wetlands, watercourses, or riparian habitat. The urban/disturbed and ornamental vegetation habitat types, and their associated plant and wildlife species, are described below.

## 15.1.1 Urban/Disturbed

Urban/disturbed habitat is primarily developed with asphalt, concrete or other impervious surfaces and is dominated by weedy, non-native plant species and wildlife adapted to high levels of disturbance. Weeds typically include non-native grasses and herbaceous plants growing in the margins of developed areas. Typical wildlife in this habitat may include house sparrow (*Passer domesticus*), rock dove (*Columba livia*), Brewer's blackbird (*Euphagus cyanocephalus*), house mouse (*Mus musculus*), or other bird or small mammal species adapted to living in urban environments.

## 15.1.2 Ornamental Vegetation

Ornamental or landscape vegetation is planted by humans along roadsides, in parks, and public rights-of-way. These areas feature typically introduced exotic species of trees, shrubs and groundcover for decorative value; ruderal, weedy species are also common. Landscape vegetation may provide cover, food, and nesting resources for wildlife species such as house mouse, California ground squirrel (Spermophilus beechei), raccoon (Procyon lotor), western fence lizard (Sceloporus occidentalis) and migratory birds, such as mourning dove (Zenaida macroura), rock dove, Anna's hummingbird (Calypte anna), western scrub-jay (Aphelocoma californica), American crow (Corvus brachyrhynchos), European starling (Sturnus vulgaris), or house finch (Carpodacus mexicanus).

## 15.1.3 Sensitive Natural Communities

Sensitive natural communities are designated as such by various resource agencies, such as the CDFW, or in local policies and regulations, and are generally considered to have important functions or values for wildlife and/or are recognized as declining in extent or distribution, and are threatened enough to warrant protection (CDFW, 2021). No sensitive natural communities are present in the Transit District area.

## 15.1.4 Special-Status Species

Special-status species are plants and wildlife that require special protection and have been listed as rare, threatened, or endangered by Federal, State, or other agencies, including:

- Species listed or proposed for listing as threatened or endangered, or are candidates for
  possible future listing as threatened or endangered, under the federal or California
  Endangered Species Acts (16 U.S.C. §1531 et seq.; Fish and Game Code §2050 et seq.);
- Species that meet the definitions of rare or endangered under CEQA Guidelines Section 15380;
- Plants listed as rare under the California Native Plant Protection Act (Fish and Game Code §1900 et seq.);
- Plants considered by the California Native Plant Society to be rare, threatened, or endangered (typically Rank 1B and Rank 2 plants) in California (CNPS, 2021);

- Wildlife species of special concern to CDFW, as listed on the California Natural Diversity Data Base (CNDDB) (CDFW 2021);
- Wildlife fully protected in California (Fish and Game Code §§3511, 4700, and 5050); and/or
- Avian species protected by the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. §703 et seq.).

A list of special-status plant and wildlife species with potential to occur in the DTPP area and surroundings was identified by reviewing the CNDDB, California Native Plant Society Inventory of Rare and Endangered Plants, and the U.S. Fish and Wildlife Information for Planning and Conservation database (CDFW, 2021; CNPS, 2021; USFWS, 2021). Upon reviewing available habitat in the 16.6-acre Transit District area and based on species distribution data in the above technical resources, it was determined that no special-status plants or wildlife are likely to occur in the area. This is due to the urbanized and disturbed character of the area, which is characterized by minimal vegetation limited to street trees and ornamental plantings with no habitat that would support such species.

# 15.2 Regulatory Setting

The following section focuses on any changes to the regulatory setting that have occurred since certification of the DTPP Final EIR. Section 15.2 of DTPP Final EIR Chapter 15, *Biological Resources*, includes the regulatory setting for this topic and is still current for this SEIR, except as noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

## 15.2.1 Migratory Bird Treaty Act (16 U.S.C. §§703-711)

The Migratory Bird Treaty Act (MBTA) is the domestic law that affirms and implements a commitment by the U.S. to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. Unless and except as permitted by regulations, the MBTA makes it unlawful at any time, by any means, or in any manner to intentionally pursue, hunt, take, capture, or kill migratory birds anywhere in the United States. The law also applies to disturbance and removal of nests occupied by migratory birds or their eggs during the breeding season, whether intentional or incidental.

## 15.2.2 Fish and Game Code Sections 3503, 3503.5, and 3513

Under these sections of the Fish and Game Code, a project operator is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey; the taking or possessing of any migratory nongame bird; the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or nongame birds; or the taking of any nongame bird pursuant to Fish and Game Code section 3800, whether intentional or incidental.

## 15.2.3 2010 Redwood City General Plan

The 2010 Redwood City General Plan Natural Resources Element - Natural Habitat and Open Space chapter has goals to protect, restore, and maintain creeks, sloughs, and streams to ensure adequate water flow, prevent erosion, provide for viable riparian plant and wildlife habitat and, where appropriate, allow for recreation opportunities and to identify, protect, and restore open spaces, sensitive biological resources, native habitat, and vegetation communities that support wildlife species.

- *Policy NR-8.2*: Preserve and create contiguous wildlife habitat and movement corridors.
- *Policy NR-8.3*: Replace and control invasive, non-native vegetation and animals to the extent feasible in parks and open space areas. Encourage restoration of native vegetation.
- *Policy NR-8.4*: Consult with regulatory agencies, nonprofit groups, and other organizations in the conservation, maintenance, acquisition, and restoration of open space lands that include wildlife, plant species, and animal habitat.
- Goal NR-9: The Urban Forest chapter Goal NR-9 is to maintain, enhance, and increase the number of trees on both public and private property to provide the maximum benefits of improved air quality, compensate for carbon dioxide production, reduce stormwater runoff, and mitigate the urban heat island effect.
- *Policy NR-9.1*: Preserve, maintain, and expand the number of trees in Redwood City's urban forest, on both public and private property.
- Policy NR-9.2: Require new trees to be planted and/or plant new trees in sufficient number, as identified on a site by site basis, on sites designated as sensitive receptors (i.e., schools or hospitals) that are in close proximity to industry, heavily traveled freeways and roads, and other similar pollution sources in order to mitigate air pollution.
- *Policy NR-9.3*: Select appropriate trees for Redwood City, focusing especially on native and landmark tree types.
- *Policy NR-9.4*: Provide a coordinated program of education, outreach, and advocacy for tree planting, maintenance, and support.

The 2010 Redwood City General Plan Urban Form and Land Use chapter (in the Built Environment Element) contains the following policies relevant to biological resources:

- Apply the following performance criteria and standards, as applicable, to all new
  development projects, with the level of application commensurate with the scale of
  development:
  - Minimize direct or indirect impact to sensitive biological resources while optimizing the potential for mitigation (BE-22.2).
  - Protect and enhance the natural environmental features in Redwood City. Preserve open space resources as visual, recreational, and habitat resources, finding creative ways to provide habitat areas and species protection (BE-23.9).

## 15.2.4 Redwood City Tree Preservation Ordinance

As described in the DTPP Final EIR, the City of Redwood City's Tree Preservation Ordinance (Municipal Code Chapter 35) specifies that, before any tree in Redwood City is cut, moved, or removed, an applicant must obtain a permit from the Parks and Recreation Director. The Parks and Recreation Commission may declare a tree a "heritage tree" if the tree is healthy and has adapted well to the climatic conditions of the area, is visible from a public right-of-way, and either (a) has historic significance, (b) is indigenous to the area, or (c) is one of a group that is dependent on the others for survival.

# 15.3 Impacts and Mitigation Measures

## 15.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe biological resources impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the certified DTPP Final EIR.

## 15.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; or
- b) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; or
- c) have a substantial adverse effect on *state or* federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; or
- d) interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- e) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- f) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Significance criterion c) was modified in 2014 to read "state or federally protected wetlands". This modification of criterion c) does not affect this SEIR because no state or federally protected

wetlands are present in the Transit District area. In addition, the California Department of Fish and Game was renamed California Department of Fish and Wildlife in 2013.

## 15.3.3 Impacts and Mitigation Measures

Overall impacts to biological resources in the Transit District area would be reduced compared to the DTPP Final EIR because the sensitive habitats along Redwood Creek and other waterways present in the DTPP area are not present in the Transit District area. Thus, the only biological resources present in the Transit District area are ornamental street trees and migratory birds. Those resources are discussed below.

Impact BIO-1: Implementation of the proposed Transit District DTPP Amendments would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. (Less than Significant with Mitigation)

The DTPP Final EIR found that grading and construction activities associated with development could impact special-status plant or wildlife species in the coastal salt marsh along Redwood Creek. To reduce this impact to a less-than-significant level, DTPP Final EIR Mitigation Measure 15-1(a) required consultation with federal and State wildlife agencies, and development of appropriate mitigation plan in coordination with the agencies. The Transit District area contains no native habitats, and available habitats are considered unsuitable for any special-status plant or wildlife species. Therefore, DTPP Final EIR Mitigation Measure 15-1(a) would not be applicable to the proposed Transit District area. Implementation of the proposed Transit District DTPP Amendments would not result in new or more severe impacts on these species than what was identified in the DTPP Final EIR, and this impact would be *less than significant*.

However, the DTPP Final EIR found that grading and construction activities associated with development could impact nesting birds, which would be a potentially significant impact. DTPP Final EIR Mitigation Measure 15-3 would require tree removal, trimming and ground disturbance to occur outside of nesting season (February 15 to August 31), or a nesting survey by a qualified biologist three days prior to such activity, with buffers placed around active nests in coordination with CDFW. The DTPP Final EIR referred only to areas outside the Transit District area as potential nesting habitat. However, urban trees and shrubs within the Transit District area may also provide habitat for common nesting birds, such as house finch, mourning dove, and American robin, which are protected under the federal MBTA and California Fish and Game Code 3503. Implementation of the proposed Transit District DTPP Amendments would entail new development of commercial, residential and retail uses. Although the existing developed state of the Transit District area makes it unsuitable habitat for special-status plant and wildlife species, common nesting migratory birds may be present, and demolition and construction activity associated with development of the Transit District area would be likely to entail removal of trees and shrubs that may provide nesting habitat for birds.

The proposed Transit District DTPP Amendments would not result in new or more severe impacts on nesting birds than the impact identified in the DTPP Final EIR. Mitigation Measure

BIO-1 (Mitigation Measure 15-3 from the DTPP Final EIR with clarifying amendments) is applicable to the proposed Transit District DTPP Amendments and would reduce this impact to a *less-than-significant* level.

Mitigation Measure BIO-1 (formerly Mitigation Measure 15-3 from the DTPP Final EIR): Project Applicant shall ensure that all tree removal and trimming, as well as ground disturbing activities, are scheduled to take place outside of the breeding season (February 15 to August 31). If construction is unavoidable during this time, a qualified biologist shall conduct a survey for nesting birds no more than three days prior to the removal or trimming of any tree and prior to the start of ground disturbing activities. If active nests are not present, project activities can proceed as scheduled. If active nests of protected species are detected, a suitable buffer shall be established around the nest based on CDFW standards, and the buffer shall remain in place until the City has determined, in consultation with the qualified biologist, that the buffer is no longer necessary to avoid significant impacts to the nest.

<b>Significance after Mitigation:</b>	Less than Significant

Impact BIO-2: Implementation of the proposed Transit District DTPP Amendments would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. (*No Impact*)

The DTPP Final EIR found that future individual development projects on parcels adjoining Redwood Creek or any City-initiated creekside improvements could affect sensitive coastal salt marsh habitat, which would be a potentially significant impact. DTPP Final EIR Mitigation Measure 15-1(b) was identified to reduce this impact to a less-than-significant level by maintenance of setbacks from Redwood Creek, erosion control methods, and management of stormwater pollution. The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impact identified in the DTPP Final EIR because the Transit District area does not include any areas of riparian habitat or sensitive natural communities. Therefore, implementation of the proposed Transit District DTPP Amendments would have *no impact* on these resources; thus, no mitigation is required.

Mitigation: None required.	

Impact BIO-3: Implementation of the proposed Transit District DTPP Amendments would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (*No Impact*)

The DTPP Final EIR found that future development adjacent to Redwood Creek may affect potential jurisdictional wetland habitat, and this represented a potentially significant impact. DTPP Final EIR Mitigation Measure 15-2 was identified to reduce this impact to a less-than-significant

level by obtaining and adhering to all required federal and State permits for wetlands. The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impact identified in the DTPP Final EIR because the Transit District area does not include any wetlands or open waters. Therefore, implementation of the proposed Transit District DTPP Amendments would have *no impact* on these resources; thus, no mitigation is required.

Mitigation: None required.	

Impact BIO-4: Implementation of the proposed Transit District DTPP Amendments would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (Less than Significant with Mitigation)

The DTPP Final EIR found that even though the riparian corridor of Redwood Creek provides a potential wildlife movement corridor, the open segment of the creek within the DTPP area is limited in its function as a wildlife corridor due to extensive surrounding urbanization. However, the DTPP Final EIR found that given the proximity to the Don Edwards National Wildlife Refuge on Bair Island and San Francisco Bay, the DTPP area is accessible to migratory birds. The DTPP Final EIR found that grading and construction activities associated with development could impact birds protected under the federal MBTA. DTPP Final EIR Mitigation Measure 15-3 was identified to reduce this impact to a less-than-significant level.

Migratory birds passing through Redwood City along the Pacific Flyway, particularly in spring and fall, may experience collision with tall buildings while in flight. Approximately 100 million to 1 billion birds die in North America as a result of building collisions each year (Seewagen, 2017). Daytime collisions occur most often when birds fail to recognize window glass because it reflects clouds and sky. Lighting in high-rise buildings also affects birds during their movement and reproduction. Indirect effects of light disturbance on migratory birds may include delayed arrival at breeding or wintering grounds, and reduced energy stores necessary for migration, winter survival, or subsequent reproduction (Gauthreaux and Belser, 2006).

As discussed in Chapter 2, *Project Description*, the proposed Transit District DTPP Amendments would not result in a change in existing maximum height and density limitations within the Transit District area. The Transit District area would accommodate an increase in overall building development, and consequently an overall increase in building heights and density, within the Transit District area compared to existing conditions. The increase in building development in the Transit District area with implementation of the proposed Transit District DTPP Amendments may incrementally increase the likelihood of striking windows of the proposed building during flight, causing injury or mortality. In addition, potential construction night lighting, and, under operation, increased building night lighting within the Transit District area could attract migratory birds and incrementally increase the likelihood of strike injuries or mortality. Outdoor landscaping close to buildings within the Transit District area could attract birds and may also increase the likelihood of bird collisions with nearby structures. However, development that would be allowed under the proposed Transit District DTPP Amendments would occur within

existing developed areas and not within natural areas which attract higher numbers of birds, which reduces the likelihood of collisions.

In considering the potential collision risks to migratory birds, because the Transit District area development would not alter the height or density previously studied and would be located near similar tall buildings within an existing developed area, with a lack of local natural features that attract birds, potential impacts to migratory birds passing through Redwood City along the Pacific Flyway are therefore considered less than significant. However, urban trees and shrubs within the Transit District area may also provide habitat for birds protected under the federal MBTA. The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impact identified in the DTPP Final EIR. Mitigation Measure BIO-1 (Mitigation Measure 15-3 from the DTPP Final EIR with clarifying amendments) is applicable to the proposed Transit District DTPP Amendments and sufficient to reduce this impact to a *less-than-significant* level.

**Mitigation:** Implement Mitigation Measure BIO-1 (nesting bird protection)

Significance after Mitigation: Less than Significant

Impact BIO-5: Implementation of the proposed Transit District DTPP Amendments would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Less than Significant with Mitigation)

The DTPP Final EIR found that future construction activities associated with development may result in the removal of heritage trees, as defined by the City's Tree Preservation Ordinance (Municipal Code Chapter 35), a potentially significant impact. Redwood City's Tree Preservation Ordinance protects trees of 12 inches diameter at breast height (dbh) or 38 inches circumference, as well as heritage trees (which may be any tree of significance to the community), and requires that a permit be obtained if removal of such trees is necessary. Transit District area development could similarly impact trees included in the Tree Preservation Ordinance. DTPP Final EIR Mitigation Measure 15-4 would require that any project involving tree removal complete the application and review process specified in the City's Tree Preservation Ordinance (Municipal Code Chapter 35). Transit District area development could similarly affect trees included in the Tree Preservation Ordinance. The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impact identified in the DTPP Final EIR Mitigation Measure BIO-5 (formerly Mitigation Measure 15-4 from the DTPP Final EIR) is sufficient to reduce this impact to a *less-than-significant* level.

**Mitigation Measure BIO-5** (formerly Mitigation Measure 15-4 from the DTPP Final EIR): Any project in the Transit District area that would involve the removal of any tree shall complete the application and review process specified in the City's Tree Preservation Ordinance (Municipal Code chapter 35) prior to project approval.

Significance after Mitigation: Less than Significant

Impact BIO-6: Implementation of the proposed Transit District DTPP Amendments would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (No Impact)

The DTPP Final EIR did not discuss this impact, because no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan applies to the DTPP area, including the Transit District area. The same is true today. Consequently, there would be *no impact* from implementation of the proposed Transit District DTPP Amendments.

Mitigation: None required.		

## 15.4 References

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# **CHAPTER 16**

# Geology and Soils

This SEIR chapter analyzes the effects of the proposed Transit District DTPP Amendments on geology and soils, focusing on changes to the DTPP Final EIR project (certified in 2011) that may result in new or more severe impacts, and describes any new or expanded mitigation measures needed to address any such impacts.

### Findings of the DTPP Final EIR

Seismic hazards impacts (i.e., impacts related to surface rupture, ground shaking, differential settlement, landslides, liquefaction, and lateral spreading) were discussed in the DTPP Final EIR, and they were identified as less-than-significant impacts. The potential for ground rupture, earthquake-induced landslides, and lateral spreading are considered low but the DTPP area is susceptible to ground shaking and liquefaction. Potential impacts associated with these seismic hazards would be adequately mitigated by existing laws, regulations, and policies (including those required by the California Building Code [CBC]) and mitigation is not required.

Expansive soils impacts were identified in the DTPP Final EIR as potentially significant. Mitigation Measure 16-1 was identified in the DTPP Final EIR to require that all design-level geotechnical investigations for future developments include an analysis of expansive soil hazards and to provide stabilization measures as necessary, which would be in conformance with the CBC.

Corrosive soils impacts were identified in the DTPP Final EIR as potentially significant. Mitigation Measure 16-2 was identified in the DTPP Final EIR to require that all water systems and other buried metal infrastructure associated with future development will have cathodic protection and all concrete designs conform with California Department of Transportation (Caltrans) standards.

Soil erosion and sedimentation impacts were identified in the DTPP Final EIR as potentially significant. Mitigation Measure 16-3 was identified in the DTPP Final EIR to require the preparation of an erosion control plan for all future developments involving grading 10,000 square feet or more, consistent with the state Construction General Permit and its required Stormwater Pollution Prevention Plan (SWPPP).

Potentially significant impact paleontological resources were identified in the DTPP Final EIR. Mitigation Measure 7-5 is included in the DTPP Final EIR to ensure that a qualified paleontologist assesses each future development for potential impacts to significant paleontological resources.

# 16.1 Environmental Setting

# 16.1.1 Regional and Local Geology

The Transit District area lies within the geologically complex Coast Ranges Geomorphic Province<sup>1</sup> in Redwood City. The tectonics of the San Andreas Fault and other major faults in the western part of California have played a major role in the geologic history of the area, driven by the interaction of the Pacific and North American Tectonic Plates. The region is marked by northwest-trending elongated ranges and narrow valleys that roughly parallel the coast and the San Andreas Fault Zone. Geologic materials are mostly composed of marine sedimentary deposits, metamorphic rocks, and volcanic rocks.

## 16.1.2 Faults and Seismicity

### **Faults**

The magnitude and nature of fault rupture can vary for different faults or even along different strands of the same fault. Structures, transportation facilities, and utility systems crossing fault traces are at risk during a major earthquake due to ground rupture caused by differential lateral and vertical movement on opposite sides of the active fault trace.

There are no known Holocene-active<sup>2</sup> faults (faults identified by the California Geological Survey (CGS) as Earthquake Fault Zones [EFZ]) within the city of Redwood City (CGS 2010). However, the San Andreas and Hayward fault zones (both classified as EFZs) are in proximity to the city. The Hayward and San Andreas fault zones have been identified as EFZs by CGS, however, given that they are not within city limits, any surface rupture of these faults is not likely.

# **Ground Shaking**

The Working Group on California Earthquake Probabilities (WGCEP) is a collaboration between the U.S. Geological Survey (USGS), CGS, and the Southern California Earthquake Center. The WGCEP recently evaluated the probability of one or more earthquakes of Mw 6.7 or higher occurring in California over the next 30 years. The WGCEP estimated that the San Francisco Bay Area as a whole has a 72 percent chance of experiencing an earthquake of Mw 6.7 or higher over the next 30 years, with the Hayward and San Andreas Faults being the most likely to cause such an event (Field et al., 2015).

The entire San Francisco Bay Area region, including the Transit District area, could be subject to strong ground shaking during earthquakes. ShakeMap is a product of the USGS Earthquake Hazards Program; ShakeMap earthquake scenarios represent one realization of a potential future earthquake by assuming a particular magnitude and location. According to the ShakeMaps that correspond with the earthquake planning scenario generated by USGS, if a large earthquake were to

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A geomorphic province is a regional area that possesses similar bedrock, structure, history, and age.

Holocene-active faults are those that have experienced fault movement within the past 11,700 years.

occur on any of the active faults in the region (San Andreas and Hayward fault zones), the city would be subjected to strong to very strong seismic ground shaking (USGS, 2013a; USGS 2013b).

### **Liquefaction and Lateral Spreading**

Liquefaction is a phenomenon in which unconsolidated, water-saturated sediments become unstable as a result of the effects of strong seismic shaking. During an earthquake, these sediments can behave like a liquid, potentially causing severe damage to overlying structures.

Lateral spreading is a variety of minor landslide that occurs when unconsolidated liquefiable material breaks and spreads due to the effects of gravity, usually down gentle slopes. Liquefaction-induced lateral spreading is defined as the finite, lateral displacement of gently sloping ground as a result of pore-pressure buildup or liquefaction in a shallow underlying deposit during an earthquake. The occurrence of this phenomenon is dependent on many complex factors, including the intensity and duration of ground shaking, particle-size distribution, and density of the soil.

The potential damaging effects of liquefaction include differential settlement, loss of ground support for foundations, ground cracking, heaving and cracking of structure slabs due to sand boiling, and buckling of deep foundations due to ground settlement. Dynamic settlement (pronounced consolidation and settlement from seismic shaking) may also occur in loose, dry sands above the water table, resulting in settlement of and possible damage to overlying structures. In general, a relatively high potential for liquefaction exists in loose, sandy soils that are within 50 feet of the ground surface and are saturated (below the groundwater table). Lateral spreading can move blocks of soil, placing strain on buried pipelines that can lead to leaks or pipe failure.

The DTPP Final EIR determined that the DTPP area has a moderate to high potential for liquefaction.

#### Subsidence

Subsidence is the gradual lowering of the land surface due to compaction of underlying materials. Subsidence can result from extraction of groundwater and oil, which can cause subsurface clay layers to compress and lower the overlying land surface. Subsidence occurs because the presence of water in the pore spaces in between grains helps to support the skeletal structure of the geologic unit. If the water is removed, the structure becomes weaker and can subside.

The DTPP Final EIR did not include specific data regarding subsidence in the DTPP area. The DTPP Final EIR discusses the possibility of subsidence occurring within expansive soils, which do occur in the DTPP area.

#### Landslides

Landslides are one of the various types of downslope movements in which rock, soil, and other debris are displaced by the effects of gravity. The potential for material to detach and move down slope depends on a variety of factors including the type of material, water content, steepness of terrain, and more.

Given the relatively flat topography within the DTPP area, landslides are not likely.

### 16.1.3 Soils

### **Expansive Soils**

Expansive soils are soils that possess a "shrink-swell" characteristic, also referred to as linear extensibility. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying; the volume change is reported as a percent change for the whole soil. Changes in soil moisture can result from rainfall, landscape irrigation, utility leakage, roof drainage, or perched groundwater. Expansive soils are typically very fine-grained and have a high to very high percentage of clay. Structural damage may occur incrementally over a long period of time, usually as a result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Linear extensibility is used to determine the shrink-swell potential of soils. If the linear extensibility is more than 3 percent, shrinking and swelling may cause damage to buildings, roads, and other structures (NRCS, 2017).

The DTPP Final EIR concluded that the soil in the lowland portions of Redwood City, including the DTPP area, are predominantly clays and silty clays with a high shrink-swell potential.

### 16.1.4 Paleontological Resources

Paleontological resources are the fossilized remains of plants and animals: vertebrates (animals with backbones; e.g., mammals, birds, fish), invertebrates (animals without backbones; e.g., starfish, clams, coral), and microscopic plants and animals (microfossils). Paleontological resources can include mineralized body parts, body impressions, or footprints and burrows. They are valuable, non-renewable, scientific resources used to document the existence of extinct life forms and to reconstruct the environments in which they lived.

Fossils can be used to determine the relative ages of the depositional layers in which they occur and of the geologic events that created those deposits. The age, abundance, and distribution of fossils depend on the geologic formation in which they occur and the topography of the area in which they are exposed. The geologic environments within which plants or animals became fossilized usually were quite different from the present environments in which the geologic formations exist.

The Society of Vertebrate Paleontology (SVP) established guidelines for the identification, assessment, and mitigation of adverse impacts on non-renewable paleontological resources. Most practicing paleontologists in the United States adhere closely to the SVP's assessment, mitigation, and monitoring requirements as outlined in these guidelines, which were approved through a consensus of professional paleontologists. Many federal, state, county, and city agencies have either formally or informally adopted the SVP's standard guidelines for the mitigation of adverse construction-related impacts on paleontological resources (SVP, 2010).

The SVP has helped define the value of paleontological resources. In particular, the SVP indicates that geologic units of high paleontological potential are those from which vertebrate or significant invertebrate or plant fossils have been recovered in the past (i.e., are represented in institutional collections). Geologic units of low paleontological potential are those that are not known to have produced a substantial body of significant paleontological material. As such, the sensitivity of an area with respect to paleontological resources hinges on its geologic setting and whether significant fossils have been discovered in the area or in similar geologic units.

Paleontological sensitivity is defined as the potential for a geologic formation to produce scientifically important fossils. This is determined by the rock type, the past history of the geologic unit in producing significant fossils, and the fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010), the SVP defines four categories of paleontological sensitivity for rock units, reflecting their potential for containing additional significant paleontological resources:

- **High Potential**: Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered;
- Low Potential: Rock units that are poorly represented by fossil specimens in institutional collections, or that based on general scientific consensus only preserve fossils in rare circumstances, with the presence of fossils being the exception, not the rule;
- **Undetermined Potential**: Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment; and
- **No Potential**: Rock units such as high-grade metamorphic rocks (e.g., gneisses and schists) and plutonic igneous rocks (e.g., granites and diorites) that will not preserve fossil resources.

The DTPP Final EIR does not specifically identify the paleontological potential within the DTPP area. However, it does mention that, according to the University of California Museum of Paleontology (UCMP) online fossil locality database, there are no known fossil localities within the DTPP area. The DTPP Final EIR further states that the nearest recorded fossil locality is two miles south, within the City of Atherton.

# 16.2 Regulatory Setting

The following section focuses on any changes to the regulatory setting that have occurred since certification of the DTPP Final EIR. Section 16.2 of DTPP Final EIR Chapter 16, *Geology and Soils*, includes the regulatory setting for this topic and is still current for this SEIR, except as noted below. (Both the 1990 General Plan and 2010 General Plan policies were used in the DTPP Final EIR. The 2010 General Plan has since superseded the 1990 General Plan.)

## 16.2.1 California Building Code

The California Building Code (CBC), codified in CCR Title 24, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards for structural strength, means of egress to facilities (entering and exiting), and general stability of buildings. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction.

CCR Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. The provisions of the CBC apply to the construction, alteration, movement, replacement, location, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The 2019 edition of the CBC is based on the 2018 International Building Code published by the International Code Council, which replaced the Uniform Building Code. The code is updated triennially; the 2019 edition of the CBC was published by the California Building Standards Commission on July 1, 2019, and took effect starting January 1, 2020. The 2019 CBC contains California amendments based on the American Society of Civil Engineers (ASCE) Minimum Design Standard ASCE/SEI 7-16, *Minimum Design Loads for Buildings and Other Structures*. The CBC provides requirements for general structural design and includes means for determining earthquake loads, as well as other loads (such as wind loads), for inclusion in building codes.

CBC Chapter 18 covers the requirements of geotechnical investigations (Section 1803), excavation, grading, and fills (Section 1804), load bearing of soils (Section 1806) and foundations (Section 1808), shallow foundations (Section 1809), and deep foundations (Section 1810).

Requirements for geotechnical investigations are included in CBC Appendix J, Section J104, *Engineered Grading Requirements*. As outlined in Section J104, applications for a grading permit must be accompanied by plans, specifications, and supporting data consisting of a soils engineering report and engineering geology report. Additional requirements for subdivisions requiring tentative and final maps and for other specified types of structures are in California Health and Safety Code Sections 17953–17955 and in 2019 CBC Section 1802. Samples from subsurface investigations, such as from borings or test pits, must undergo testing. Studies must be done as needed to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness.

# 16.2.2 National Pollutant Discharge Elimination System Construction General Permit

Construction activities associated with future development allowed under the proposed Transit District DTPP Amendments would disturb more than one acre of land surface, potentially affecting the quality of stormwater discharges into waters of the United States. The proposed Transit District DTPP Amendments would, therefore, be subject to the National Pollutant

Discharge Elimination System (NPDES) *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002, Construction General Permit; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ).

The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the United States from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface. The permit regulates stormwater discharges from construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a risk level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk at the site and the risk to receiving waters during periods of soil exposure (e.g., grading and site stabilization). The sediment risk level reflects the relative amount of sediment that could be discharged to receiving water bodies, and is based on the nature of the construction activities and the location of the site relative to receiving water bodies. The receiving-waters risk level reflects the risk to receiving waters from the sediment discharge. Depending on the risk level, the construction projects could be subject to the following requirements:

- Effluent standards
- Good site management "housekeeping"
- Non-stormwater management
- Erosion and sediment controls

- Run-on and runoff controls
- Inspection, maintenance, and repair
- Monitoring and reporting requirements

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that includes specific best management practices (BMPs) designed to prevent sediment and pollutants from coming into contact with stormwater and moving off-site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management, and good housekeeping. They are intended to protect surface water quality by preventing eroded soil and construction-related pollutants from migrating off-site from the construction area. Routine inspection of all BMPs is required under the Construction General Permit. In addition, the SWPPP must contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The SWPPP must be prepared before construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff.

Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment

and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, and washing and fueling of vehicles and equipment. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site after construction).

In the Transit District area, the Construction General Permit is implemented and enforced by the San Francisco Bay Regional Water Quality Control Board, which administers the stormwater permitting program. Dischargers must electronically submit a notice of intent and permit registration documents to obtain coverage under this Construction General Permit. Dischargers are to notify the San Francisco Bay Regional Water Quality Control Board of violations or incidents of non-compliance, and submit annual reports identifying deficiencies in the BMPs and explaining how the deficiencies were corrected. The risk assessment and SWPPP must be prepared by a State Qualified SWPPP Developer, and implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. A legally responsible person, who is legally authorized to sign and certify permit registration documents, is responsible for obtaining coverage under the permit.

# 16.3 Impacts and Mitigation Measures

### 16.3.1 Scope of Analysis

The scope of this impact analysis is limited to the identification of new or more severe geology and soils impacts that would result from implementation of the proposed Transit District DTPP Amendments, in relation to the certified DTPP Final EIR.

# 16.3.2 Significance Criteria

Significance criteria from Appendix G of the CEQA Guidelines were used as the basis of the impact analysis in this chapter. A significant impact could occur if implementation of the proposed Transit District DTPP Amendments would:

- a) directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. *Refer to Division of Mines and Geology Special Publication 42*; or
  - ii. strong seismic ground shaking; or
  - iii. seismic-related ground failure, including liquefaction; or
  - iv. landslides.
- b) result in substantial soil erosion or the loss of topsoil; or
- c) be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; or

- d) be located on expansive soil<sup>3</sup> creating substantial direct or indirect risks to life or property; or
- e) have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water; or
- f) directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impacts to paleontological resources were addressed in the cultural and historic resources section of the DTPP Final EIR. Per the Governor's Office of Planning and Research's revisions to the CEQA Guidelines of 2018, impacts to paleontological resources will be analyzed in this chapter.

## 16.3.3 Impacts and Mitigation Measures

Overall, the proposed Transit District DTPP Amendments would allow for excavation and construction in a subset of the geographic area analyzed in the DTTP Final EIR. Because subsurface conditions in the area have not changed, impacts related to implementation of the proposed Transit District DTPP Amendments would be the same as those identified in the DTPP Final EIR.

Impact GEO-1: Implementation of the proposed Transit District DTPP Amendments would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. (Less than Significant)

The DTPP Final EIR found that, while the DTPP would result in future developments (including residential and commercial developments) that could be affected by seismic hazards, the existing laws and regulations would be sufficient to mitigate those hazards. The impacts from seismic hazards (i.e., surface rupture, ground shaking, liquefaction, landslides, etc.) would be a less than significant impact and no mitigation were necessary.

Establishing the Transit District area would allow for future development, such as new residential and commercial spaces. As discussed in the DTPP Final EIR, all future development would be subject to the state and local laws in place to ensure that new developments are constructed in accordance with the CBC and are structurally sound. Specifically, all future developments would be required to undergo a geotechnical investigation and submit a geotechnical report prior to construction. The investigation would inform the geotechnical design of all structures to ensure they are able to withstand any impacts from seismic hazards, such as strong ground shaking and liquefaction (surface rupture and landslides were not identified in the DTPP Final EIR as potentially significant impacts). Compliance with all applicable state and local laws would ensure that impacts from the proposed Transit District DTPP Amendments would not result in new or more severe impacts related to seismic hazards than the impacts identified in the DTPP Final EIR. Therefore, impacts related to seismic hazards would be *less than significant*.

The CBC, based on the International Building Code and the now defunct Uniform Building Code, no longer includes a Table 18-1-B. Instead, Section 1803.5.3 of the CBC describes the criteria for analyzing expansive soils.

# Impact GEO-2: Implementation of the proposed Transit District DTPP Amendments would not result in substantial soil erosion or the loss of topsoil. (*Less than Significant with Mitigation*)

The DTPP Final EIR found that the DTPP would create a potentially significant impact as it relates to erosion and sedimentation due to the ground disturbance associated with future developments. DTPP Mitigation Measure 16-3 was identified to reduce this impact to a less-than-significant level by requiring the preparation of an erosion control plan for all future developments involving grading 10,000 square feet or more, consistent with the state Construction General Permit and its required SWPPP.

Implementation of the proposed Transit District DTPP Amendments would not change this conclusion as the proposed Transit District boundary is within the DTPP boundary; soil disturbance, as a result of future developments within the proposed Transit District, would be no more than what is proposed within the DTPP and would present a similar level of impact as identified in the DTPP Final EIR. The DTPP Final EIR Mitigation Measure 16-3 is sufficient to address impacts from the proposed Transit District DTPP Amendments as it relates soil erosion.

The proposed Transit District DTPP Amendments would not result in new or more severe impacts related to erosion than the impacts identified in the DTPP Final EIR. Mitigation Measure GEO-2 (formerly Mitigation Measure 16-3 from the DTPP Final EIR with clarifying amendments) is applicable to the proposed Transit District DTPP Amendments and is sufficient to reduce this impact to a *less-than-significant* level.

Mitigation Measure GEO-2 (formerly Mitigation Measure 16-3 from the DTPP Final EIR with clarifying amendments): The City shall require applicants for future development projects in the Transit District area involving a grading area of 10,000 or more square feet to prepare erosion control plans subject to City approval and consistent with the required project Stormwater Pollution Prevention Plans (SWPPPs) as well as Best Management Practices (BMPs) specified by the Redwood City Stormwater Management and Discharge Control Program (Municipal Code Chapter 27A). The plans and BMPs shall be implemented during construction. Erosion during all phases of construction shall be controlled through the use of erosion and soil transport control facilities. These shall include the use of catch basins and filter fabrics, and the direction of stormwater runoff away from disturbed areas. The plans shall also provide for longterm stabilization and maintenance of remaining exposed soils after construction is completed. Areas disturbed by construction shall be either covered with impervious surfaces (e.g., buildings and pavement) or fully stabilized with landscaping and/or native vegetation. All revegetated areas shall be irrigated and maintained as necessary to ensure the long-term survival of the vegetation.

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Impact GEO-3: Implementation of the proposed Transit District DTPP Amendments would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. (Less than Significant)

As discussed in Impact GEO-1, the DTPP Final EIR concluded that the risks associated with unstable geologic units or soil are low, but that effects of strong seismic ground shaking and liquefaction would present a potentially significant impact. Implementation of the proposed Transit District DTPP Amendments would not change this conclusion as the proposed Transit District boundary is within the DTPP boundary. As all future developments within the proposed Transit District DTPP Amendments are within the DTPP boundary, the impacts would be similar to those identified in the DTPP Final EIR. As further discussed in Impact GEO-1, compliance with all applicable local and state laws (i.e., the CBC) would ensure that all future developments within the proposed Transit District would be designed consistent with the CBC, which would ensure that new structures would not be susceptible to the effects of unstable geologic units and soils.

The impacts of the proposed Transit District DTPP Amendments would not result in new or more severe impacts related to unstable geologic units than those identified in the DTPP Final EIR. Therefore, the impact would be *less than significant*.

Impact GEO-4: Implementation of the proposed Transit District DTPP Amendments would not be located on expansive or corrosive soil creating substantial direct or indirect risks to life or property. (Less than Significant with Mitigation)

The DTPP Final EIR found that the DTPP would create a potentially significant impact as it relates to future developments within expansive and/or corrosive soil. Implementation of the proposed Transit District DTPP Amendments would not change this conclusion as the proposed Transit District boundary is within the DTPP boundary. As all future developments within the proposed Transit District are within the DTPP boundary, the impacts would be similar to those identified in the DTPP Final EIR. To reduce impacts related to expansive and corrosive soil the DTPP Final EIR includes Mitigation Measure 16-1 and Mitigation Measure 16-2, which state that the required geotechnical investigations must include an analysis of potential soil hazards and, if expansive or corrosive soils are identified, must include recommendations to address those issues (including engineering non-expansive soils and covering all metal infrastructure with cathodic protection from corrosive soil). Because nothing has changed with regard to soil conditions in the Transit District area. The proposed Transit District DTPP Amendments would not result in new or more severe impacts than the impact identified in the DTPP Final EIR. Mitigation Measure GEO-4a (formerly Mitigation Measure 16-1 from the DTPP Final EIR with clarifying amendments) and Mitigation Measure GEO-4b (formerly Mitigation Measure 16-2 from the DTPP Final EIR with clarifying amendments) are applicable to the proposed Transit District DTPP Amendments and are sufficient to reduce this impact to a less-than-significant level.

**Mitigation Measure GEO-4a** (formerly Mitigation Measure 16-1 from the DTPP Final EIR with clarifying amendments): The detailed, design-level geotechnical investigations required by the City Building Official shall include analysis of expansive soil hazards and

recommend stabilization measures. Once grading plans have been developed, the actual use of expansive soils in engineered fill construction shall be further evaluated by a geotechnical engineer and the location primary borrow source areas for fills shall be determined. Additionally, supplemental field and laboratory testing of potential cut materials shall be completed. In addition to observing all cut and fill slope construction, the project geotechnical engineer shall inspect and certify that any expansive soils underlying individual building pads and all roadway subgrades have been either removed or amended in accordance with City-approved construction specifications. If expansive soils are not fully remediated on each lot and in the area of all public and private improvements at the time of site development, the project geotechnical engineer shall make site-specific recommendations for grading, drainage installation, foundation design, the addition of soil amendments, and/or the use of imported, non-expansive fill materials, as may be required to fully mitigate the effects of weak or expansive soils and prevent future damage to project improvements. These recommendations shall be reviewed by a City-retained registered geologist and, following his or her approval, be incorporated into a report to be included with each building permit application and with the plans for all public and common area improvements. In addition, since proper drainage, in particular, can improve the performance of expansive soils by significantly reducing their tendency to shrink and swell, deed restrictions shall be imposed to prohibit significant modification of finished lot grades that would adversely affect site drainage.

Mitigation Measure GEO-4b (formerly Mitigation Measure 16-2 from the DTPP Final EIR with clarifying amendments): Project plans and specifications shall ensure that water systems and other buried metal infrastructure in all future development within the Transit District area shall, in addition to other coatings called for in the specifications, have cathodic protection using a sacrificial anode system. Design criteria for cathodic protection shall conform to Part VII (G) of the City's water system design criteria and standard specification details Section 02661.

Concrete mix designs shall conform to California Department of Transportation (Caltrans) Memo to Designers 10-5 January 2002 Protection Reinforcement Against Corrosion Due to Chlorides, Acids, and Sulfates.

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Impact GEO-5: Implementation of the proposed Transit District DTPP Amendments would not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. (Less than Significant)

The DTPP Final EIR did not address the impacts related adequate soils for the use of septic tanks or alternative waste water disposal systems because septic systems are not appropriate within urbanized areas. The same is still true, and no septic systems would be installed in the Transit District area. As future developments would connect to the existing sewer system, there would be a *less-than-significant impact* related to the suitability of the soils.

# Impact GEO-6: Implementation of the proposed Transit District DTPP Amendments would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Less than Significant with Mitigation)

The DTPP Final EIR determined that the DTPP would present a potentially significant impact to paleontological resources as a result of deep excavations associated with future development in the plan area. Implementation of the proposed Transit District DTPP Amendments would not change this conclusion as the Transit District area is wholly located within the DTPP boundary. As all future developments within the Transit District area are within the DTPP boundary, the impacts would be similar to those identified in the DTPP Final EIR. To reduce impacts to significant paleontological resources the DTPP Final EIR includes Mitigation Measure 7-5, which requires that a qualified paleontologist assess each future development to ensure construction activities do not disturb or destroy significant paleontological resources. If it is determined that there is a high potential to encounter significant paleontological resources proper procedures would be followed to ensure paleontological resources are avoided or handled properly if avoidance is not feasible. As the height of the buildings are not changing, the depth of excavation during construction should remain the same as well. Because the possibility of encountering paleontological resources has not changed, the DTPP Final Mitigation Measure 7-5 is sufficient to address impacts from the proposed Transit District DTPP Amendments on significant paleontological resources. The proposed Transit District DTPP Amendments would not result in new or more severe impacts on paleontological resources than were identified in the DTPP Final EIR. Mitigation Measure GEO-6 (formerly Mitigation Measure 7-5 from the DTPP Final EIR with clarifying amendments) is applicable to the proposed Transit District DTPP Amendments and is sufficient to reduce this impacts to a less-than-significant level.

Mitigation Measure GEO-6 (formerly Mitigation Measure 7-5 from the DTPP Final EIR with clarifying amendments): Prior to the issuance of grading or demolition permits. the Community Development & Transportation Department, in coordination with a qualified paleontologist, shall assess individual development project proposals within the Transit District area for the potential to destroy unique paleontological resources. The City's Community Development and Transportation Department shall require development proposals entailing significant earthworks or deep foundations with the potential to penetrate sedimentary rock layers to incorporate a study by a professional paleontologist to assess the potential for damage of paleontological resources. Should the paleontologist determine that the proposal has the potential to damage paleontological resources, the paleontologist shall provide detailed provisions for the protection of these resources to the City's Community Development & Transportation Department. These provisions may include the complete avoidance of the resource, in -place preservation, and/or complete data recovery as discussed in Mitigation Measure CR-2. Implementation of this measure would reduce the potential impact on paleontological resources to a lessthan-significant level.

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### 16.4 References

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# **CHAPTER 17**

# **Cumulative Impacts**

Cumulative impacts, as defined in CEQA Guidelines Section 15355, refer to two or more individual effects that, when considered together, are "considerable" or that compound or increase other environmental impacts. A cumulative impact from several projects is the change in the environment that would result from the incremental impact of the project when added to the impacts of other closely related past, present, or reasonably foreseeable future projects. Pertinent guidance for cumulative impact analysis is provided in Guidelines Section 15130:

- An EIR shall discuss cumulative impacts of a project when the project's incremental effect is "cumulatively considerable" (i.e., the incremental effects of an individual project are considerable when viewed in connection with the effects of past, current, and probable future projects, including those outside the control of the agency, if necessary).
- An EIR should not discuss impacts that do not result in part from the project evaluated in the EIR.
- A project's contribution is less than cumulatively considerable, and thus not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.
- The discussion of impact severity and likelihood of occurrence need not be as detailed as for effects attributable to the project alone.
- The focus of analysis should be on the cumulative impact to which the identified other projects contribute, rather than on attributes of the other projects that do not contribute to the cumulative impact.

An EIR must determine whether an individual project's contribution to a significant cumulative impact is *considerable*. This means that the project's proportional share is considered adverse in conjunction with other similar projects that may combine to result in physical impacts.

The cumulative impact analysis for each individual resource topic is described in the corresponding resource section of this chapter, immediately following the description of the project-specific impacts and mitigation measures.

Two approaches to a cumulative impact are articulated in CEQA Guidelines Section 15130(b)(1): (1) The analysis can be based on a list of past, present, and reasonably foreseeable probable future projects producing closely related impacts that could combine with those of a proposed project; or (2) a summary of projections contained in a general plan or related planning document can be used to determine cumulative impacts.

Most of the quantitative analysis in this SEIR employs the projections approach. For example, the analysis in Chapter 9, *Transportation*, relies substantially on the City/County Association of Governments of San Mateo County (C/CAG) Travel Demand Model, which encompasses growth projections to the year 2040. The VTA-C/CAG model includes growth already assumed in the Redwood City General Plan, including its 2014 Housing Element and also including growth within the DTPP area that could be accommodated under the DTPP's existing assumptions and office and housing development caps. Similarly, the model includes assumed growth from other San Mateo County communities and those elsewhere in the Bay Area. Additionally, for this SEIR, the cumulative land use projections within Redwood City were updated to include preliminary assumptions underlying the City's in-progress General Plan Housing Element Update, which is intended to accommodate the City's recently assigned Regional Housing Needs Assessment (RHNA) allocation. Finally, the 2040 cumulative growth projections also include growth anticipated in the SEIR that is in preparation for the DTPP Plan-wide amendments, a separate project. This separate SEIR will evaluate effects of increased office and residential growth throughout the DTPP area, compared to growth assumed in the DTPP Final EIR.

The above-described growth projections also largely underlie the cumulative analyses of other environmental topics evaluated quantitatively, including noise and vibration, air quality, and greenhouse gas emissions evaluated in the analysis of climate change. In contrast, and depending on which approach best suits the individual resource topic being analyzed, some topics employ a list-based approach, at least in part. For instance, the cumulative analyses of land use and aesthetics considers several individual projects that are anticipated or approved in the immediate vicinity of the Transit District area.

The following factors were used to determine an appropriate list of individual projects to be considered in the cumulative impact analysis where the list-based approach is used:

- **Similar Environmental Impacts**—A relevant project contributes to effects on resources that are also affected by the proposed project. A relevant future project is defined as one that is "reasonably foreseeable," such as a proposed project for which an application has been filed with the approving agency or has approved funding, or a project for which public agency staff has undertaken considerable planning that is widely acknowledged.
- Geographic Scope and Location—A relevant project is located within the geographic area within which effects could combine. The geographic scope varies on a resource-by-resource

C/CAG licenses the countywide model from the Santa Clara Valley Transportation Authority (VTA); as a result, the model is often referred to as the VTA-C/CAG Model.

The RHNA process, which occurs in eight-year cycles, begins with the state Department of Housing and Community Development identifying a total number of new housing at a statewide level, broken down by income level, from very-low-income households all the way to market-rate housing, and to assign a share of this Regional Housing Needs Determination to each region of California. In the San Francisco Bay Area, the next step is for the Association of Bay Area Governments (ABAG), as the region's Council of Governments, to allocate a share of the required regional housing to each jurisdiction within the region. as well as growth associated with the Plan-wide Amendments to the General Plan and DTPP. For the 2023-2031 RHNA cycle, ABAG completed the regional allocation in December 2021. For Redwood City, the total RHNA allocation for 2023-2031 is 4,588 units, including 1,115 units affordable to very-low-income households; 643 low-income units; 789 moderate-income units; and 2,041 above-moderate-income (i.e., market-rate) units.

basis. For example, the geographic scope for evaluating cumulative effects on regional air quality consists of the affected air basin.

• **Timing and Duration of Implementation**—Effects associated with activities for a relevant project (e.g., short-term construction or demolition, or long-term operations) would likely coincide in timing with the related effects of the proposed project.

# 17.1 Cumulative Development Assumptions

Since certification of the DTPP Final EIR, the following projects have been completed or are nearly complete in the Plan area:

- Greystar I (299 Franklin Street), now the Franklin 299 Apartments;
- Greystar II (103 Wilson Street [1 Franklin Street]), now the Cardinal Apartments;
- Greystar III (1305 El Camino Real), now The Huxley Apartments;
- Greystar IV (1409 El Camino Real), now The Highwater Apartments;
- 612 Jefferson Street, Habitat for Humanity affordable townhouses;
- 707 Bradford Street, Arroyo Green Apartments (affordable senior housing);
- 601 Marshall Street, offices over retail;
- Broadway Station (2075 Broadway), offices over retail;
- 550 Allerton Street, offices;
- 815 Hamilton Street, offices over retail;
- 851 Main Street, offices over retail; and
- 929 Main Street, offices over retail

There are six projects in the DTPP area with applications on file that are being considered for DTPP and General Plan amendments as part of "Gatekeeper" process initiated by the City Council. These Gatekeeper projects are the subject of the separate DTPP Plan-Wide Amendments SEIR referenced above. They include:

- 651 El Camino Real, residential and a replacement American Legion facility;
- 901 El Camino Real, offices over retail and a new teen center; off-site residential units;
- 2300 Broadway, offices over retail; off-site residential units;
- 603 Jefferson Avenue/750 Bradford Street, offices and residential;
- 1900 Broadway, offices and residential over retail; and
- 601 Allerton Street, offices over retail; off-site residential units

In addition to the six Gatekeeper projects, there are two other projects within the DTPP area that currently have applications on file:

- Sequoia Hotel (800 Main Street), rehabilitation and expansion of a historic hotel; and
- 1330 El Camino Real ("Redwood City Discovery"), residential

All 20 of the foregoing projects are included in the analysis in this SEIR, with projects that were occupied prior to the most recent update of the VTA-C/CAG model included as part of the existing setting and the other projects included in the cumulative analysis of quantifiable issues such as transportation, air quality, greenhouse gases, and noise.

Also included in the cumulative analysis are other nearby projects that are proposed, approved, under construction, or recently completed, including 610 Walnut Street (offices, within the Downtown Medical Campus [Kaiser] Precise Plan); 353 Main Street (affordable residential); 849/855 Veterans Boulevard (residential), 1180 Main Street (offices); 1201 Main Street (offices and residential); the South Main Mixed-Use project (office, residential, and retail); and a hotel at 690 Veterans Boulevard. Also under construction (although outside Redwood City jurisdiction as a San Mateo County project) is the new San Mateo County Government Center, on the block bounded by Marshall, Hamilton, and Bradford Streets and Middlefield Road.

In addition, the Peninsula Corridor Joint Powers Authority, operator of Caltrain, is currently undertaking the Peninsula Corridor Electrification Project, described below.

• The Peninsula Corridor Electrification Project is a key component of the Caltrain Modernization (CalMod) Program and will electrify the corridor from San Francisco's 4th and King Caltrain Station to the Tamien Caltrain Station, a distance of approximately 51 miles. Electrification improvements include converting diesel-hauled trains to electric trains, increasing service to six trains per peak hour per direction, and maintaining operating speed up to 79 miles per hour. The project would require the installation of 138 miles of overhead wires and supports for the distribution of electrical power to the trains. The project began construction in 2016 and revenue service is currently scheduled for late 2024, at which time approximately 75 percent of Caltrain's current diesel fleet will be replaced by new electric trains. (Some trains traveling, including those traveling between San Francisco and Gilroy, will continue to use diesel locomotives.)

Beyond the projects listed above, there are two other major projects that are not funded, approved, or past the conceptual design phase. While the City cannot speculate as to whether these projects will be implemented, they are described below as they are currently conceived for informational purposes only:

• Expansion and Relocation of Redwood City Caltrain station. The adopted Caltrain 2040 Long-Range Service Vision sets forth a minimum service level of eight trains per hour in each direction between San Francisco and Tamien Station in San José, doubling the existing maximum frequency of four trains per hour.<sup>3</sup> As part of the ongoing planning effort for implementation of the Long-Range Service Vision, Caltrain has identified Redwood City as the preferred location for a four-track transfer station. Given Redwood City's location approximately midway between San Francisco and San José, Caltrain anticipates that a Redwood City transfer station would play a key role in this expanded service by allowing for transfers between express and local trains. Accordingly, Caltrain is considering a proposal to relocate and expand the existing Redwood City Transit Center. According to a presentation given to a committee of the Caltrain Board of Directors in August 2021, "Strong ridership,

Caltrain, The Caltrain 2040 Long Range Service Vision; adopted by the Caltrain Board of Directors, October 3, 2029. Available on the internet at: https://caltrain2040.org/wp-content/uploads/Caltrain-Business-Plan-Final-Service-Vision.pdf.

high land use densities and a potential connection to a future Dumbarton service make Redwood City an ideal location for a potential four-track mid-Peninsula hub." Any relocation and/or expansion of the Caltrain station would be undertaken by Caltrain as a separate project from the proposed Transit District DTPP Amendments and would be subject to separate project-level CEQA review. However, through the proposed Transit District DTPP Amendments, the City is taking proactive steps to plan for this station relocation.

Grade Separation at Caltrain Rail Crossings. Also, separate from the proposed Transit District DTPP Amendments, the City is working with Caltrain to evaluate the six at-grade rail (Caltrain) crossings in Redwood City (Whipple and Brewster Avenues; Maple, Main, and Chestnut Streets; and Broadway) to address existing issues such as travel delay, safety, train noise, and the fact that at-grade crossings result, to some degree, in de facto barriers between neighborhoods. These issues are likely to become amplified with increased rail service and new track configurations. The City has not selected a preferred alternative, but is considering the following two options: a) grade-separate all crossings with Maple Street having bicycle and pedestrian access only and Chestnut Street having either full access or bicycle and pedestrian access only; and b) grade-separate the northern crossings only, leaving the southern crossings at-grade. While grade separations are not a part of the proposed Transit District DTPP Amendments, and it is not currently known which, if any, of the six at-grade crossings might ultimately be converted to grade-separated crossings, this SEIR's transportation analysis includes an evaluation of potential circulation changes that could result from grade separation, for informational purposes. Like a potential new Caltrain station, grade separation would be the subject of separate project-level CEOA review.<sup>6</sup>

# 17.2 Cumulative Impacts and Mitigation Measures

## 17.2.1 Land Use and Planning

Impact C-LU-1: The proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects would not result in cumulative impacts on land use and planning. (Less than Significant)

The DTPP Final EIR found that cumulative impacts related to land use and planning would be less than significant, as the project would not contribute substantially to either physically dividing an established community nor to conflicts with plans, policies, or regulations adopted to protect the environment. (The DTPP Final EIR also found that the DTPP would not result in cumulative effects related to incompatibility of land uses; however, this criterion has since been removed from the CEQA Checklist.)

The geographic scope for cumulative impacts on land use and planning includes the City of Redwood City and areas within approximately 0.5 miles of the DTPP boundary. Impacts from cumulative development projects outside of 0.5 miles from the DTPP area boundary are not likely

Caltrain, "Redwood City Planning and Redwood City Update," presentation to the Work Program-Legislative-Planning Committee, July 28, 2021. Available on the internet at: https://www.caltrain.com/Assets/6i+Redwood+City+Planning+and+Real+Estate+Update+PowerPoint.pdf.

Crossings at Jefferson Avenue and Woodside Road are already grade-separated.

Depending on the grade separation option pursued, bicycle access could be provided across (beneath) the tracks, along the Broadway right-of-way and beneath the historic "Climate Best by Government Test" arch. This could entail removal/reconfiguration of the existing Arguello Plaza hardscape open space.

to combine with land use and planning impacts from the Plan-Wide Amendments because there are a variety of intervening land uses in between, thus, creating a buffer between the DTPP area and surrounding projects. Thus, 0.5 miles is an appropriate search radius for this analysis.

### Division of an Established Community

Development of cumulative transportation projects such as the Peninsula Corridor Electrification Project and relocation and expansion of the Caltrain station would include widening the Caltrain right-of-way in connection with potential future relocation and expansion of the Redwood City Caltrain Station and Transit Center. The train tracks currently represent a partial physical barrier, because they only allow crossing from one side of the tracks to the other at specified at grade crossings when it is safe to do so. Widening this partial physical barrier as part of the relocation and expansion effort could represent a cumulative impact on the physical division of an established community. However, the proposed Transit District DTPP Amendments would not contribute to this cumulative impact because it would not alter any of the existing at grade crossings and would extend a network of public streets through the site and include pedestrian and bicycle circulation enhancements. This would serve to ameliorate the physical division caused by the existing train tracks, which would reduce the proposed Transit District DTPP Amendments' contribution to a potentially significant cumulative impact.

The potential future Caltrain grade separation project would reduce the partial physical barrier created in the community by the railroad tracks. While construction of this cumulative project could result in temporary detours, thus temporarily causing a physical division within the community, the grade separations would ultimately allow safe and easy travel across the railroad corridor at all times, improving access, to, from, and through the Transit District area and vicinity.

Other development projects that may occur within the vicinity would generally occur within the context of the existing or planned street grid, and would therefore not physically divide or sever existing connected parts of the community, or make it impossible or extremely inconvenient for a person to get from one part of the established community to a previously connected part of the community.

The cumulative development would be urban infill in nature and, while increasing density, would be constructed on parcels that fit in with the existing framework of land use and circulation in the existing community, and therefore would not create physical barriers that would physically divide an established community. As described in Chapter 4, *Land Use and Planning*, the proposed Transit District DTPP Amendments would have a less-than-significant impact as a result of the extended network of public streets through the site and pedestrian and bicycle circulation enhancements. All of these changes would enhance public access to and through the site. Based on the above considerations, the proposed Transit District DTPP Amendments, in conjunction with other cumulative development within the vicinity, would not divide an established community and the proposed Transit District DTPP Amendments would not result in any increase in the physical barrier that results from the existing Caltrain tracks, while cumulative development, particularly if it were to include grade separation of the Caltrain tracks, would decrease the existing physical barrier in Downtown Redwood City. Therefore, there would be no

new or more severe cumulative impacts than what was identified in the DTPP Final EIR. Cumulative impacts would be *less than significant*.

# Conflicts with Plans Adopted for the Purpose of Avoiding or Mitigation and Environmental Effect

The proposed Transit District DTPP Amendments would combine with growth elsewhere in the DTPP and vicinity to transform the area surrounding the Redwood City Caltrain Station and Transit Center. The area would transform from a low-density, substantially commercial area to a mixed-use residential-commercial area. However, this transformation would be largely consistent with both adopted local and regional plans, including the existing DTPP, the Redwood City General Plan, and *Plan Bay Area*. As described in Chapter 5, *Population and Housing*, the proposed Transit District DTPP Amendments would be within the amount of overall planned growth in the General Plan.

Projected growth and the cumulative development projects would increase density in the area and, together with cumulative increases in transit infrastructure, would support the increased use of transit and other non-single-occupant vehicle modes of transportation. This would reduce the need for motor vehicle travel in the area surrounding the Transit District area and support the further revitalization of Downtown. This type and location of development is consistent with statewide, regional, and local plans that seek to accommodate increased population growth while achieving goals to reduce GHG emissions and other typical environmental effects of suburban sprawl and greenfield development.

Impacts related to conflicts with applicable land use plans, policies, or regulations of an agency with jurisdiction over the related projects generally are specific to the individual related projects; the impacts are not cumulative. However, the proposed Transit District DTPP Amendments, together with related cumulative projects, would indirectly result in development, including high-density residential, commercial, and transit-oriented development that would be concentrated in a Transit Priority Area. This type of development implements the transit-oriented development policies and would not conflict with plans adopted for the purpose of avoiding or mitigating an environmental effect. There would be no new or more severe cumulative impact than the impact identified in the DTPP Final EIR. Therefore, the cumulative impact would be *less than significant*.

Mitigation: None required.		

## 17.2.2 Population and Housing

Impact C-PH-1: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would have a less than significant cumulative impact on population and housing. (Less than Significant)

The DTPP Final EIR found that cumulative population and housing impacts would be less than significant, as the project would neither contribute considerably to unplanned growth nor contribute considerably to displacement of housing or people.

The geographic scope of the analysis of cumulative impacts related to population, employment, and housing includes Redwood City and the region. Cumulative planned growth in the City is based on projections in the General Plan and Housing Element, and cumulative planned growth in the region is reflected in ABAG's *Plan Bay Area 2040*.

The recently (October 2021) adopted *Plan Bay Area 2050*, like *Plan Bay Area 2040* before it, calls for an increasing percentage of Bay Area growth to occur as infill development in areas with good transit access and where services necessary for daily living are provided in proximity to housing and jobs. With its abundant transit service and mixed-use Downtown, Redwood City is expected to accommodate an increasing share of future regional growth.

Cumulative projects would cumulatively increase the population and housing in Redwood City and the Region. However, as stated in Impact PH-1 in Chapter 5, Population and Housing, under "Direct Population Growth," there is sufficient remaining capacity in Redwood City under Plan Bay Area projections through 2040 to accommodate the proposed Transit District DTPP Amendments, as well as other cumulative development in Redwood City, including that anticipated under the DTPP Plan-Wide Amendments. In addition, Plan Bay Area anticipates the residential population in San Mateo County will increase by about 15 percent from 2020 to 2040, and that the number of jobs in San Mateo County will increase by more than 18 percent over the same period. The projected growth in Redwood City from 2020 to 2040 in the General Plan (22,319 residents and 29,302 jobs) would represent approximately 19 percent of the residential growth and approximately 40 percent of the job growth ABAG anticipates will occur in San Mateo County from 2020 to 2040. The proposed Transit District DTPP Amendments alone would be responsible for approximately 13 percent of the residential growth and approximately 45 percent of the job growth ABAG anticipates will occur in Redwood City between 2020 to 2040. Thus, projected development pursuant to the proposed Transit District DTPP Amendments in combination with General Plan projections would not exceed planned growth in the region.

The purpose of the proposed Transit District DTPP Amendments is to accommodate growth in jobs and housing in a new Transit Center. The plan would not: (1) induce population growth beyond that already planned, and (2) would not directly displace housing or necessitate the construction of replacement housing outside of the proposed Transit District because the Transit District area does not currently contain any dwelling units or office space; thus, no direct displacement would occur. Therefore, the proposed Transit District DTPP Amendments would not result in new or more severe cumulative impacts related to growth inducement or

displacement of housing and people than the impacts identified in the DTPP Final EIR. The cumulative impact would be *less than significant*.

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### 17.2.3 Aesthetics and Visual Resources

Mitigation: None required

Impact C-AE-1: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would not result in a significant impact related to aesthetics, light, glare, or shadow. (*Less than Significant*)

The DTPP Final EIR identified less-than-significant cumulative impact on aesthetics, light and glare, and shadow.

The geographic scope for cumulative impacts on aesthetics, light and glare, and shadow includes projects approved but not built, or were the subject of a pending development application at the time the NOP was issued, within approximately 0.5 miles of the DTPP area boundary. Impacts from cumulative development projects outside of 0.5 miles from the DTPP area boundary are not likely to combine with aesthetic and shadow impacts from the Plan-Wide Amendments because there are a variety of intervening buildings in between that create a visual buffer between the DTPP area and surrounding projects. Therefore, 0.5 miles is an appropriate search radius for this analysis.

Development of cumulative transportation projects such as the Peninsula Corridor Electrification Project, relocation and expansion of the Caltrain station, and potential future Caltrain grade separation would not introduce tall or bulky features that would obstruct scenic vistas from public vantage points, conflict with regulations governing scenic quality, or combine with the proposed Transit District DTPP Amendments to result in light and glare, or shadow impacts.

The Caltrain grade separation project includes four alternatives for separating the Caltrain railroad from existing at-grade crossings. Within the DTPP area, the height of the railroad could be up to 26 feet at the Brewster Avenue crossing under alternative 2, or no more than 0 feet above grade under alternative 4 at all crossings within the DTPP area. If alternatives 1 through 3 are selected, an elevated railroad would be constructed at the following crossings in the DTPP area: Brewster, Broadway, Maple, and Main. This could introduce above-ground infrastructure that could affect scenic views of the western hills. However, these infrastructure improvements would not be likely to conflict with applicable zoning and other regulations governing scenic quality, nor would it affect scenic views of the Downtown Redwood City skyline and the San Francisco Bay from four vantage points in the western hills: Easter Cross, Easter Bowl, Cañada College, and Edgewood Park and Natural Preserve. Therefore, the Caltrain grade separation project, in combination with cumulative projects, would not result in a significant impact on aesthetics.

Development of all other residential, mixed use, or commercial projects within or near the DTPP boundary would occur pursuant to the DTPP. As explained in the DTPP Final EIR, projects consistent with the DTPP would contribute to a "mounding" of buildings concentrated near the center of Downtown, thus resulting in a more discernable and distinctive Downtown form and skyline. The proposed Transit District DTPP Amendments would contribute to this "mounding" effect, which was seen as beneficial in the DTPP Final EIR, and therefore would not result in significant cumulative impacts on aesthetics.

With respect to light and glare, cumulative projects would be required to meet the LZ3 (medium) lighting power allowances in the California Building Standards Code Title 24 (Parts 1 and 6 – Outdoor Lighting Zones), as would development in the Transit District area. Compliance with Title 24 standards would improve the quality of outdoor lighting and reduce the cumulative impacts of light pollution, light trespass and glare to less than significant levels.

Regarding shadow, all cumulative projects would be located to the east, south, and north of the Transit District area. Shadow from the recently completed Greystar II and III and projects could overlap with shadow from development in the Transit District area; however, the additional shadow contributed by these cumulative projects would not affect any shadow-sensitive uses and spaces analyzed herein.

As described in Chapter 6, Aesthetics, the proposed Transit District DTPP Amendments development projects would not increase the potential for shadow beyond that analyzed in the DTPP Final EIR, and therefore the proposed amendments would not contribute to any potential increased shadow from cumulative development.

Therefore, the cumulative impact of the proposed Transit District DTPP Amendments in combination with cumulative projects would not result in new or more severe cumulative impacts than the impacts identified in the DTPP Final EIR. The cumulative impact would be *less than* significant.

Mitigation: None required.

### 17.2.4 Cultural and Historic Resources and Tribal Cultural Resources

Impact C-CR-1: The proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects would result in less-than-significant cumulative impacts related to cultural, historic, and tribal cultural resources. (Less than Significant)

The DTPP Final EIR determined that anticipated cumulative development would have the potential to cause a substantial adverse change in one or more identified historic resources (i.e., through demolition, relocation, and/or alteration) , which would be considered a significant and unavoidable cumulative impact.

The geographic scope for cumulative impacts on cultural and historic resources and tribal cultural resources includes the Transit District area and properties on adjacent blocks that face the Transit District area boundaries.

As discussed in Chapter 7, Cultural and Historic Resources and Tribal Cultural Resources, of this SEIR, the proposed Transit District DTPP Amendments is subject to the DTPP preservation requirements. Mitigation Measure CR-1 (formerly Mitigation Measure 7-4 from the DTPP Final EIR, which requires that proposed development adjacent to historic resources requiring discretionary approval be reviewed by an architect or architectural historian) and Mitigation Measure CR-2 (formerly Mitigation Measure 7-1 from the DTPP Final EIR, which establishes inadvertent discovery protocol for cultural resources identified during project construction) would reduce impacts from the proposed Transit District DTPP Amendments to historic resources, archaeological resources, and tribal cultural resources to a less-than significant level. DTPP Final EIR Mitigation Measures 7-2 (which addresses properties in the DTPP area that contain a historic resource) and 7-3 (which addresses impacts on historic districts) do not pertain to the proposed Transit District DTPP Amendments because there are no historic resources or historic districts within the Transit District area, nor are there any historic districts adjacent to the Transit District area. Additionally, Mitigation Measure NO-2 (formerly Mitigation Measure 11-3 from the DTPP Final EIR, which imposes conditions of approval on all future projects involving demolition and construction activities in order to reduce ground-borne vibration levels) would reduce impacts from the proposed Transit District DTPP Amendments to nearby historic resources to a less-thansignificant level.

The Transit District area does not contain historic resources or historic districts, and there are no adjacent historic districts. Therefore, the proposed Transit District DTPP Amendments would not result in additional impacts to historic architectural resources. Through the above mitigation measures, the proposed Transit District DTPP Amendments potential impacts to archaeological and tribal cultural resources and nearby historic resources would be mitigated to a less-than-significant level. When considered together with other projects within and adjacent to the Transit District area, the less-than-significant impacts to cultural and historical resources do not considerably contribute to the significant cumulative impact identified in the 2010 DTPP Final EIR and would not result in new or more severe cumulative impacts. Therefore, the proposed Transit District DTPP Amendments' contribution to the cumulative impact related to cultural and historic resources and tribal cultural resources would be *less than significant*.

Mitigation: N	lone required.	•	

### 17.2.5 Public Services

Impact C-PS-1: Implementation of the proposed Transit District DTPP Amendments, combined with past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity and Citywide, would not result in an adverse cumulative increase in demand for public services that would require new or physically altered governmental facilities, construction of which could have significant physical environmental impacts. (Less than Significant)

The DTPP Final EIR found that cumulative development would result in increased demand of public services and new or expanded facilities could be required; however, because specific needs in terms of size, staffing, equipment, and location were unknown, associated impacts were deemed speculative and cumulative impacts related to public services were determined to be less than significant.

The geographic scope for cumulative impacts related to public services includes the City of Redwood City.

The proposed Transit District DTPP Amendments, in combination with cumulative projects in the vicinity would increase the demand for police services, fire protection and emergency medical response services, public schools, and libraries. Impacts on public services as a result of the proposed Transit District DTPP Amendments could combine specifically with the DTPP Planwide Amendments as the projects have similar geographies and development capacity and would impact the same public service providers.

Cumulative development would result in additional Redwood City Police Department (RCPD) calls for police service. Should RCPD determine that an additional police substation or community policing center is necessary within the DTPP area as a result of cumulative development, the facility would likely be incorporated into an existing or otherwise-planned structure similar to the existing Downtown Substation and would not result in significant environmental impacts.

Cumulative development would also result in additional Redwood City Fire Department (RCFD) calls for fire protection and emergency medical services. To the extent possible, the additional services would likely be incorporated into an existing or otherwise-planned structure and would not result in significant environmental impacts. It would require speculation to determine the specific needs in terms of size, staffing, equipment and location of any new RCFD facilities. If and when the construction or expansion of RCFD facilities to accommodate additional fire personnel or equipment becomes necessary as a result of cumulative development, CEQA review, General Plan provisions, and City and Zoning Code regulations would all apply, thereby avoiding significant environmental impacts, because construction impacts would be similar to those from construction of any moderately sized building.

With regard to public schools, similar to individual projects developed within the Transit District area, cumulative projects would be subject to school impact fees which would fully mitigate the potential effect on public school facilities from the new student population that may be generated

by cumulative development. Any expansion of Redwood City School District or Sequoia Union High School District facilities would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities.

The projected demand as a result of cumulative development would be included in the scope of the Redwood City Public Library (RCPL)'s upcoming Downtown Library improvements study. Any Downtown Library facility expansion or improvements developed as a result of the RCPL's study and cumulative development would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities.

Therefore, when considered in the cumulative context, the proposed Transit District DTPP Amendments' public services-related impacts would not be cumulatively considerable and would not result in new or more severe cumulative impacts than what was identified in the DTPP Final EIR. Cumulative impacts would be *less than significant*.

Impact C-PS-2: Implementation of the proposed Transit District DTPP Amendments, combined with past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity and citywide, would not result in significant cumulative impacts to parks and recreation. (*Less than Significant*)

The DTPP Final EIR found that cumulative development under the DTPP would also be subject to applicable parkland dedication or in-lieu fee requirements, and new parkland could be provided inside or outside of the DTPP area in the future. However, specific parks and recreational facilities expansion needs were unknown and associated impacts were deemed speculative and as a result, cumulative impacts on parks and recreational facilities were found to be less than significant.

The geographic scope for cumulative impacts related to parks and recreation is Citywide.

The proposed Transit District DTPP Amendments, in combination with cumulative projects in the vicinity would increase the demand for and use of parks and recreational facilities. Impacts on parks and recreation as a result of the proposed Transit District DTPP Amendments could combine specifically with the DTPP Plan-wide Amendments as the projects have similar geographies and development capacity and would impact similar parks and recreation facilities.

Cumulative projects, including individual projects proposed under the DTPP Plan-wide Amendments, would be subject to the City's Parks Impact Fee and parkland dedication requirements (or Parkland In-Lieu Fee) as they are developed, the same as for the proposed Transit District DTPP Amendments. The City's Parks Impact Fee and Parkland In-Lieu Fee would allow the City to purchase parkland, make park improvements, and provide recreation

facilities to meet the demand generated by new residential development. As the residential population of Redwood City increases as a result of cumulative development, the construction of new parks and recreational facilities in the City would occur. The park projects developed as a result of the City's Parks Impact Fee and Parkland In-Lieu Fee would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities. Additionally, as discussed in Chapter 8, *Public Services and Recreation*, Redwood City residents also use nearby regional recreation facilities at Bair Island and Edgewood Park and Nature Preserve to meet their recreational needs and new residents as a result of cumulative would be expected to use these facilities from time to time. Therefore, when considered in the cumulative context, the Transit District DTPP Amendments' parks and recreation-related impacts would not be cumulatively considerable and would not result in new of more severe cumulative impacts than the impacts identified in the DTPP Final EIR. Cumulative impacts related to parks and recreation would be *less than significant*.

Mitigation: None required.	

## 17.2.6 Transportation and Circulation

Impact C-TR-1: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity and Citywide, would not result in a cumulatively considerable contribution to a significant transportation impact. (Less than Significant)

### **DTPP Impact Summary**

The DTPP Final EIR identified a number of significant cumulative impacts related to intersection, freeway mainline, and freeway ramp operations. The significant cumulative intersection impacts were identified at the following 13 study intersections during either the AM and/or PM peak hour within the DTPP:

- El Camino Real and Whipple Avenue (PM peak hour)
- El Camino Real and Jefferson Avenue (AM and PM peak hours)
- Main Street and Woodside Road (AM and PM peak hours)
- Middlefield Road and Jefferson Avenue (AM and PM peak hours)
- Middlefield Road and Main Street (AM and PM peak hours)
- Middlefield Road and Woodside Road (AM and PM peak hours)
- Broadway and Walnut Street (PM peak hour)
- Broadway and Chestnut Street (PM peak hour)
- Broadway and Woodside Road (AM and PM peak hours)
- Bay Road/Woodside Road (PM peak hour)
- Bradford Street and Main Street (AM and PM peak hours)

- Veterans Boulevard and Whipple Avenue (PM peak hour)
- Veterans Boulevard and Woodside Road (AM and PM peak hours)

Significant cumulative freeway segment impacts were identified for the following segments on US 101:

- Northbound US 101 between Marsh Road and Woodside Road (impact on mixed-flow lanes during both AM and PM peak hours; impact on HOV lane during the PM peak hour)
- Northbound US 101 between Whipple Avenue and Holly Street (impact on mixed-flow lanes during PM peak hour)
- Southbound US 101 between Holly Street and Whipple Avenue (impact on mixed-flow lanes during PM peak hour)
- Southbound US 101 between Woodside Road and Marsh Road (impact on mixed-flow and HOV lanes during both AM and PM peak hours)

A significant cumulative freeway ramp was identified for the following location:

• US 101 to Woodside Road diagonal freeway ramp (AM and PM peak hours)

The DTPP Final EIR identified mitigation measures (Mitigation Measures 9-10 through 9-22) to address the cumulative intersection impacts; however, only one of the study intersections where a significant impact was identified would be mitigated to a less-than-significant-level: Veterans Boulevard and Whipple Avenue. For the remaining 12 study intersections, a significant and unavoidable cumulative impact was identified due to the fact that the mitigation measures identified for those intersections would require approvals from an agency (Caltrans) other than the Lead Agency (Redwood City) that could not be guaranteed, or because of a General Plan policy conflict. Similarly, Redwood City's lack of authority to independently implement the mitigation measure identified to address significant cumulative impacts on the four study freeway segments and one freeway ramp location (Mitigation Measures 9-23 and 9-24) also lead to a significant and unavoidable impact determination.

The significant intersection and freeway segment impacts listed above were determined using the performance metric of delay/LOS. As noted under Section 9.2, *Regulatory Setting*, SB 743 and the resulting change to the CEQA Guidelines in section 15064.3, subdivision (b), vehicle LOS can no longer be used as a determinant of significant environmental impacts. VMT is now used as the primary performance metric to establish the significance of a transportation impact, and that impact analysis, which is modeled using a cumulative analysis year of 2040, is provided under Impact TR-2.

The DTPP Final EIR did not identify any significant cumulative impacts related to transit or bicycle and pedestrian facilities.

The geographic scope for cumulative transportation impacts includes the City of Redwood City.

### **Project Impacts**

For the following reasons, the proposed Transit District DTPP Amendments would not result in a cumulatively considerable contribution to a significant transportation impact with respect to conflicts with plans, ordinances, or policies; increases in VMT; increased hazards; or emergency access.

- As shown in Table 9-6, the proposed Transit District DTPP Amendments would generate per capita (for residential uses) and per employee (for office uses) VMT under cumulative (Year 2040) conditions that are below the City's thresholds of significance.
- As discussed previously under Impact TR-1, the proposed Transit District DTPP Amendments is consistent with the General Plan policies related to transportation facilities.
- The Transit District area is located in a central area of Downtown Redwood City near high-quality transit. These characteristics are beneficial with regard to VMT, reduced vehicle trips, and increased usage of non-auto transportation (walking, biking, and transit).
- The same City design standards and requirements that must be met for individual project approvals identified under Impact TR-3 (increased hazards) and TR-4 (emergency access) would also apply to any and all other cumulative project that could be approved/built under the proposed Transit District DTPP Amendments.

With respect to the potential for future grade separations at Caltrain rail crossings, the cumulative year 2040 analysis conservatively assumes current conditions, i.e., at-grade crossings at the six locations within Redwood City. The primary components in VMT calculations are the number of trips multiplied by the trip distance. It is not anticipated that the VMT for the proposed Transit District DTPP Amendments would change substantially between a scenario in which the crossings are at-grade or fully grade separated, since the street network is a grid pattern with numerous alternative access routes, so associated trip lengths to/from the Transit District area; it is the potential delay at the crossings that would change.

In the scenario in which one or two of the southern grade crossings were to be closed to vehicle access (i.e., not grade-separated, although they would continue to allow bike/pedestrian crossing), any changes to grade crossing access at the southern end of the City would not be likely to result in any substantial changes to the proposed Transit District DTPP Amendments' VMT per employee or VMT per resident, since the downtown and surrounding areas have a grid network that allow for multiple access routes of similar trip lengths. For example, for a trip starting at the Chestnut Street/Spring Street intersection and normally traveling down Chestnut Street over the grade crossing to El Camino Real and then heading north to the Transit District area, the trip length is about one mile. If crossings were closed to vehicle access at Chestnut Street, one could travel down Chestnut Street and turn right onto Middlefield Street, to westbound Jefferson, and turn right onto northbound El Camino Real. The trip length for this route is just under one mile. Thus, the City's grid network allows for reasonable alternate routes that have very similar trip lengths and are not likely to change the VMT impact conclusions of the proposed Transit District DTPP Amendments.

#### Conclusion

As discussed above, the proposed Transit District DTPP Amendments would not result in a cumulatively considerable contribution to a significant transportation impact and would not result in new or more severe cumulative impacts than the impacts identified in the DTPP Final EIR. Mitigation measures identified in the DTPP Final EIR to address cumulative intersection, freeway segment, and freeway ramp operations impacts (Mitigation Measures 9-10 through 9-24) *would not be applicable* to the proposed Transit District DTPP Amendments due to the change in performance metrics used to determine a significant transportation impact, as required by SB 743 and CEQA Guidelines section 15064.3, subsection (b). Therefore, the impact would be *less than significant*.

Mitigation: None required.

### 17.2.7 Utilities and Infrastructure

The geographic scope for cumulative impacts related to utilities and infrastructure includes the City of Redwood City.

Impact C-UT-1: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity and Citywide, would not contribute considerably to cumulative impacts on utilities and service systems. (Less than Significant with Mitigation)

The DTPP Final EIR found that cumulative water distribution and wastewater conveyance needs would be determined through City planning and capital improvement programs, and if any improvements were identified construction of those improvements would not result in significant environmental impacts. The DTPP Final EIR also found that available wastewater treatment capacity would be adequate to serve cumulative development, and that cumulative impacts related to wastewater treatment would be less than significant.

The geographic scope for cumulative impacts related to utilities and infrastructure is Citywide. The proposed Transit District DTPP Amendments, in combination with cumulative projects in the vicinity and Citywide, would increase the demand for water, wastewater conveyance and treatment, storm drainage, and energy systems infrastructure. Impacts on these infrastructure systems as a result of the proposed Transit District DTPP Amendments could combine with the proposed DTPP Plan-wide Amendments as the resulting development would affect a similar area and would seek to access the same utility providers. Cumulative projects would be subject to applicable City development and utilities fees that would be collected by the City, construction of system improvements, and fair-share contributions to address the new utility system demand. The potential replacement or extension of utility infrastructure to serve cumulative development would be installed primarily in existing roadways and utility rights-of-way. Aside from short-term

A Local Transportation Analysis (LTA) was prepared in parallel with this Draft SEIR for the Transit District; the LTA analyzes non-CEQA transportation issues, including vehicle delay and LOS, for General Plan and Congestion Management Program consistency.

construction disturbance, no unusual or further environmental impacts would be generated beyond those identified elsewhere in this SEIR for overall construction activity associated with future development in the Transit District area (e.g., Chapter 11, *Noise and Vibration*, and Chapter 12, *Air Quality*). For these reasons, and because changes proposed to utilities infrastructure as part of future developments will be subject to the City's review and permitting process, the proposed Transit District DTPP Amendments would not contribute considerably to a significant cumulative impact in this regard, and impacts would be less than significant.

Cumulative development projects would also be required to meet the required fire flow velocities and flow durations pursuant to the California Fire Code and Redwood City Engineering Standards, as would development in the Transit District area. In this regard, as explained under Impact UT-1 in Chapter 10, *Utilities and Infrastructure; Hydrology and Water Quality*, City staff has determined that the transmission and distribution systems are not sized to provide adequate flows and pressures under emergency service for future citywide development. Emergency water storage volume for emergency uses in a fire, earthquake, or a temporary shutdown of the San Francisco Public Utilities Commission Regional Water System (SFPUC RWS; wholesale water supplier to Redwood City) is also inadequate. Accordingly, Mitigation Measure UT-1, which would require each subsequent development project in the Transit District area to make a fair-share contribution to development of an emergency water supply for Downtown, would also apply to cumulative development. This mitigation measure would provide for water supplies in the case of drought and disaster-caused emergencies, such as a temporary interruption of water supplies due to an earthquake.

Mitigation: Implement Mitigation Measure UT-1.

Significance after Mitigation: Less than Significant.

With regard to water supply, the proposed Transit District DTPP Amendments, in combination with cumulative projects in the vicinity and Citywide, would result in additional demand for potable water. As explained under Impact UT-2 in Chapter 10, *Utilities and Infrastructure; Hydrology and Water Quality*, water demand projections for new development in Redwood City include both potable and recycled water uses to conform to Municipal Code requirements, with potable/recycled water ratio for indoor water use estimated to be 20/80 percent for office uses and 70/30 percent for residential uses; all landscape irrigation is assumed to be recycled water. Accordingly, Mitigation Measure UT-2 requires all development projects in the Transit District area to extend recycled water infrastructure to each project's location, and this measure would also be applicable to cumulative development projects.

Mitigation: Implement Mitigation Measure UT-2.

Significance after Mitigation: Less than Significant.

As further discussed in Chapter 10, the UWMP predicts water supply shortfalls in dry years and multiple dry year periods with or without the Bay-Delta Amendments, but that the shortage in supply can be closed by implementing the various stages of curtailment measures in the WSCP. Water demand associated with the proposed Transit District DTPP Amendments and the other

cumulative development was accounted for in the City's 2020 UWMP. Development in the Transit District area and the cumulative projects would be subject to the same drought-related curtailments in the WSCP as the City's other water customers and would be required to reduce its impacts to the City's water supply through extension of recycled water infrastructure (Mitigation Measure UT-2) and compliance with the California Green Building Standards Code and the Redwood City Green Infrastructure Plan. Development in the Transit District area, along with cumulative development, would not cause increased curtailment measures otherwise required in dry years because, as explained in Under Impact UT-2, the City's Water Shortage Contingency Plan would result in sufficient reductions in water use, and because the City's 2020 Urban Water Management Plan included projected water demand sufficient to accommodate growth associated with the proposed Transit District DTPP Amendments, as well as the proposed DTPP Plan-Wide Amendments and other cumulative growth through 2045. Also, development in the Transit District area and cumulative projects would be required to pay applicable City development and water capacity fees, contribute fees to any SFPUC RWS Alternative Water Supply Planning Program funding mechanism that may be developed to alleviate future supply shortages, pay their fair-share towards necessary water system facilities, and construct water system capacityenhancing improvements/upgrades to support the proposed development's water infrastructure needs. As a result, development in the Transit District area would not result in the City having to increase water supply curtailments to other water customers. With development pursuant to the proposed Transit District DTPP Amendments and other cumulative development, the City would experience substantial water shortages during multiple dry years whether or not the Bay-Delta Plan Amendment is implemented, although implementation of the Bay-Delta Plan Amendment would substantially worsen the shortfall. However, based on the foregoing, and considering that the demand for the Transit District DTPP Amendments would amount to approximately 3.4 percent of the City's total water demand in the UWMP horizon year of 2045, the proposed Transit District DTPP Amendments would not exacerbate the preexisting water supply reliability issues or contribute considerably to a cumulative increase in water shortfalls, and the impact would be less than significant with mitigation.

With regard to wastewater treatment capacity, cumulative projects would also generate additional wastewater treatment demand at the Silicon Valley Clean Water (SVCW) treatment plant. SVCW's Regional Environmental Sewer Conveyance Upgrade Program, which consists of replacing or rehabilitating various components of the existing wastewater treatment and conveyance system, including pipelines and pump stations to ensure reliable operation of the overall wastewater system, is currently under way. The City would collect wastewater treatment capacity fees from cumulative projects to reimburse SVCW for costs expended on the operation, capital repairs, and maintenance related to the City's service areas. As such, future upgrades are being added at SVCW's wastewater treatment plant and capacity fees would be collected by the City to address the cumulative wastewater demand. Based on the approximately 15 MGD average daily excess capacity at the SVCW treatment plant and the Transit District area's relatively minimal demand (0.36 MGD), the proposed Transit District DTPP Amendments would not contribute considerably to a significant cumulative impact on wastewater treatment capacity.

Therefore, when considered in the cumulative context, the proposed Transit District DTPP Amendments' utilities-related impacts would not be cumulatively considerable and would not

result in new or more severe cumulative impacts than what was identified in the DTPP Final EIR. Cumulative impacts would, therefore, be *less than significant*.

Mitigation: None require	d.	

Impact C-UT-2: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity and Citywide, would not contribute considerably to cumulative impacts on solid waste. (*Less than Significant*)

The DTPP Final EIR found that while cumulative development would result in increased generation of solid waste, the Ox Mountain landfill would have adequate capacity to serve cumulative development along with diversion programs and cumulative impacts related to solid waste were determined to be less than significant.

The proposed Transit District DTPP Amendments, in combination with cumulative projects in the vicinity and Citywide, would increase the generation of solid waste. Impacts on solid waste as a result of the proposed Transit District DTPP Amendments could combine specifically with development as a result of the proposed DTPP Plan-wide Amendments, since that development is in the same area and would use the same solid waste disposal facilities. However, the project's contributions to the landfill would represent less than 1 percent of the total permitted waste stream at the Ox Mountain Landfill.

While the Ox Mountain Landfill has an expected closure date of 2034 (or 2038 according to the County's most recent review of the CIWMP in 2019), San Mateo County is currently revising the Siting Element of its Countywide Integrated Waste Management Plan, which will identify facilities and proposed programs that would provide San Mateo County with sufficient disposal capacity to meet the statutorily required minimum of 15 years of combined permitted disposal capacity (Public Resources Code Section 41260).

Cumulative development projects would also be required to comply with federal, state, and local solid waste standards, including waste diversion during construction, including at least 65 percent construction and demolition waste diversion, and during operation, including recycling and organic material diversion requirements. As such, non-renewable sources of solid waste and the solid waste disposal requirements of cumulative development would be reduced. Therefore, when considered in the cumulative context, the proposed Transit District DTPP Amendments' solid waste-related impacts would not be cumulatively considerable and would not result in new or more severe cumulative impacts than what was identified in the DTPP Final EIR. Cumulative impacts would, therefore, be *less than significant*.

wingation: None requir	ea.	

Mitigation, Nama magninad

Impact C-UT-3: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity and Citywide, would not contribute considerably to cumulative impacts on hydrology and water quality. (Less than Significant)

The DTPP Final EIR determined that there would be a less-than-significant impact as it relates to hydrology and water quality. While future developments in the DTPP area could contribute cumulatively to hydrology and water quality impacts, all new developments would be subject to the same local and state laws and regulations. The DTPP further determined that compliance with these laws would address any potential impacts to hydrology and water quality. As all new development within the Transit District area would be within the DTPP area would be subject to the same local and state laws (i.e., the City, County, and the RWQCB), the cumulative impacts to related to hydrology and water quality from implementation of the proposed Transit District DTPP Amendments would not be considerable and would not result in new or more severe cumulative impacts than the impacts identified in the DTPP Final EIR. Cumulative impacts would therefore be *less than significant*.

Mitigation: None required.	

### 17.2.8 Noise and Vibration

Impact C-NO-1: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity, would not contribute considerably to cumulative noise impacts. (Less than Significant)

The DTPP Final EIR identified less-than-significant impacts that would result from increased traffic noise due to development pursuant to the DTPP.

The geographic scope for cumulative noise impacts includes the Transit District area and nearby streets, as explained below.

Potential vehicular traffic noise increases from cumulative (2040) conditions plus implementation of the proposed Transit District DTPP Amendments were evaluated and compared to the existing traffic noise levels.

Noise levels along the 14 street segments within and surrounding the Transit District area analyzed in the transportation analysis were quantitatively modeled and the modeling results are presented in **Table 17-1**. Roadway segment link volumes at these study locations were developed for the existing and 2040 cumulative conditions. The roadways segments were selected as they represent roadways expected to be most likely used to access the Transit District area and therefore be affected by vehicle traffic changes.

The significance of cumulative impacts related to traffic noise levels is determined using a twostep process. First, similar to the project-level assessment of traffic impacts, the increase in noise levels between cumulative (2040) conditions with the Transit District area and existing baseline (2020) conditions is compared to an incremental 3 dBA or 5 dBA threshold, as applicable, based on the existing noise level. If the roadside noise levels would exceed this incremental threshold, a cumulative noise impact would be identified.

TABLE 17-1
CUMULATIVE TRAFFIC NOISE INCREASES ALONG ROADWAYS IN THE PLAN VICINITY

Roadway Segment	Existing Conditions	Existing plus TD Implementation plus cumulative (2040)	Change in Noise Level Compared to existing (dB)	Cumulative No Project (2040)	Change in Noise Level Compared to No Project (dB)	Significant?
	1	Weekday Peak-Hour	Noise Levels dB	A		
Maple St from El Camino Real to Main St	49.1	53.4	4.3	53.6	-0.2	No
James Ave from Clinton St to El Camino Real	60.8	54.0	-6.8	54.2	-0.2	No
Jefferson Ave from Clinton St to El Camino Real	63.6	65.1	1.5	64.9	0.2	No
Jefferson Ave from El Camino Real to Sequoia Station	69.7	71.3	1.6	70.7	-0.4	No
Broadway from El Camino Real to Perry St	59.8	62.5	2.7	62.6	-0.1	No
Broadway from Perry St to Arguello St	61.9	64.1	2.2	64.1	0	No
Broadway from Arguello St to Winslow St	60.3	62.2	1.9	62.3	-0.1	No
Broadway from Winslow St to Jefferson Ave	53.9	56.0	2.1	56.0	0	No
Marshall St from Arguello St to Winslow St	48.3	50.2	1.9	50.2	0	No
Brewster Ave from Fulton St to Broadway	54.2	56.6	2.4	55.9	0.7	No
Brewster Ave from Broadway to El Camino Real	49.2	56.4	7.2	56.6	-0.2	No
Middlefield Road from Jefferson Ave to Main St	59.8	62.5	2.7	61.7	0.8	No
Middlefield Road from Main St to Maple St	63.0	65.7	2.7	64.9	0.8	No
Middlefield Road from Beech St to Chestnut St	60.2	62.8	2.6	62.2	0.6	No

NOTE: dBA = A-weighted decibels; **Bold** values indicate exceedance of applicable threshold.

SOURCES: Traffic data compiled by Fehr & Peers in 2022, and noise modeling performed by Environmental Science Associates in 2022.

The second step of the analysis of cumulative roadside noise impacts (if a cumulative noise impact is predicted based on the above methodology) is to evaluate whether the contribution of the proposed Transit District DTPP Amendments to roadside noise levels would be cumulatively

considerable. This second step (if necessary) involves assessing whether the proposed Transit District DTPP Amendments' contribution to roadside noise levels (i.e., the difference between cumulative conditions and cumulative plus project conditions) would exceed a 1.5 dBA incremental contribution; this is a threshold that is considered to be cumulatively considerable. The 1.5 dBA increase used to represent a cumulatively considerable contribution is conservatively based on the minimum increase identified as potentially significant by the Federal Interagency Committee on Noise (FICON, 1992). As stated in Chapter 11, *Noise and Vibration*, except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived. Consequently, a cumulatively considerable contribution would reasonably be more than 1 dBA.

As shown in Table 17-1, project-generated vehicular traffic would increase traffic noise along the 14 modeled segments would be less than 3 dBA except along two roadway segments. Some segments would experience a decrease in noise from traffic being redistributed as a result of new roadway connections. As shown in Table 17-1, a cumulative roadway noise impact is predicted to occur along Maple Street from El Camino Real to Main Street (an increase of 4.3 dBA) and along Brewster Avenue from Broadway to El Camino Real (an increase of 7.2 dBA). However, when compared to the 2040 cumulative baseline condition without the proposed Transit District DTPP Amendments, the noise levels along both these roadways are predicted to decrease as traffic would be redistributed as a result of new roadway connections within the Transit District area. The traffic noise associated with the proposed Transit District DTPP Amendments would not represent a cumulatively considerable contribution to this cumulative impact and would, in fact, serve to reduce this predicted significant cumulative impact.

Therefore, while there would be a cumulative traffic noise impact along two of the 14 roadways analyzed, the proposed Transit District DTPP Amendments would not contribute to this cumulative impact and would not result in new or more severe cumulative impacts than the impacts identified in the DTPP Final EIR. The cumulative traffic noise impacts resulting from the proposed Transit District DTPP Amendments would be *less than significant*.

Witigation: None require	ed.

# 17.2.9 Air Quality

Impact C-AQ-1: Adoption of the proposed Transit District DTPP Amendments would result in a cumulatively considerable contribution to the regional cumulative air quality impacts. (Significant and Unavoidable with Mitigation)

## **DTPP Impact Summary**

The DTPP Final EIR concluded that due to the DTPP's consistency with the applicable Clean Air Plan at the time, and as the projected increase in vehicle use (i.e., VMT or vehicle trips) under the DTPP was found to be less than its projected population increase, the DTPP would represent a less than considerable contribution to the significant cumulative air quality of the region, and thus

a *less-than-significant impact*. As discussed in Impact AQ-1 and Impact AQ-2 (see Chapter 12, *Air Quality*, these conclusions remain valid for the proposed Transit District DTPP Amendments.

The geographic scope for cumulative air quality impacts includes the San Francisco Bay Area Air Basin.

Impact AQ-1 addresses potential impacts related to consistency with the BAAQMD 2017 Clean Air Plan. Because the 2017 Clean Air Plan focuses on reducing population exposure to air pollutants throughout the region, the assessment in Impact AQ-1 is a cumulative analysis in itself as it assesses consistency with a region wide air quality plan. Therefore, a separate cumulative assessment of consistency with the 2017 Clean Air Plan is not required.

Due to the San Francisco Bay Area Air Basin's nonattainment status with respect to ozone and fine particulate matter, a significant cumulative air quality impact exists. As discussed under Impact AQ-2, while the proposed Transit District DTPP Amendments' impact on regional air quality would be less than significant when analyzed at a plan level, individual project developments that are implemented under the proposed Transit District DTPP Amendments could result in criteria pollutant emissions that constitute significant and unavoidable impacts following mitigation. Because criteria pollutant emissions are regional pollutants, this impact is by definition a significant cumulative impact and is not repeated here. However, as explained in the conclusion under Impact AQ-2, even with implementation of Mitigation Measure AQ-2b, it cannot be stated with certainty that criteria air pollutant impacts associated with all subsequent development projects would be reduced to less-than-significant levels. While this would likely be true only for relatively large projects and projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules, and while future development projects would benefit from their proximity to transit facilities and would be subject to the requirements in the City's Reach Codes to reduce operational nitrogen oxide emissions, emissions of reactive organic gases from consumer products may remain significant as it is infeasible to impose mitigation on choice of consumer products and habits. For these reasons, criteria pollutant emissions from construction and operation of subsequent projects in the Transit District area would be significant and unavoidable with mitigation, on a cumulative basis and would be a new impact not previously identified in the DTPP Final EIR. As discussed in Chapter 12, the identification of this significant and unavoidable cumulative impact does not preclude the finding of a less-than-significant or less-than-significant-with-mitigation impact for certain subsequent development projects.

Ü	•	C		
Significance	after N	Mitigation:	Significant and	Unavoidable.

Mitigation: Implement Mitigation Measure AQ-2b.

Impact C-AQ-2: Adoption of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to local health risk impacts. (Less than Significant with Mitigation)

## **DTPP Impact Summary**

The DTPP Final EIR concluded that compliance with policies and programs in the Draft 2010 General Plan would prevent new development from exposing sensitive receptors to significant TAC levels. These policies require incorporation of design and construction features to reduce exposure to TACs below BAAQMD thresholds and provide guidance for siting of new sensitive receptors in the vicinity of existing sources of TACs. With these policies, the DTPP Final EIR concluded that cumulative health risk impacts related to TACs would be less than significant.

#### **Project Impacts**

With mitigation, even the largest project in the Transit District area—the Sequoia Station project—in conjunction with other permitted stationary sources within 1,000 feet of the MEIR and background health risks from mobile sources on highways, major streets and rail, would result in cumulative risks below the BAAQMD's cumulative thresholds, which are 100 in a million for incremental lifetime cancer risk, 10.0 for non-cancer Hazard Index (acute or chronic), and 0.8 µg/m<sup>3</sup> for annual average PM<sub>2.5</sub> concentration. Other projects proposed within the Transit District and within the 1,000-feet zone of influence<sup>8</sup> of the MEIR could also contribute to the cumulative health risk. However, the timeline for the construction of these projects is currently unknown. Besides, Mitigation Measure AQ-3 requires all subsequent projects proposed in the Transit District area to conduct a project-level HRA at the time of project review to determine if BAAOMD health risk thresholds would be exceeded and implement measures identified in Mitigation Measure AO-2b to reduce impacts to a less than significant level. Therefore, the contribution of the proposed Transit District DTPP Amendments to the cumulative health risk would not be considerable and would not result in new or more severe cumulative impacts than the impact identified in the DTPP Final EIR. Cumulative impacts would therefore be considered less than significant with mitigation.

Mitigation: Implement Mitigation Measure AQ-3.

Significance after Mitigation: Less than Significant.

-

The BAAQMD recommends evaluating sources within a 1,000-foot radius from the property line of a receptor when analyzing health risks to the receptor.

Impact C-AQ-3: Adoption of the Transit District, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to local odor impacts. (Less than Significant)

#### **DTPP Impact Summary**

The DTPP Final EIR concluded that compliance with policies and programs and implementation of DTPP Final EIR Mitigation Measure 12-2 (Odor Impacts of Mixed-Use Development), the exposure of receptors within the DTPP area to odors would represent a less than considerable contribution to the significant cumulative impact related to odors, and thus a less-than-significant impact.

# **Project Impacts**

As discussed under Impact AQ-4, the Transit District area does not contain any major sources of odor that would contribute to a cumulative odor impact in the vicinity. DTPP Final EIR Mitigation Measure 12-2 would be applicable to all odor sources associated with food service establishments in the Transit District area; these requirements would be enforced through compliance with BAAQMD Rule 6-2 (Commercial Cooking Equipment). Therefore, the proposed Transit District DTPP Amendments' cumulative impact with respect to odors would not result in new or more severe cumulative impacts than what was identified in the DTPP Final EIR. Cumulative impacts would not be considerable and therefore would be *less than significant*.

Mitigation: None required.

# 17.2.10 Climate Change

Impact C-CC-1: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to GHG emissions that may have a significant impact on the environment or conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases. (Significant and Unavoidable with Mitigation)

Global GHG emissions and global climate change are inherently a cumulative concern that is understood for CEQA purposes to be an existing significant and adverse condition. Accordingly, the significance of GHG emissions in this analysis is determined based on whether such emissions would have a cumulatively considerable impact on global climate change. Because the geographic scope of cumulative impacts related to GHG emissions (i.e., global climate change) is global, this analysis evaluates the proposed Transit District DTPP Amendments' direct and indirect generation of GHG emissions which contribute to this cumulative impact. The California Air Pollution Control Officers' Association (CAPCOA) considers GHG impacts to be exclusively cumulative impacts, in that no single project could, by itself, result in a substantial change in climate. Therefore, the evaluation of cumulative GHG impacts presented in this section considers whether the proposed Transit District DTPP Amendments would make a considerable

contribution to cumulative emissions of GHG. Implementation of the proposed Transit District DTPP Amendments would result in a significant and unavoidable impact with mitigation.

Implementation of Mitigation Measure CC-1 would ensure consistency with the state's 2030 and 2045 GHG reduction goals. The Project would also be consistent with applicable reduction plans and policies, and given that GHG emission impacts are cumulative in nature, the Project's incremental contribution to significant cumulative GHG emissions would be less than cumulatively considerable, and the proposed Transit District DTPP Amendments would not result in new or more severe cumulative impacts than were identified in the DTPP Final EIR and the cumulative impact would be *significant and unavoidable with mitigation*.

Mitigation Measure: Implement Mitigation Measure CC-1.

Significance after Mitigation: Significant and Unavoidable.

Impact C-CC-2: The proposed Transit District DTPP Amendments, in conjunction with past, present, existing, approved, pending, and reasonably foreseeable future projects in the City, would not result in energy use that would be considered wasteful and unnecessary or conflict with or obstruct a state or local plan for renewable energy or energy efficiency

under cumulative conditions. (Less than Significant)

Cumulative impacts of the proposed Transit District DTPP Amendments related to the wasteful, inefficient, or unnecessary consumption of energy during construction and operation and the potential to conflict with or obstruct adopted energy conservation plans or violate energy efficiency standards would be the same as discussed under Impact CC-3. Energy consumption effects related to individual projects combined with continued growth in the City of Redwood City and throughout PG&E and PCE's service areas could contribute to ongoing increases in demand for electricity and natural gas, which are discussed below.

The proposed Transit District DTPP Amendments, in conjunction with cumulative development in the City, would allow increased development in an already developed area and result in increased energy consumption. Potential impacts to energy resources from future development in the Transit District area would be site-specific and would require applications for development permits that would be evaluated for code compliance on a case-by-case basis. Thus, all subsequent development projects proposed within the Transit District area would be subject to compliance with all federal, state, and local requirements for energy efficiency, including the California Energy Code Building Energy Efficiency Standards (CCR Title 24, Part 6), the CALGreen Code (CCR Title 24, Part 11), and SB 743. Consequently, subsequent projects within the Transit District area would not result in significant environmental impacts from the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation; and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the proposed Transit District DTPP Amendments would not result in new or more severe cumulative impacts than were identified in the DTPP Final EIR and the cumulative energy impact would be *less than significant*.

Mitigation: None required.

## 17.2.11 Hazards and Hazardous Materials

Impact C-HAZ-1: The proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects would result in less-than-significant cumulative impacts related to hazards and hazardous materials. (Less than Significant)

The DTPP Final EIR determined that new development within the DTPP area would include subsequent projects that may use, store, or dispose of potentially hazardous materials (i.e., common household and commercial cleaners, paints, pesticides, etc.). These materials would typically not be used, stored, or disposed of in quantities that would pose a significant hazard to the public or environment. Additionally, construction activities associated with subsequent development projects could potentially encounter hazardous materials from prior contamination. However, the DTPP Final EIR further determined that potential impacts would be adequately mitigated by the existing laws, regulations, and policies in place to address impacts related to hazardous materials; cumulative impacts related to hazards and hazardous materials would be less than significant. Because the regulatory regime has not changed substantially since the DTPP Final EIR was certified, this conclusion remains valid.

The geographic scope of analysis for cumulative hazards and hazardous materials impacts encompasses and is limited to the Transit District area and its immediately adjacent areas (i.e., locations within approximately 0.5 miles). This is because impacts relative to hazards and hazardous materials are generally site-specific and depend on the nature and extent of the hazards and hazardous materials released, and existing and future soil and groundwater conditions. For example, hazardous materials incidents tend to be limited to a smaller more localized area surrounding the immediate spill location and extent of the release, and could only be cumulative if two or more hazardous materials releases spatially and temporally overlapped.

As discussed in Chapter 14, *Hazards and Hazardous Materials*, the potential impacts associated with hazards and hazardous materials would be adequately addressed through compliance with existing laws, regulations, and policies. Other projects and developments being implemented in the area (either past, present, or future) would—or have already—complied with similar mitigation measures as the ones required as part of the proposed Transit District DTPP Amendments. Additionally, other projects will be required to comply with the same existing laws and regulations that future developments allowed under the proposed Transit District DTPP Amendments will comply with. Further, as all new development within the Transit District area would be subject to existing laws and regulations and subject to applicable mitigation measures, the cumulative impacts from implementation of the proposed Transit District DTPP Amendments would not result in new or more severe cumulative impacts than the impacts identified in the DTPP Final EIR. Cumulative impacts would therefore be *less than significant*.

Mitigation: None required.

# 17.2.12 Biological Resources

Impact C-BIO-1: The proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects would result in less-than-significant cumulative impacts related to biological resources. (Less than Significant)

The DTPP Final EIR determined that anticipated cumulative development would not have the potential to cause a substantial adverse change in significant biological resources due to the low existing habitat values within the DTPP area, including the Transit District area. Because the DTPP area includes the Transit District area, and the Transit District area has lower habitat value than the DTPP as a whole, this conclusion is applicable to the proposed Transit District DTPP Amendments. The proposed Transit District Amendments would not result in new or more severe cumulative impacts on biological resources than the impact identified in the DTPP Final EIR. Cumulative impacts would therefore be *less than significant*. No mitigation is required.

Mitigation: None require	d.	

# 17.2.13 Geology and Soils

Impact C-GEO-1: The proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects would result in less-than-significant cumulative impacts related to geology and soils. (Less than Significant)

The DTPP Final EIR determined that, while new developments within Redwood City would be subject to geologic and soil-related hazards (i.e., seismic ground shaking, etc.), the potential risks to life and property as a result of these hazards would be adequately mitigated by existing laws, regulations, and policies (i.e., compliance with the California Building Code). On this basis, the DTPP Final EIR determined that cumulative impacts related to geology and soils would be less than significant. Because there have been no changes in soil conditions, and any other projects being implemented in proximity to the Transit District area would be developed on soils that have already been previously studied, this conclusion remains valid.

Other projects and developments being implemented in the area (either past, present, or future) would—or have already—complied with similar mitigation measures as the ones proposed as part of the proposed Transit District Amendments. Additionally, other projects will be required to comply with the same existing laws and regulations that future developments allowed under the proposed Transit District Amendments will comply with.

Additionally, Mitigation Measure GEO-4a and Mitigation Measure GEO-4b would ensure potential geotechnical hazards within the Transit District area are addressed prior to construction and Mitigation Measure GEO-6 would ensure potential impacts to paleontological resources are addressed within the Transit District area. All new development within the Transit District area would be subject to existing laws and regulations, and the included mitigation. Therefore, the proposed Transit District Amendments would not result in new or more severe cumulative impacts related to geology and soils than the impacts identified in the DTPP Final EIR. Cumulative impacts from implementation of the proposed Transit District Amendments would be *less than significant*.

Mitigation: None required.

# **CHAPTER 18**

# Other CEQA-Required Assessment Considerations

This chapter summarizes the SEIR findings in terms of the various assessment categories suggested by the California Environmental Quality Act (CEQA) Guidelines for EIR content. The findings of this SEIR regarding the proposed project are summarized below in terms of potential "growth-inducing effects," "significant unavoidable impacts," and "irreversible environmental changes."

# 18.1 Growth-inducing Effects

Section 21100(b)(5) of CEQA requires that an EIR include information regarding the growth-inducing impacts of the proposed project. CEQA Guidelines section 15126.2(d) states that an EIR shall:

"Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing either directly or indirectly, in the surrounding environment....It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement results if a project involves construction of new housing that would result in new residents moving to the area. A project can have indirect growth-inducement potential if it establishes substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it involves a substantial construction effort with substantial short-term employment opportunities and indirectly stimulates the need for additional housing and services to support the new employment demand. Similarly, under CEQA, a project could indirectly induce growth if it expands roadway capacity or removes an obstacle to additional growth and development, such as removing a constraint on required public services or utilities (e.g., adding a sewage treatment plant that has capacity to serve demand beyond the associated project).

#### 18.1.1 Removal of Obstacles to Growth

The elimination of physical obstacles to growth is considered a growth-inducing effect. Common factors that limit growth include limited capacities of local or regional utility infrastructure, such as storm drainage systems or wastewater conveyance and treatment systems. Transportation infrastructure can also be a factor that limits growth.

The project site is within a fully urbanized area, with extensive transportation and utility infrastructure designed to accommodate urban development. As described in Chapter 3, *Project Description*, the proposed Transit District DTPP Amendments would include circulation improvements to promote quality vehicular, bicycle and pedestrian connections. However, these improvements would not remove barriers to growth, nor would they increase vehicular capacity.

For the foregoing reasons, the proposed project would not eliminate obstacles to further growth within the meaning of CEQA Guidelines Section 15126.2(e).

## 18.1.2 Economic Effects

As discussed in Chapter 3, *Project Description*, and Chapter 5, *Population and Housing*, the proposed Transit District DTPP Amendments would include amendments to the DTPP and General Plan to increase the office and residential development potential of the Transit District area. However, as also as discussed in Chapter 5, no significant effects would ensue from this growth and the growth would not be unplanned. Instead, the growth would be consistent with and implement important components of the policy framework underlying *Plan Bay Area 2050*, including the associated growth projections and visions to concentrate new growth around transit. Moreover, as noted above, growth in the immediate vicinity of transit (i.e., development proximate to the Redwood City Transit Center) would tend to have lesser environmental effects than would the same development in a less transit-accessible location. Accordingly, the proposed Transit District DTPP Amendments would have less than significant impacts with respect to growth inducement.

#### 18.1.3 Conclusion

Based on the discussions above, the proposed project would not remove physical obstacles to growth such that it would indirectly induce growth, nor would it result in significant direct growth inducement.

Growth inducement is also discussed in Chapter 5, Population and Housing, of this SEIR.

# 18.2 Significant Unavoidable Impacts

CEQA Guidelines section 15126.2(b) requires that an EIR discuss "significant environmental effects which cannot be avoided if the proposed project is implemented." Significant unavoidable impacts are those that would not be reduced to a less-than-significant level by the mitigation measures identified in this EIR.

As discussed in Chapter 12, *Air Quality*, and Chapter 17, *Cumulative Impacts*, the proposed project could result in the following significant unavoidable impacts related to air quality.

Impact AQ-2: Adoption of the proposed Transit District DTPP Amendments would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

• Implementing Mitigation Measures AQ-2a: Best Management Practices for Construction Dust Suppression, and AQ-2b: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants, would reduce the severity of the impact, but not necessarily to a less-than-significant level.

It is noted that Impact AQ-2 is not an impact of the project (adoption of the proposed Transit District DTPP Amendments) itself, but rather a potential impact of individual development project(s) that may be approved pursuant to the plan. This is because the BAAQMD thresholds of significance with respect to criteria air pollutants for revisions to a plan (consistency with current air quality plan control measures, and projected VMT or vehicle trip increase is less than or equal to projected population increase) differ from the criteria pollutants thresholds of significance for individual projects, which are based on comparison to specific quantities of daily and annual project emissions. Accordingly, it cannot be known with certainty whether a subsequent individual development project would exceed the project-specific significance thresholds for criteria pollutants until the individual project is analyzed at the project-specific level. However, as explained in Chapter 12, *Air Quality*, in the conclusion following Impact AQ-2:

Mitigation Measure AQ-2b is expected to be effective at reducing criteria pollutant emissions from construction and operation of individual projects developed in the Transit District area to below the BAAQMD thresholds; however, the specific emissions associated with future projects are not currently known, and therefore the effectiveness of emission reduction measures cannot be definitively determined. It is possible that projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could exceed construction significance thresholds. Also, ROG emissions from consumer products used during project operations may remain significant because use of such products is a function of consumer choice and commercial availability. Finally, although the mitigation measure would require emissions offsets required to reduce any criteria pollutant emissions that would exceed the thresholds of significance for these pollutants after implementation of all other feasible emission reduction measures, implementation of any emissions reduction project(s) that may be developed would be undertaken by BAAOMD and is outside the jurisdiction and control of the City and not fully within the control of the project applicants. For these reasons, criteria air pollutants from construction and operation of subsequent projects developed under the proposed Transit District DTPP Amendments would result in a new and more severe impact than the impact identified in the DTPP Final EIR. This impact would conservatively be significant and unavoidable with mitigation.

The identification of this significant and unavoidable impact does not preclude the finding of a less-than-significant or less-than-significant-with-mitigation impact for subsequent projects that are below the applicable screening criteria or that meet the criteria air pollutant thresholds of significance with implementation of Mitigation Measures AQ-2b.

Impact C-AQ-1: Adoption of the proposed Transit District DTPP Amendments would result in a cumulatively considerable contribution to the regional cumulative air quality impacts.

Impact C-AQ-1 is the cumulative equivalent of Transit District-specific Impact AQ-2; because Impact AQ-2 is concluded to be significant and unavoidable, Impact C-AQ-1 is likewise conservatively considered to be significant and unavoidable.

The only means of ensuring that Impacts AQ-2 and C-AQ-1would be less than significant would be to cap the size of individual development projects. However, because the severity of these impacts cannot be determined with accuracy until a specific project is analyzed and project-specific mitigation measures applied, and it is possible that future project emissions will be below the threshold with mitigation, it would be speculative and inappropriate in a program SEIR to impose such a limitation. Therefore, this SEIR conservatively concludes that the proposed Transit District DTPP Amendments would have a significant unavoidable project and cumulative impact with respect to emissions of criteria air pollutants from individual subsequent development project(s).

Impact CC-1: Implementation of the proposed Transit District DTPP Amendments would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact CC-2: Implementation of the proposed Transit District DTPP Amendments would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impacts CC-1 and CC-2 would be reduced to a less -than-significant level with implementation of Mitigation Measure CC-1. However, as explained in Chapter 13, *Climate Change*, the City Council in 2020 adopted the Redwood City Reach Codes, which permit certain exceptions to prohibitions on the use of natural gas, as local policy following staff's extensive outreach, consideration of other examples, and public input. Therefore, this SEIR considers that the full implementation of Mitigation Measure CC-1 may not be feasible, and, as a result, Impacts CC-1 and CC-2 are conservatively considered to be significant and unavoidable.

Impact C-CC-1: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to GHG emissions that may have a significant impact on the environment or conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases.

Impact C-CC-1 is the cumulative equivalent of Transit District-specific Impacts CC-1 and CC-2; because Impacts CC-1 and CC-2 are concluded to be significant and unavoidable, Impact C-CC-1 is likewise conservatively considered to be significant and unavoidable, for the reason set forth above.

# 18.3 Irreversible Environmental Changes

CEQA Guidelines section 15126.2(c) requires that the EIR discuss "significant irreversible environmental changes which would be caused by the proposed project should it be implemented." Implementation of the proposed Transit District DTPP Amendments would result in an irreversible commitment of energy resources, primarily in the form of fossil fuels, including fuel oil, natural gas, and gasoline or diesel fuel for construction equipment and automobiles during project construction and ongoing use of the development site. Because office and residential development allowed under the proposed Transit District DTPP Amendments would be required by law to comply with California Code of Regulations Title 24 and adopted City energy conservation ordinances and regulations, and would constitute infill development in a Transit Priority Area and Priority Development Area, the proposed Transit District DTPP Amendments would not be expected to use energy in a wasteful, inefficient, or unnecessary manner (see Chapter 13, *Climate Change*, of this SEIR).

The consumption or destruction of other non-renewable or slowly renewable resources would also result during construction, occupancy, and operation of the proposed Transit District DTPP Amendments. These resources would include, but would not be limited to, lumber, concrete, sand, gravel, asphalt, masonry, metals, and water. Development that could occur in the Transit District area would also irreversibly use water and solid waste landfill resources. However, development would not involve a large commitment of those resources relative to supply, nor would it consume any of those resources wastefully, inefficiently, or unnecessarily, especially considering ongoing City and County conservation, diversion, and recycling programs.

# 18.4 Effects Found Not to be Significant

Section 15128 of the CEQA Guidelines requires that the EIR "contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." This SEIR discusses all of the environmental topic areas included in CEQA Guidelines Appendix G (Environmental Checklist Form), with the potential significance of each impact evaluated in the appropriate EIR chapter (e.g., Chapter 6, *Aesthetics*, Chapter 7, *Cultural and Historic Resources and Tribal Cultural Resources*), with the exception of the following environmental topics:

• Agricultural and Forestry Resources (item II in CEQA Appendix G): As discussed in the 2010 DTPP EIR, 1 no agricultural uses are located within the DTPP area. According to the San Mateo County Important Farmlands Map, the DTPP site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No portion of the DTPP site is zoned for agricultural use, nor is any portion of the site under a Williamson Act contract. Therefore, the proposed project would not result in any impact on farmland.

<sup>&</sup>lt;sup>1</sup> 2010 DTPP EIR, p. 18-4.

- Mineral Resources (item XII in CEQA Appendix G): As discussed in the 2010 DTPP EIR,<sup>2</sup> no significant mineral deposits are identified in the DTPP area. Therefore, the proposed project would not result in any impact on mineral resources.
- Wildfire (item XX in CEQA Appendix G): This topic was not included in Appendix G at the time the DTPP Final EIR was certified, and therefore this topic was not addressed in the FEIR. However, inasmuch as development in the Transit District area would consist of urban infill and there are no high fire hazard areas or wildlands susceptible to wildfire in the project vicinity, effects related to wildfire would be less-than-significant.

Ibid.

# **CHAPTER 19**

# Alternatives to the Proposed Project

# 19.1 Introduction

CEQA requires that an EIR describe and evaluate a range of reasonable alternatives to the proposed project, and evaluate the comparative merits of the alternatives (*CEQA Guidelines* Section 15126.6(a), (d)). The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to foster informed decision-making and public participation (Section 15126.6(a), (f)).

The range of alternatives shall include alternatives that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant effects of the project (*CEQA Guidelines* Section 15126.6(a)-(c)). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. An EIR must briefly describe the rationale for selecting the alternatives to be discussed and identify any alternatives that were rejected as infeasible, briefly explaining the reasons (15126.6(c)).

The description or evaluation of alternatives selected for analysis need not be exhaustive, and an EIR need not consider alternatives for which the effects cannot be reasonably determined and for which implementation is remote or speculative. An EIR need not describe or evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project (*CEQA Guidelines* Section 15126.6(d)).

The "no project" alternative must be evaluated. This analysis shall discuss the existing conditions, as well as what could be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services (*CEQA Guidelines* Section 15126.6(e)(2)). Where, as in this case, the proposed project is the revision of an existing land use plan, the "no project" alternative "will be the continuation of the existing plan, policy or operation into the future. Typically, this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan" (*CEQA Guidelines* Section 15126.6(e)(3)(A)). This differs from the case in which the proposed project is an individual development, in which instance the "no project" alternative entails either no development on the project site or, if predictable, a different proposed project or action.

CEQA also requires that an environmentally superior alternative be selected from among the alternatives. The environmentally superior alternative is the alternative with the fewest or least severe adverse environmental impacts. When the "no project" alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives (*CEQA Guidelines* Section 15126.6(e)(2)).

## 19.2 DTPP Draft EIR Alternatives

The DTPP Draft EIR described seven alternatives to proposed project, including a No Project Alternative that assumed build-out of the plan area under the 1990 Redwood City Strategic General Plan and Zoning Code, and would have resulted in more development than the proposed DPP. Other alternatives included Alternative 2: DPP With Reduced Development Capacity, Alternative 3: DPP with Reduced Building Height, Alternative 4: Revised Maximum Allowable Development (MAD) Caps; and Alternative 5: Revised Historic Resource Preservation Regulations. Alternative 6 (Revised DPP Area Boundary) and Alternative 7 (Alternative DPP Location) were eliminated without detailed analysis because they would not avoid or substantially lessen potential significant environmental effects, and/or would not achieve basic project objectives.

TABLE 19-1
DTPP DRAFT EIR ALTERNATIVES COMPARED TO THE DPP: SUMMARY OF NET NEW DEVELOPMENT <sup>a</sup>

	Residential (Units)	Office (s.f.)	Retail (s.f.)	Lodging (rooms)	Industrial (s.f.)
Proposed DPP	2,500	275,000	221,000	200	-95,000
Alternative 1: No Project	3,300	921,000	275,000	189	-95,000
Alternative 2: Reduced Development	1,875	206,250	165,750	200	-95,000
Alternative 3: Reduced Height	2,500	275,000	221,000	200	-95,000
Alternative 4: Revised MAD Caps	2,500	500,000	100.000	200	-95,000
Alternative 5: Revised Preservation Regulations	2,500	275,000	221,000	200	-95,000

#### NOTES:

SOURCE: City of Redwood City, DTPP Draft EIR p. 19-14

Following certification of the DTPP Final EIR, the City Council approved the proposed DTPP with amendments analyzed in Alternative 4 (revised development caps) and Alternative 5 (revised preservation regulations).

a Neither the Proposed DPP nor the alternatives proposed new civic/institutional uses.

# 19.3 Project Objectives

CEQA Guidelines Section 15124(b) requires the description of the project in an EIR to state the objectives sought by the project, explaining that "A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project."

In keeping with this requirement, the City's project objectives are as follows:

- To establish a new sub-area within the DTPP—the Redwood City Transit District—focused on transit-oriented development with a new hub of office, residential and retail uses adjacent to the Redwood City Transit Center, including the Caltrain Station and the SamTrans bus depot, thereby potentially minimizing automobile travel and vehicle miles traveled, consistent with the City's greenhouse gas reduction goals.
- To allow for redevelopment of the existing Transit Center and Sequoia Station properties with a mix of retail, office, and residential uses that is responsive to market demands and can be constructed within existing height limitations (i.e., no changes to the maximum height allowed) and that maximizes development potential of the area in terms of both job and housing opportunities;
- To anticipate a potential future four-track Caltrain station, north of the existing station, that would allow for expanded service with completion of Caltrain's electrification program (currently under construction) and for long-term implementation of the Caltrain Business Plan, which calls for substantially increased frequency of service and the use of the Redwood City Transit Center as a transfer point between local and express trains;
- To designate land uses appropriate to the Transit District sub-area and the total amount of
  development to be permitted in the sub-area. To that end, establish a separate development
  cap for office use that is distinct from, and not subject to, the office cap applicable to the
  remainder of the DTPP, and to allow residential uses that contribute to a thriving hub of
  office, residential and retail uses;
- To make circulation improvements to promote quality vehicular, bicycle and pedestrian connections.
- To lower the parking requirement to reflect actual demand, current best practices and future plans for Caltrain track expansion that will encourage non-driving modes of transportation while continuing to incentivize shared parking and the ability for project applicants to pay a fee to the City in lieu of providing new parking spaces;
- To require frontage improvements to support active transportation consistent with RWCmoves, Redwood City's Citywide Transportation Plan; with the City's El Camino Real Corridor Plan; and with the in-progress RWC Walk Bike Thrive initiative;
- To provide options for more design flexibility to allow for increased diversity in architecture and style; and
- To maintain existing DTPP maximum building height limits (i.e., no changes to the maximum allowable height) in the proposed Transit District, but allow for some development flexibility by permitting limited exceptions to building placement requirements (i.e., build-to-corner, building setback, and frontage coverage requirements) to allow corner setbacks, other

setbacks from the street, and lesser lot coverage than is currently required; and lowering the required minimum heights from 35 feet to 25 feet, or less with a potential exception. The exceptions would allow for reduced massing and shadows, an enhanced pedestrian experience, and provide support for ground floor retail.

# 19.4 Significant Impacts of the Proposed Project

# 19.4.1 Significant Unavoidable Impacts

As stated above, a focus of the discussion of alternatives is to determine whether there are potentially feasible alternatives that could avoid or substantially lessen the significant impacts of the proposed project. As discussed in Chapter 18, Section 18.2, Significant Unavoidable Impacts, the proposed project could result in the following significant unavoidable impact related to air quality.

Impact AQ-2: Adoption of the proposed Transit District DTPP Amendments would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

• Implementing Mitigation Measures AQ-2a: Best Management Practices for Construction Dust Suppression, and AQ-2b: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants, would reduce the severity of the impact, but not necessarily to a less-than-significant level.

It is noted that Impact AQ-2 is not an impact of the project (adoption of the proposed Transit District DTPP Amendments) itself, but rather a potential impact of individual development project(s) that may be approved pursuant to the plan. This is because the BAAQMD thresholds of significance with respect to criteria air pollutants for revisions to a plan (consistency with current air quality plan control measures, and projected VMT or vehicle trip increase is less than or equal to projected population increase) differ from the criteria pollutants thresholds of significance for individual projects, which are based on comparison to specific quantities of daily and annual project emissions. Accordingly, it cannot be known with certainty whether a subsequent individual development project would exceed the project-specific significance thresholds for criteria pollutants until the individual project is analyzed at the project-specific level. However, as explained in Chapter 12, *Air Quality*, in the conclusion following Impact AQ-2:

Mitigation Measure AQ-2b is expected to be effective at reducing criteria pollutant emissions from construction and operation of individual projects developed in the Transit District area to below the BAAQMD thresholds; however, the specific emissions associated with future projects are not currently known, and therefore the effectiveness of emission reduction measures cannot be definitively determined. It is possible that projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could exceed construction significance thresholds. Also, ROG emissions from consumer products used during project operations may remain significant because use of such products is a function of consumer choice and commercial availability. Finally, although the mitigation measure would require emissions offsets required to reduce any criteria pollutant emissions that would exceed the thresholds of significance for these pollutants after implementation of all other feasible emission reduction measures, implementation of any emissions reduction

project(s) that may be developed would be undertaken by BAAQMD and is outside the jurisdiction and control of the City and not fully within the control of the project applicants. For these reasons, criteria air pollutants from construction and operation of subsequent projects developed under the proposed Transit District DTPP Amendments would result in a new and more severe impact than the impact identified in the DTPP Final EIR. This impact would conservatively be *significant and unavoidable with mitigation*.

The identification of this significant and unavoidable impact does not preclude the finding of a less-than-significant or less-than-significant-with-mitigation impact for subsequent projects that are below the applicable screening criteria or that meet the criteria air pollutant thresholds of significance with implementation of Mitigation Measures AQ-2b.

The only means of ensuring that Impact AQ-2 would be less than significant would be to cap the size of individual development projects. However, in fact, this impact is conservatively considered to be significant and unavoidable with mitigation; in reality, the severity of this impact cannot be truly gauged with accuracy until a specific project is analyzed and project-specific mitigation measures applied, and it is possible that future project emissions will be below the threshold with mitigation. Therefore, it would be speculative and inappropriate at the level of a program SEIR to attempt to limit the size of individual projects as a means of addressing this potential future project-specific impact.

Impact C-AQ-1: Adoption of the proposed Transit District DTPP Amendments would result in a cumulatively considerable contribution to the regional cumulative air quality impacts.

Impact C-AQ-1 is the cumulative equivalent of Transit District-specific Impact AQ-2; because Impact AQ-2 is concluded to be significant and unavoidable, Impact C-AQ-1 is likewise conservatively considered to be significant and unavoidable.

Impact CC-1: Implementation of the proposed Transit District DTPP Amendments would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact CC-2: Implementation of the proposed Transit District DTPP Amendments would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impacts CC-1 and CC-2 would be reduced to a less -than-significant level with implementation of Mitigation Measure CC-1. However, as explained in Chapter 13, *Climate Change*, the City Council in 2020 adopted the Redwood City Reach Codes, which permit certain exceptions to prohibitions on the use of natural gas, as local policy following staff's extensive outreach, consideration of other examples, and public input. Therefore, this SEIR considers that the full implementation of Mitigation Measure CC-1 may not be feasible, and, as a result, Impacts CC-1 and CC-2 are conservatively considered to be significant and unavoidable.

Impact C-CC-1: Implementation of the proposed Transit District DTPP Amendments, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to GHG emissions that may have a significant impact on the environment or conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases.

Impact C-CC-1 is the cumulative equivalent of Transit District-specific Impacts CC-1 and CC-2; because Impacts CC-1 and CC-2 are concluded to be significant and unavoidable, Impact C-CC-1 is likewise conservatively considered to be significant and unavoidable, for the reason set forth above.

# 19.4.2 Significant but Mitigable Impacts

As stated above, a focus of the discussion of alternatives is to determine whether there are potentially feasible alternatives that could avoid or substantially lessen the significant impacts of the proposed project. This can include significant impacts for which mitigation measures have been identified to reduce the severity of project impacts to less than significant. The proposed project would result in the following potentially significant impacts that could be reduced to a less-than-significant level with mitigation:

**Impact CR-1:** Implementation of the proposed Transit District DTPP Amendments would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

**Impact CR-2:** Implementation of the proposed Transit District DTPP Amendments would not potentially cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

**Impact CR-4:** Implementation of the proposed Transit District DTPP Amendments would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.

**Impact UT-1:** Implementation of the proposed Transit District DTPP Amendments would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

**Impact UT-2:** With implementation of the proposed Transit District DTPP Amendments, the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

**Impact NO-1:** Implementation of the proposed Transit District DTPP Amendments would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

- **Impact NO-2:** Implementation of the proposed Transit District DTPP Amendments would not generate a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- **Impact NO-3:** Implementation of the proposed Transit District DTPP Amendments would not generate excessive groundborne vibration or groundborne noise levels.
- **Impact AQ-3:** Adoption of the proposed Transit District DTPP Amendments would not expose sensitive receptors to substantial pollutant concentrations.
- **Impact CC-1:** Implementation of the proposed Transit District DTPP Amendments would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- **Impact CC-2:** Implementation of the proposed Transit District DTPP Amendments would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
- **Impact HAZ-6:** Implementation of the proposed Transit District DTPP Amendments would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- **Impact BIO-1:** Implementation of the proposed Transit District DTPP Amendments would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service
- **Impact BIO-5:** Implementation of the proposed Transit District DTPP Amendments would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- **Impact GEO-4:** Implementation of the proposed Transit District DTPP Amendments would not be located on expansive or corrosive soil creating substantial direct or indirect risks to life or property.
- **Impact GEO-6:** Implementation of the proposed Transit District DTPP Amendments would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

# 19.5 SEIR Alternatives Considered but Dismissed from Further Evaluation

Like the DTPP Draft EIR and in keeping with CEQA Guidelines Section 15126.6(f)(2), this SEIR considered whether to analyze alternate locations for the Transit District area, and concluded that such an alternative would not meet the primary objective of the project, which is to establish a new sub-area within the DTPP focused on transit-oriented development adjacent to the Redwood City Transit Center. Because the location of the Transit District area is fundamental to its purpose, and another location with a comparable transit center proximate to downtown does not exist, an off-site alternative was not carried forward for evaluation in this EIR.

Additionally, none of the reduced density alternatives evaluated in the DTPP Final EIR are feasible, given that the amount of office space and the number of residential units already developed exceeds the totals for each of those alternatives.

# 19.6 Selection and Analysis of SEIR Alternatives

As described in this section, this SEIR analyzes a no project alternative and two other alternatives to the proposed Transit District DTPP Amendments, and compares the impacts of those alternatives to each other and to the project.

In selecting alternatives for analysis in this chapter, the City of Redwood City considered: the project objectives and significant impacts identified above; the potential feasibility of alternatives based on factors in CEQA Guidelines Section 15126.6(f)(1); and whether the alternative would substantially reduce or eliminate environmental impacts of the projects, with a particular emphasis on significant and unavoidable impacts.

Consistent with these requirements, and CEQA's requirement for a No Project Alternative, this chapter describes the following alternatives:

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Development Alternative
- Alternative 3: Altered Land Use Mix Alternative

**Table 19-2** compares the development program of the project and the alternatives, each of which is described further below.

TABLE 19-2
PROPOSED LAND USES IN DOWNTOWN PRECISE PLAN FOR THE PROPOSED TRANSIT DISTRICT DTPP
AMENDMENTS AND ALTERNATIVES

Land Use	Office Development Cap <sup>a</sup>	Residential Development Assumption <sup>a</sup>
Proposed Transit District DTPP Amendments	1,630,000 square feet	1,100 units
Reduced Development Alternative	1,100,000 square feet	750 units
Change from Project	-33%	-32%
Altered Land Use Mix Alternative	850,000 square feet	1,500 units
Change from Project	-48%	+36%
Change from Reduced Develop. Alt.	-23%	+100%

#### NOTE:

SOURCE: City of Redwood City, 2022

The following discussion provides a comparative evaluation of the environmental consequences of the alternatives selected for further consideration in this EIR. Consistent with the requirements

<sup>&</sup>lt;sup>a</sup> All development totals represent net new development in the proposed Transit District DTPP Amendments.

of CEQA Guidelines Section 15126.6(d), the discussion includes "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with" the proposed project. As provided for under CEQA, where an alternative would cause a significant impact that would not otherwise be caused by the proposed project, the significant impact of the alternative is discussed, but in less detail than the significant impacts of the proposed project that are presented elsewhere in this SEIR.

#### 19.6.1 Identified Alternatives

## **No Project Alternative**

Under the No Project Alternative, the proposed Transit District DTPP Amendments would not be created as a separate sub-area within the DTPP. Instead, the area proposed as the Transit District would remain under the land use controls of the existing DTPP, as it may be amended in the future. There would be no creation of a Transit District-specific development cap for office use or the addition of residential development potential specific to the Transit District area, nor would there be any district-specific circulation improvements or changes in land use controls (development standards) related to building design, building massing, circulation, and parking in the DTPP to support transit-oriented development. It is noted that these circulation improvements and changes in land use controls could potentially be made in the future as part of revisions to the broader DTPP that are also being considered by the City as part of a separate but generally parallel planning process that could also anticipate a relocated and enlarged Caltrain station and widened Caltrain right-of-way as part of a new and relocated Transit Center. However, the No Project Alternative, unlike the proposed Transit District DTPP Amendments, would not anticipate space for the envisioned Caltrain improvements.

Cumulative development within the existing DTPP, such as projects with applications on file, as well as nearby cumulative development, could occur.<sup>2</sup> However, there would be no project to make a contribution to the cumulative effects of such development.

# **Reduced Development Alternative**

Under the Reduced Scale Alternative, an overall lesser amount of allowed office and residential development would be assumed, compared to that with the proposed Transit District DTPP Amendments. Like the proposed project, this alternative would consist of amendments to the

As explained in Chapter 1, Introduction, the City is also considering broader General Plan and DTPP amendments that are being analyzed in separate SEIR that is also in preparation.

Since the adoption of the City's General Plan in 2010, the City has experienced substantial growth and development due to a variety of factors. A strong economy and the adoption of the DTPP in 2011 streamlined project analysis and public review by setting overall development caps (Maximum Allowable Development) for office, residential, retail, and hotel development. The caps for office space and residential uses are almost met, so any project proposing to exceed these caps has had to request both a General Plan amendment and a DTPP amendment to increase the cap(s). Therefore, absent adjustment of the office development cap, very little office development could occur within the DTPP. However, as explained in Chapter 3, *Project Description*, the existing cap on residential development in the DTPP is proposed to be eliminated by the City Council's adoption of a new Redwood City General Plan Housing Element in 2022, in compliance with the Housing Accountability Act. Therefore, assuming this action is taken by the Council, residential development could be approved within the DTPP, including the area proposed as the Transit District, without any other DTPP or General Plan amendments.

City's General Plan and DTPP that would create a new sub-area, the Transit District area, within the DTPP area focused on transit-oriented development with approximately 16.6 acres of land located to the west of the Caltrain right-of-way. However, the Reduced Development Alternative would establish an office development cap for the Transit District area of 1.1 million square feet, about two-thirds of the office development cap proposed under the Transit District DTPP Amendments. Under this alternative, the assumed residential development would likewise be about two-thirds of the project proposal, or 750 dwelling units. Other aspects of the proposed Transit District DTPP Amendments, circulation improvements and changes to land use controls (development standards) related to, among other things, building design, building massing, circulation, and parking, would also be part of this alternative and would be the same as those with the proposed Transit Center, or nearly so. Like the proposed Transit District DTPP Amendments, the Reduced Development Alternative would anticipate a relocated and enlarged Caltrain station and tracks as part of a new and relocated Transit Center.

#### Altered Land Use Mix Alternative

This alternative, which is included specifically to address concerns raised during the scoping process about the amount of office development anticipated in Redwood City and about the City's jobs-housing balance, would reduce the amount of office space and increase the number of residential units, compared to what is assumed under the proposed Transit District DTPP Amendments. Like the proposed project, this alternative would consist of amendments to the City's General Plan and DTPP that would create a new sub-area, the Transit District area, within the DTPP area focused on transit-oriented development with approximately 16.6 acres of land located to the west of the Caltrain right-of-way. However, the Altered Land Use Mix Alternative would establish an office development cap for the Transit District area of 800,000 square feet, about half of the office development cap proposed under the Transit District DTPP Amendments, and about 23 percent less than under the Reduced Development Alternative. Under the Altered Land Use Mix Alternative, the assumed residential development would be about 36 percent more than with the proposed Transit District DTPP Amendments, or 1,500 dwelling units—twice the number of units assumed under the Reduced Development Alternative. However, with a somewhat greater reduction, compared to the proposed Transit District DTPP Amendments, in office floor area relative to the increase in residential units, the total square footage of development would be about 15 percent less than with the proposed Transit District DTPP Amendments (and about 25 percent greater than with the Reduced Development Alternative).

Other aspects of the proposed Transit District DTPP Amendments, circulation improvements and changes to land use controls (development standards) related to, among other things, building design, building massing, circulation, and parking, would also be part of this alternative and would be the same as those with the proposed Transit Center, or nearly so. Like the proposed

Transit District DTPP Amendments, the Altered Land Use Mix Alternative would anticipate a relocated and enlarged Caltrain station and tracks as part of a new and relocated Transit Center.<sup>3</sup>

## 19.6.2 Alternatives Evaluation

## **No Project Alternative**

Under the No Project Alternative, because there would be no amendments to the General Plan or the DTPP adopted, none of the effects of the proposed Transit District DTPP Amendments would occur.<sup>4</sup> Accordingly, the existing DTPP would continue to govern the Transit District area.

If no development were to occur, existing conditions as described in Chapter 3, *Project Description*, and in the technical analyses in Chapters 4 through 16 would remain. In this instance, there would be no impacts related to the intensity of development, such as increases in traffic (including traffic that might potentially interfere with emergency evacuation plans), emissions of criteria air pollutants or toxic air contaminants from construction or operation of new buildings in the Transit District area. Likewise, there would be no increase in noise, vibration, or greenhouse gas emissions from construction or operation of Transit District area development projects, and no increase in population or employment or increase in demand for public services or utilities from subsequent projects on the project site. There would be no effects related to the footprint of subsequent development projects, meaning that there would be no excavation that could disturb archaeological or tribal cultural resources, result in exposure of workers or the public to subsurface soil or groundwater contamination, or disturb paleontological resources; no building demolition that could adversely affect historical resources; no disturbance of nesting birds or removal of trees that could result from construction of subsequent development projects in the Transit District area; and no development in the Transit District area on potentially expansive or corrosive soils.

The No Project Alternative would avoid the proposed Transit District DTPP Amendments' potentially significant and unavoidable effect of subsequent individual development projects with respect to emissions of criteria air pollutants (Impact AQ-2).

This alternative would also avoid each of the project's significant but mitigable impacts identified above.

Inasmuch as the adopted DTPP would continue to apply, development could proceed in the Transit District area, although as noted in the footnote, little office or residential capacity

It is noted that a 2020 financial analysis presented to the City in connection with the proposed Sequoia Station site noted that a project with reduced intensity would affect the financial feasibility of the project, which may impact the ability to set aside land for an expanded Caltrain right-of-way. Available on the internet at: <a href="https://meetings.redwoodcity.org/AgendaOnline/Documents/ViewDocument/ATTACHMENT%20C%20%E2%80%93%20FINANCIAL%20FEASIBILITY%20MEMO.pdf?meetingId=2205&documentType=Agenda&itemId=4637&publishId=7754&isSection=false.</a>

As described in Chapter 3, *Project Description*, the proposed Transit District DTPP Amendments would establish a new sub-area within the DTPP and also establish a new office development cap for the Transit District area. It should be noted that the overall DTPP caps for both office space and residential uses as set forth in both the DTPP and the General Plan are almost met, so any project proposing to exceed these caps has had to request both a General Plan amendment and a DTPP amendment to increase the cap(s). However, the caps for both retail and hotel uses have substantial availability.

currently remains in the DTPP. It should be noted, however, that the City is currently preparing a separate SEIR for proposed DTPP Plan-Wide Amendments, in large part to accommodate other "Gatekeeper" projects for which the City Council has initiated General Plan amendment proceedings.

The No Project Alternative would not meet any of the City's objectives for the proposed Transit District DTPP Amendments, in that it would not:

- establish a new DTPP sub-area focused on transit-oriented development;
- allow for redevelopment of the existing Transit Center and Sequoia Station properties with a mix of retail, office, and residential uses;
- anticipate a potential future four-track Caltrain station;
- make circulation improvements;
- lower the parking requirement;
- require frontage improvements to support active transportation;
- provide options to allow for increased architectural diversity; or
- allow for exceptions, at certain sites, to requirements concerning building placement and required minimum heights.

## **Reduced Development Alternative**

Under the Reduced Development Alternative, impacts related to the intensity of development—traffic (including traffic that might potentially interfere with emergency evacuation plans); criteria air pollutant, toxic air contaminant, and greenhouse gas emissions; noise and vibration; population or employment; and demand for public services and utilities—would generally be reduced, compared to those of the proposed Transit District DTPP Amendments.

## **Transportation**

As explained in Chapter 9, *Transportation and Circulation*, all impacts of the proposed Transit District DTPP Amendments would be less than significant and no mitigation measures would be required. The proposed Transit District DTPP Amendments would be consistent with the General Plan transportation goals; would not conflict with any of the overarching transportation goals of the existing DTPP or RWCMoves; and would increase transit ridership, which would not result in a significant adverse effect on the environment. Because it would result in development of increased office and residential uses in proximity to a transit station and other comparable uses, the Reduced Development Alternative would likewise be consistent with the General Plan, DTPP, and RWCMoves, and would increase transit ridership, although by a lesser amount than would the proposed Transit District DTPP Amendments. Effects of the Reduced Development Alternative would be less than significant, as with the proposed Transit District DTPP Amendments.

The proposed Transit District DTPP Amendments would result in a less-than-significant impact with respect to VMT and, because it would result in development of increased office and

residential uses in proximity to a transit station and other comparable uses, the Reduced Development Alternative would likewise have a less-than-significant impact on VMT. This effect of the Reduced Development Alternative would be less than significant, as with the proposed Transit District DTPP Amendments.

The proposed Transit District DTPP Amendments would have less-than-significant impacts with respect to safety hazards and emergency access. Because it would develop the same land uses on the same or comparable sites—albeit at lesser intensity—as would the proposed Transit District DTPP Amendments, these impacts of the Reduced Development Alternative would be less than significant, as with the proposed Transit District DTPP Amendments.

## Air Quality and Climate Change

As discussed in Chapter 12, *Air Quality*, and Chapter 17, *Cumulative Impacts*, and above, the analysis in this SEIR conservatively concludes that the proposed Transit District DTPP Amendments could result in a significant unavoidable impact with respect to emissions of criteria air pollutants from individual subsequent development project(s) (Impacts AQ-2 and C-AQ-1). This is because the BAAQMD thresholds of significance with respect to criteria air pollutants for revisions to a plan (consistency with current air quality plan control measures, and projected VMT or vehicle trip increase is less than or equal to projected population increase) differ from the criteria pollutants thresholds of significance for individual projects, which are based on comparison to specific quantities of daily and annual project emissions. Implementation of Mitigation Measures AQ-2a and AQ-2b would reduce the impact, but it cannot be stated with certainty that impacts from all subsequent development projects would be less than significant, even with mitigation.

Because the Reduced Development Alternative would develop the same office and residential land uses at a lesser intensity than would the proposed Transit District DTPP Amendments, it would be less likely that one or more individual projects could exceed the BAAQMD screening thresholds; however, it cannot be stated with certainty that, under this alternative, impacts from all subsequent development projects would be less than significant, even with mitigation. Therefore, this SEIR conservatively concludes that the Reduced Development Alternative, like the proposed Transit District DTPP Amendments, would have a significant unavoidable impact with respect to emissions of criteria air pollutants from individual subsequent development project(s). The foregoing conclusion would also apply to the cumulative impact with respect to emissions of criteria air pollutants from individual subsequent development project(s) (Impact C-AQ-1): this impact would be significant and unavoidable for the Reduced Development Alternative, as it would be for the proposed Transit District DTPP Amendments.

Other air quality impacts of the proposed Transit District DTPP Amendments would be less than significant, in some cases with mitigation. The proposed Transit District DTPP Amendments would have a less-than-significant impact with respect to compliance with BAAQMD's 2017 Clean Air Plan, with which the proposed Transit District DTPP Amendments would be consistent. Because it would develop the same office and residential uses in proximity to a transit station and other comparable uses in at least some of the same locations, albeit at a reduced intensity, as would the proposed Transit District DTPP Amendments, the Reduced Development

Alternative would likewise be consistent with the applicable clean air plan and would have a less-than-significant impact.

Given its lesser increase in VMT than in service population, at a plan level, the proposed Transit District DTPP Amendments would have a less-than-significant impact with respect to its cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The Reduced Development Alternative, which would similarly develop office and residential uses in proximity to a transit station and other comparable uses in at least some of the same locations, albeit at a reduced intensity, this alternative, too would have a less-than-significant impact.

The proposed Transit District DTPP Amendments would have a potentially significant impact with respect to health risks because subsequent development projects could generate substantial volumes of toxic air contaminants during construction. However, with implementation of Mitigation Measure AQ-3: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction, this impact would be reduced to a less-than-significant level. With the same land uses at a reduced intensity in at least some of the same locations, the Reduced Development Alternative could result in similar, albeit somewhat lesser, significant health risk impact as would the proposed Transit District DTPP Amendments. However, this impact, too, would be reduced to a less-than-significant level with implementation of Mitigation Measure AQ-3.

Subsequent development in the proposed Transit District DTPP Amendments would not include any major sources of odor, and therefore odor impacts would be less than significant. With the same land uses at a reduced intensity in at least some of the same locations, the Reduced Development Alternative would likewise have less-than-significant odor impacts.

As discussed in Chapter 13, Climate Change, absent mitigation, the proposed Transit District DTPP Amendments could result in significant impacts on climate change because the City's Reach Codes allow waivers to its requirement for all-electric buildings (i.e., no natural gas). The Reach Codes also do not ensure compliance with future updates to the CALGreen Tier 2 EV requirements. Therefore, the proposed Transit District DTPP Amendments would not comply with BAAQMD's adopted GHG threshold and could conflict with the GHG reduction targets established by Executive Order S-3-05 and SB 32, the reduction measures identified in CARB's 2017 Scoping Plan, and Plan Bay Area and the Redwood City Climate Action Plan. These impacts would be reduced to a less-than-significant level with Mitigation Measure CC-1: Enforce No Natural Gas Requirement and Require Compliance with EV Requirements in CALGreen Tier 2. Inasmuch as climate change impacts are by their nature cumulative, the proposed Transit District DTPP Amendments would likewise have potentially significant cumulative climate change impacts that would be reduced to a less-than-significant level with Mitigation Measure CC-1. However, as also explained in Chapter 13, the City Council in 2020 adopted the Redwood City Reach Codes, which permit certain exceptions to prohibitions on the use of natural gas, as local policy following staff's extensive outreach, consideration of other examples, and public input. Therefore, this SEIR considers that the full implementation of Mitigation Measure CC-1

may not be feasible, and, as a result, Impacts CC-1 and CC-2 are conservatively considered to be significant and unavoidable.

With the same land uses at a reduced intensity in at least some of the same locations, the Reduced Development Alternative could result in similar, albeit somewhat lesser, significant climate change impacts as the proposed Transit District DTPP Amendments. However, as with the proposed Transit District DTPP Amendments, these impacts, as well as this alternative's cumulative climate change impacts, would be reduced to a less-than-significant level with Mitigation Measure CC-1. Nevertheless, as stated in the preceding paragraph, full implementation of Mitigation Measure CC-1 may not be feasible, and, as a result, impacts of the Reduced Development Alternative with respect to climate change are likewise conservatively considered to be significant and unavoidable.

#### Noise and Vibration

As discussed in Chapter 11, *Noise and Vibration*, the proposed Transit District DTPP Amendments could potentially result in a significant impact related to temporary construction noise from subsequent individual development project(s). However, this impact would be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-1: Construction Noise Reduction. With the same land uses at a reduced intensity in at least some of the same locations, the Reduced Development Alternative could result in similar, albeit somewhat lesser, construction noise impacts. These impacts would likewise be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-1.

The proposed Transit District DTPP Amendments could potentially result in a significant impact related to permanent increases in building equipment noise from subsequent individual development project(s). However, this impact would be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-2: Operational Noise Performance Standard. With the same land uses at a reduced intensity in at least some of the same locations, the Reduced Development Alternative could result in similar, albeit somewhat lesser, building equipment noise impacts. These impacts would likewise be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-2. Like the proposed Transit District DTPP Amendments, the Reduced Development Alternative would result in less-than-significant traffic noise impacts because traffic volumes would increase by a lesser amount than would trigger an impact; this less-than-significant impact would be somewhat less substantial with the Reduced Development Alternative, compared to the proposed Transit District DTPP Amendments, because of this alternative's lesser traffic volumes.

The proposed Transit District DTPP Amendments could potentially result in a significant impact related to groundborne vibration from construction of subsequent individual development project(s). However, this impact would be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-3: Vibration Reduction. With the same land uses at a reduced intensity in at least some of the same locations, the Reduced Development Alternative could result in similar, albeit somewhat lesser, construction- generated vibration impacts. These impacts would likewise be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-3.

Effects related to airport noise would be less than significant with the Reduced Development Alternative, as would be the case for the proposed Transit District DTPP Amendments because the 60, 65, 70, and 75 CNEL noise contours for San Carlos Airport do not extend into the City of Redwood City.

## Population and Housing

As discussed in Chapter 5, *Population and Housing*, the proposed Transit District DTPP Amendments would have less-than-significant impacts with respect to population and housing because it would not induce substantial unplanned growth and would not result in residential displacement. With the same land uses at a reduced intensity in at least some of the same locations, the Reduced Development Alternative would likewise have less-than-significant impacts with respect to population and housing.

#### Public Services and Utilities and Infrastructure

As discussed in Chapter 8, *Public Services and Recreation*, the proposed Transit District DTPP Amendments would have less-than-significant effects with respect to public services (police, fire, and emergency medical services; parks and recreational facilities; schools; and libraries). With the same land uses at a reduced intensity in at least some of the same locations, the Reduced Development Alternative would likewise have less-than-significant impacts with respect to public services.

As discussed in Chapter 10, *Utilities and Infrastructure*, the proposed Transit District DTPP Amendments would have less-than-significant effects with mitigation with respect to water supply. The proposed Transit District DTPP Amendments would have less-than-significant impacts with respect to the construction of water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities; wastewater treatment capacity; and solid waste. The proposed Transit District DTPP Amendments would also have less-than-significant impacts with respect to water quality; groundwater recharge; storm drainage; flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; and consistency with a water quality control plan or sustainable groundwater management plan. With the same land uses at a reduced intensity in at least some of the same locations, the Reduced Development Alternative would likewise have less-than-significant impacts with respect to utilities and infrastructure (including hydrology and water quality).

## Other Impacts

Effects related to the footprint of subsequent development projects would generally be the same as or similar to those of the proposed Transit District DTPP Amendments. This is because the locations of subsequent development projects would not necessarily change, although lesser overall development would occur within the proposed Transit District DTPP Amendments. That is, it is possible that the existing Sequoia Station shopping center would be redeveloped under this alternative, albeit with lesser intensity of new construction and either shorter buildings or buildings with less bulk, or both. Likewise, the existing Redwood City Transit Center site could also be redeveloped if the Caltrain station and transit center were to be relocated and expanded, but again

with lesser intensity of new development. Because any change in the footprint of subsequent development projects, if any, cannot be known at this time, it is assumed that excavation could potentially disturb archaeological or tribal cultural resources, potentially result in exposure of workers or the public to subsurface soil or groundwater contamination, and potentially disturb paleontological resources to the same or a similar degree as would be the case with the proposed Transit District DTPP Amendments. Likewise, building demolition could adversely affect historical resources to the same or a similar degree as with the proposed Transit District DTPP Amendments. Additionally, the Reduced Development Alternative could result in the same or similar disturbance of nesting birds and removal of trees that could result from construction of subsequent development projects in the Transit District area. Finally, this alternative could, like the proposed Transit District DTPP Amendments, result in the same or similar development on potentially expansive or corrosive soils. Each of these impacts—Impact CR-1, CR-2, CR-4, HAZ-6, BIO-4, BIO-5, GEO-4, and GEO-6—would be less than significant with mitigation under the Reduced Development, as would be the case with the proposed Transit District DTPP Amendments.

As with the proposed Transit District DTPP Amendments, effects of the Reduced Development Alternative would be less than significant with respect to land use and aesthetics (including shadow), because the same office and residential uses would be developed in at least some of the same locations as with the Transit District area, although at lesser intensity. However, one or more subsequent individual development project(s) could be the same as, or similar to, individual development project(s) that could be developed pursuant to the proposed Transit District DTPP Amendments.

The Reduced Development Alternative would not necessarily avoid the proposed Transit District DTPP Amendments' potentially significant and unavoidable effect of subsequent individual development projects with respect to emissions of criteria air pollutants (Impact AQ-2) because, like the proposed Transit District DTPP Amendments, it could lead to one or more subsequent development projects that would exceed the BAAQMD project-specific thresholds of significance for criteria air pollutants. As noted above, however, at this time, the severity of this impact cannot be accurately known, pending analysis of a specific project and application of project-specific mitigation measures, and therefore this impact is conservatively assumed to be significant and unavoidable.

The Reduced Development Alternative would address each of the City's objectives for the proposed project, but to a lesser degree than would the proposed Transit District DTPP Amendments.

#### Altered Land Use Mix Alternative

Under the Reduced Development Alternative, impacts related to the intensity of development—traffic (including traffic that might potentially interfere with emergency evacuation plans); criteria air pollutant, toxic air contaminant, and greenhouse gas emissions; noise and vibration; population or employment; and demand for public services and utilities—would generally be reduced, compared to those of the proposed Transit District DTPP Amendments.

## **Transportation**

As explained in Chapter 9, *Transportation and Circulation*, all impacts of the proposed Transit District DTPP Amendments would be less than significant and no mitigation measures would be required. The proposed Transit District DTPP Amendments would be consistent with the General Plan transportation goals; would not conflict with any of the overarching transportation goals of the existing DTPP or RWCMoves; and would increase transit ridership, which would not result in a significant adverse effect on the environment. Because it would result in an increase, compared to existing conditions, of office and residential uses in proximity to a transit station and other comparable uses, the Altered Land Use Mix Alternative would likewise be consistent with the General Plan, DTPP, and RWCMoves, and would increase transit ridership, although by a lesser amount than would the proposed Transit District. Effects of the Altered Land Use Mix Alternative would be less than significant, as with the proposed Transit District DTPP Amendments and the Reduced Development Alternative.

The proposed Transit District DTPP Amendments would result in a less-than-significant impact with respect to VMT and, because it would result in an increase, compared to existing conditions, of office and residential uses in proximity to a transit station and other comparable uses, the Altered Land Use Mix Alternative would likewise have a less-than-significant impact on VMT. This effect of the Altered Land Use Mix Alternative would be less than significant, as with the proposed Transit District DTPP Amendments and the Reduced Development Alternative.

The proposed Transit District DTPP Amendments would have less-than-significant impacts with respect to safety hazards and emergency access. Because it would develop the same land uses on the same or comparable sites—albeit at lesser intensity—as would the proposed Transit District DTPP Amendments, these impacts of the Altered Land Use Mix Alternative would be less than significant, as with the proposed Transit District DTPP Amendments and the Reduced Development Alternative.

#### Air Quality and Climate Change

As discussed in Chapter 12, *Air Quality*, and Chapter 17, *Cumulative Impacts*, and above, the analysis in this SEIR conservatively concludes that the proposed Transit District DTPP Amendments could result in a significant unavoidable impact with respect to emissions of criteria air pollutants from individual subsequent development project(s) (Impacts AQ-2 and C-AQ-1). This is because the BAAQMD thresholds of significance with respect to criteria air pollutants for revisions to a plan (consistency with current air quality plan control measures, and projected VMT or vehicle trip increase is less than or equal to projected population increase) differ from the criteria pollutants thresholds of significance for individual projects, which are based on comparison to specific quantities of daily and annual project emissions. Implementation of Mitigation Measures AQ-2a and AQ-2b would reduce the impact, but it cannot be stated with certainty that impacts from all subsequent development projects would be less than significant, even with mitigation.

Because the Altered Land Use Mix Alternative would develop just over half of the office space but more than 35 percent of the residential units, and about 15 percent less total floor area than

would the proposed Transit District DTPP Amendments, it could be slightly less likely that one or more individual projects could exceed the BAAOMD screening thresholds; however, as with the Reduced Development Alternative, it cannot be stated with certainty that, under the Altered Land Use Mix Alternative, impacts from all subsequent development projects would be less than significant, even with mitigation. Therefore, this SEIR conservatively concludes that the Altered Land Use Mix Alternative, like the proposed Transit District DTPP Amendments, would have a significant unavoidable impact with respect to emissions of criteria air pollutants from individual subsequent development project(s). The foregoing conclusion would also apply to the cumulative impact with respect to emissions of criteria air pollutants from individual subsequent development project(s) (Impact C-AQ-1): this impact would be significant and unavoidable for the Altered Land Use Mix Alternative, as it would be for the proposed Transit District DTPP Amendments and the Reduced Development Alternative.

Other air quality impacts of the proposed Transit District DTPP Amendments would be less than significant, in some cases with mitigation. The proposed Transit District DTPP Amendments would have a less-than-significant impact with respect to compliance with BAAQMD's 2017 Clean Air Plan, with which the proposed Transit District DTPP Amendments would be consistent. Because it would develop the office and residential uses in proximity to a transit station and other comparable uses in at least some of the same locations, albeit at a reduced overall intensity (considerably less office space but somewhat more residential development, with about 15 percent less total square footage), as would the proposed Transit District DTPP Amendments and the Reduced Development Alternative, the Altered Land Use Mix Alternative would likewise be consistent with the applicable clean air plan and would have a less-thansignificant impact.

Given its lesser increase in VMT than in service population, at a plan level, the proposed Transit District DTPP Amendments would have a less-than-significant impact with respect to its cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The Altered Land Use Mix Alternative, which would similarly develop office and residential uses in proximity to a transit station and other comparable uses in at least some of the same locations, albeit at a reduced overall intensity would likewise have a less-than-significant impact, similar to the Reduced Development Alternative.

The proposed Transit District DTPP Amendments would have a potentially significant impact with respect to health risks because subsequent development projects could generate substantial volumes of toxic air contaminants during construction. However, with implementation of Mitigation Measure AQ-3: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction, this impact would be reduced to a less-than-significant level. With the same land uses at a reduced overall intensity in at least some of the same locations, the Altered Land Use Mix Alternative could result in similar, albeit slightly lesser, significant health risk impact as would the proposed Transit District DTPP Amendments, because the overall square footage would be reduced by about 15 percent. However, as with the proposed Transit District DTPP Amendments and the Reduced Development Alternative this

impact, too, would be reduced to a less-than-significant level with implementation of Mitigation Measure AQ-3.

Subsequent development proposed under the Transit District DTPP Amendments would not include any major sources of odor, and therefore odor impacts would be less than significant. With the same land uses at a reduced overall intensity in at least some of the same locations, the Altered Land Use Mix Alternative, like the proposed Transit District DTPP Amendments and the Reduced Development Alternative, would likewise have less-than-significant odor impacts.

As discussed in Chapter 13, Climate Change, absent mitigation, the proposed Transit District DTPP Amendments could result in significant impacts on climate change because the City's Reach Codes allows waivers to its requirement for all-electric buildings (i.e., no natural gas). The Reach Codes also do not ensure compliance with future updates to the CALGreen Tier 2 EV requirements. Therefore, the proposed Transit District DTPP Amendments would not comply with BAAOMD's adopted GHG threshold and could conflict with the GHG reduction targets established by Executive Order S-3-05 and SB 32, the reduction measures identified in CARB's 2017 Scoping Plan, and Plan Bay Area and the Redwood City Climate Action Plan. These impacts would be reduced to a less-than-significant level with Mitigation Measure CC-1: Enforce No Natural Gas Requirement and Require Compliance with EV Requirements in CALGreen Tier 2. Inasmuch as climate change impacts are by their nature cumulative, the proposed Transit District DTPP Amendments would likewise have potentially significant cumulative climate change impacts that would be reduced to a less-than-significant level with Mitigation Measure CC-1. However, as also explained in Chapter 13, the City Council in 2020 adopted the Redwood City Reach Codes, which permit certain exceptions to prohibitions on the use of natural gas, as local policy following staff's extensive outreach, consideration of other examples, and public input. Therefore, this SEIR considers that the full implementation of Mitigation Measure CC-1 may not be feasible, and, as a result, Impacts CC-1 and CC-2 are conservatively considered to be significant and unavoidable.

With the same land uses at a reduced overall intensity and in at least some of the same locations, the Altered Land Use Mix Alternative could result in similar, albeit somewhat lesser, significant climate change impacts as the proposed Transit District DTPP Amendments and the Reduced Development Alternative. However, as with the proposed Transit District DTPP Amendments, these impacts, as well as this alternative's cumulative climate change impacts, would be reduced to a less-than-significant level with Mitigation Measure CC-1. Nevertheless, as stated in the preceding paragraph, full implementation of Mitigation Measure CC-1 may not be feasible, and, as a result, impacts of the Altered Land Use Mix Alternative with respect to climate change are likewise conservatively considered to be significant and unavoidable.

#### Noise and Vibration

As discussed in Chapter 11, *Noise and Vibration*, the proposed Transit District DTPP Amendments could potentially result in a significant impact related to temporary construction noise from subsequent individual development project(s). However, this impact would be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-1: Construction Noise Reduction. With the same land uses at a reduced overall intensity pf

development (about 15 percent less total square footage) in at least some of the same locations, the Altered Land Use Mix Alternative could result in similar, albeit somewhat lesser, construction noise impacts to those of the proposed Transit District DTPP Amendments and the Reduced Development Alternative. These impacts would likewise be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-1.

The proposed Transit District DTPP Amendments could potentially result in a significant impact related to permanent increases in building equipment noise from subsequent individual development project(s). However, this impact would be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-2: Operational Noise Performance Standard. With the same land uses at a reduced overall intensity in at least some of the same locations, the Altered Land Use Mix Alternative could result in similar, albeit somewhat lesser, building equipment noise impacts. These impacts would likewise be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-2. Like the proposed Transit District DTPP Amendments and the Reduced Development Alternative, the Altered Land Use Mix Alternative would result in less-than-significant traffic noise impacts because traffic volumes would increase by a lesser amount than would trigger an impact; this less-than-significant impact would be somewhat less substantial with the Altered Land Use Mix Alternative, compared to the Transit District DTPP Amendments, because of this alternative's lesser traffic volumes.

The proposed Transit District DTPP Amendments could potentially result in a significant impact related to groundborne vibration from construction of subsequent individual development project(s). However, this impact would be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-3: Vibration Reduction. With the same land uses at a reduced overall intensity in at least some of the same locations, the Altered Land Use Mix Alternative could result in similar, albeit somewhat lesser, construction- generated vibration impacts to those of the proposed Transit District DTPP Amendments and the Reduced Development Alternative. These impacts would likewise be mitigated to a less-than-significant level with implementation of Mitigation Measure NO-3.

Effects related to airport noise would be less than significant with the Altered Land Use Mix Alternative, as would be the case for the proposed Transit District DTPP Amendments and the Reduced Development Alternative because the 60, 65, 70, and 75 CNEL noise contours for San Carlos Airport do not extend into the City of Redwood City.

## Population and Housing

As discussed in Chapter 5, *Population and Housing*, the proposed Transit District DTPP Amendments would have less-than-significant impacts with respect to population and housing because it would not induce substantial unplanned growth and would not result in residential displacement. With the same land uses at a reduced overall intensity in at least some of the same locations, the Altered Land Use Mix Alternative, like the Reduced Development Alternative, would likewise have less-than-significant impacts with respect to population and housing.

#### Public Services and Utilities and Infrastructure

As discussed in Chapter 8, *Public Services and Recreation*, the proposed Transit District DTPP Amendments would have less-than-significant effects with respect to public services (police, fire, and emergency medical services; parks and recreational facilities; schools; and libraries). With the same land uses at a reduced overall intensity in at least some of the same locations, the Altered Land Use Mix Alternative, like the Reduced Development Alternative, would likewise have less-than-significant impacts with respect to public services.

As discussed in Chapter 10, *Utilities and Infrastructure*, the proposed Transit District DTPP Amendments would have less-than-significant effects with mitigation with respect to water supply. The proposed Transit District DTPP Amendments would have less-than-significant impacts with respect to the construction of water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities; wastewater treatment capacity; and solid waste. The proposed Transit District DTPP Amendments would also have less-than-significant impacts with respect to water quality; groundwater recharge; storm drainage; flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; and consistency with a water quality control plan or sustainable groundwater management plan. With the same land uses at a reduced overall intensity in at least some of the same locations, the Altered Land Use Mix Alternative, like the Reduced Development Alternative, would likewise have less-than-significant impacts with respect to utilities and infrastructure (including hydrology and water quality).

## Other Impacts

Effects related to the footprint of subsequent development projects would generally be the same as or similar to those of the proposed Transit District DTPP Amendments and of the Reduced Development Alternative. This is because the locations of subsequent development projects would not necessarily change, although lesser overall development would occur within the Transit District area. That is, it is possible that the existing Sequoia Station shopping center would be redeveloped under this alternative, albeit with lesser intensity of new construction and either shorter buildings or buildings with less bulk, or both. Likewise, the existing Redwood City Transit Center site could also be redeveloped if the Caltrain station and transit center were to be relocated and expanded, but again with lesser intensity of new development. Because any change in the footprint of subsequent development projects, if any, cannot be known at this time, it is assumed that excavation could potentially disturb archaeological or tribal cultural resources, potentially result in exposure of workers or the public to subsurface soil or groundwater contamination, and potentially disturb paleontological resources to the same or a similar degree as would be the case with the proposed Transit District DTPP Amendments and the Reduced Development Alternative. Likewise, building demolition could adversely affect historical resources to the same or a similar degree as with the proposed Transit District DTPP Amendments. Additionally, the Altered Land Use Mix Alternative, like the Reduced Development Alternative, could result in the same or similar disturbance of nesting birds and removal of trees that could result from construction of subsequent development projects in the Transit District area. Finally, this alternative could, like the proposed Transit District DTPP Amendments and the Reduced Development Alternative, result in the same or similar development on potentially expansive or corrosive soils. Each of these impacts—Impact CR-1,

CR-2, CR-4, HAZ-6, BIO-4, BIO-5, GEO-4, and GEO-6—would be less than significant with mitigation under the Altered Land Use Mix Alternative, as would be the case with the proposed Transit District DTPP Amendments.

As with the proposed Transit District DTPP Amendments, effects of the Altered Land Use Mix Alternative would be less than significant with respect to land use and aesthetics (including shadow), because the same office and residential uses would be developed in at least some of the same locations as with the proposed Transit District DTPP Amendments, although at lesser intensity. However, one or more subsequent individual development project(s) could be the same as, or similar to, individual development project(s) that could be developed pursuant to the proposed Transit District DTPP Amendments.

The Altered Land Use Mix Alternative would not necessarily avoid the proposed Transit District DTPP Amendments' potentially significant and unavoidable effect of subsequent individual development projects with respect to emissions of criteria air pollutants (Impact AQ-2) because, like the proposed Transit District DTPP Amendments, it could lead to one or more subsequent development projects that would exceed the BAAQMD project-specific thresholds of significance for criteria air pollutants. As noted above, however, at this time, the severity of this impact cannot be accurately known, pending analysis of a specific project and application of project-specific mitigation measures, and therefore this impact is conservatively assumed to be significant and unavoidable.

The Altered Land Use Mix Alternative would address each of the City's objectives for the proposed project, but to a lesser degree than would the proposed Transit District DTPP Amendments.

### 19.7 Environmentally Superior Alternative

The CEQA Guidelines specify that an EIR must identify the environmentally superior alternative among those discussed. If the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. (CEQA Guidelines Section 15126.6(e)(2)).

In this case, the Reduced Development Alternative is the environmentally superior alternative because it would likely reduce the severity of the project's significant air quality impacts with respect to criteria air pollutants (Impacts AQ-2 and C-AQ-1). As stated above in the analysis of the Reduced Development Alternative, "Because the Reduced Development Alternative would develop the same office and residential land uses at a lesser intensity than would the proposed Transit District DTPP Amendments, it would be less likely that one or more individual projects could exceed the BAAQMD screening thresholds." Nevertheless, as also explained above, it cannot be stated with certainty that, under this alternative, impacts from all subsequent development projects would be less than significant, even with mitigation. Conversely, the Reduced Development Alternative likely would not avoid the proposed project's significant and unavoidable impacts with respect to climate change. This is because, as explained in Chapter 13, *Climate Change*, Mitigation Measure CC-1 would impose stricter requirements on subsequent

development projects with respect to use of natural gas and compliance with electric vehicle charging requirements in the California Green Building Standards Code (CALGreen Code) than are imposed by the Redwood City Reach Codes, which permit certain exceptions to the foregoing. If, as described in Chapter 13, full implementation of Mitigation Measure CC-1 proves infeasible, then the Reduced Development Alternative would result in significant and unavoidable climate change impacts, similar to those of the proposed project.

Nevertheless, on the whole, due to the overall reduced scale of development, this alternative was found to provide a greater decrease in significant environmental impacts, compared to those of the proposed project, than the other alternatives considered. It should be noted, however, that to the extent that the demand for additional developed space that would otherwise be built pursuant to the proposed project would be met elsewhere in the Bay Area, employees in and residents of such development could potentially generate greater impacts on transportation systems (including vehicle miles traveled), air quality, and greenhouse gases than would be the case for development on the more compact and better-served-by-transit project site. This would be particularly likely for development in more outlying parts of the region where fewer services and less transit access is provided. While it would be speculative to attempt to quantify or specify the location where such development would occur and the subsequent impacts thereof, it is acknowledged that the Reduced Development Alternative would incrementally reduce local impacts in and around the project site and in Downtown Redwood City, while potentially increasing regional emissions of criteria air pollutants and greenhouse gases, as well as regional traffic congestion. This alternative could also incrementally increase impacts related to "greenfield" development on previously undeveloped locations in the Bay Area and, possibly, beyond.

### 19.8 References

Economic and Planning Systems, Inc., "Financial Review of Proposed Sequoia Station Development," September 28, 2020. Available on the internet at: https://meetings.redwoodcity.org/AgendaOnline/Documents/ViewDocument/ATTACHME NT%20C%20%E2%80%93%20FINANCIAL%20FEASIBILITY%20MEMO.pdf?meeting Id=2205&documentType=Agenda&itemId=4637&publishId=7754&isSection=false. Accessed April 14, 2022.

### **CHAPTER 20**

## **Report Preparers**

### 20.1 City of Redwood City

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# Appendix A Notice of Preparation



# Community Development & Transportation Department

1017 Middlefield Road Redwood City, CA 94063



(650) 780-7234 planning@redwoodcity.org www.redwoodcity.org

### **NOTICE OF PREPARATION**

DATE: August 27, 2021

TO: Reviewing Agencies, Interested Parties and Organizations

FROM: City of Redwood City, Lead Agency

APPLICANT: City of Redwood City

SUBJECT: Notice of Preparation of a Subsequent Environmental Impact Report regarding

the Proposed Transit District

After holding several study sessions and conducting community outreach, the City of Redwood City (City) is leading a process to amend its General Plan and Downtown Precise Plan (DTPP) to plan for shopping, jobs and housing with a new transit center for trains and buses in the heart of downtown, which is collectively and commonly referred to as the Transit District. Pursuant to the California Environmental Quality Act (CEQA), the City has determined that a program-level Subsequent Environmental Impact Report (SEIR) will be necessary to evaluate the environmental impacts of the Transit District. The City is soliciting comments from the Redwood City community, the County of San Mateo, adjacent cities, responsible agencies, agencies with jurisdiction by law, trustee agencies, and other interested parties, as to the appropriate scope and content of the SEIR.

The SEIR will constitute a substantial revision of the Redwood City Downtown Precise Plan Final Environmental Impact Report (EIR; State Clearinghouse No. 2006052027), a programmatic environmental analysis certified in 2011 and will analyze proposed amendments to the City's General Plan and DTPP that would, if adopted, create the Transit District, comprised of a subset of the area subject to the DTPP adopted in 2011 and amended in 2012, 2013, and 2016.<sup>1</sup>

Pursuant to Section 15162 of the CEQA Guidelines, a SEIR is required if the City, as the CEQA Lead Agency, determines on the basis of substantial evidence in light of the whole record that there have been substantial changes to the project and/or the circumstances under which the project is undertaken, or substantial new information has arisen, and that one or more of the foregoing will result in new or substantially more severe impacts and that thus necessitate major revisions to the prior environmental impact report and/or new mitigation measures or alternatives are now applicable.

In compliance with CEQA, the City will be the Lead Agency and will prepare the SEIR. Attached are the Transit District project description, location map, and preliminary identification of the potential environmental issues to be explored.

<sup>1</sup> The City is also considering broader General Plan and DTPP amendments. The Transit District is not dependent on those DTPP amendments. A separate SEIR is being prepared for those amendments. The Transit District is independently justified and serves the distinct purpose of creating and planning for the Transit District specifically.



The City is requesting review and consideration of this Notice of Preparation (NOP) and comments and guidance on the scope and content of the program-level SEIR from the Redwood City community, responsible and trustee agencies, interested public agencies, organizations, and the general public (CEQA Guidelines Section 15082). If your agency is a responsible agency as defined by Section 15381 of the CEQA Guidelines, your agency may use the environmental documents prepared by the City when considering permits or approvals for action regarding the Transit District. Due to the time limits mandated by state law, your response must be sent at the earliest possible date but *not later than 30 calendar days* after receipt of this NOP. The 30-day comment period for this NOP is **August 27 to September 27, 2021**. The final date for responses to the NOP to be received by the City of Redwood City is **September 27, 2021**, by **5:00 PM**.

Comments and responses to this NOP must be in writing and submitted by the close of business on the last day of the comment period. Please provide a contact name, phone number and email address with your comments. All comments must be sent by mail or email to:

Lindy Chan, Principal Planner
City of Redwood City

1017 Middlefield Road, Redwood City, CA 94063
(650) 780-7237 | <a href="mailto:lchan@redwoodcity.org">lchan@redwoodcity.org</a>

Pursuant to CEQA Guidelines Section 15082(c) (Notice of Preparation and Determination of Scope of EIR) and Section 15083 (Early Public Consultation), the Redwood City Planning Commission will also conduct a scoping session for the purpose of soliciting views of the Redwood City community, the County of San Mateo, adjacent cities, responsible agencies, agencies with jurisdiction by law, trustee agencies, and other interested parties, as to the appropriate scope and content of the SEIR.

The scoping session will be conducted by the Planning Commission at its September 7, 2021, meeting, which begins at 7:00 PM via teleconference, which can be accessed by visiting www.redwoodcity.org/PC.

Ludy Chan	8/27/2021
Lindy Chan, Principal Planner	Date
City of Redwood City	



### **Project Title and Applicant**

Transit District by the City of Redwood City (City)

### **Project Location:**

See **Figure 1, Project Site Location**, at the end of this Notice of Preparation (NOP). The Transit District is generally located between Arguello Street and the Caltrain tracks to the east, Jefferson Avenue to the south; El Camino Real, California Street, and Perry Street to the west; and Brewster Avenue to the north in Redwood City, San Mateo County, California.

### **Project Description:**

### **Project Background**

On November 4, 2019, the City Council directed staff to create a Transit District in the area adjacent to the existing bus and train stations. On January 27, 2020, the City Council authorized a Memorandum of Understanding (MOU) to work with Caltrain and SamTrans and provided direction for community input and visioning to support transit-oriented development. On February 24, 2020, the City Council considered the Sequoia Station development project, which is located within the proposed Transit District. The Council directed staff to move forward with a City-led process, beginning with community engagement to consider priorities for land use to support a transit rich district. The Sequoia Station project would need to comply with the City's vision for the Transit District.

### **Current Project**

The Transit District consists of amendments to the City's General Plan and Downtown Precise Plan (DTPP) that would create a new district, the Transit District, within the DTPP area focused on transit-oriented development with approximately 17.5 acres of land located to the west of the Caltrain right-of-way. The district would include the Caltrain right of way, city streets, and the following three areas:

- <u>Perry Parcel</u>. Approximately 2.5 acres owned by the Peninsula Corridor Joint Powers Board (JPB) (Caltrain)
- <u>Transit Center</u>. Approximately 3.0 acres owned by the JPB, Tifft, and Terry L Family Trust (A-1 Party Rental store location)
- <u>Sequoia Station Shopping Center</u>. Approximately 12 acres owned by REG8 Sequoia Station (Regency Centers), Safeway, Inc., and the San Mateo County Transit District (SamTrans).

The proposed General Plan and DTPP amendments would create a vision for the Transit District that would allow for redevelopment of the existing Transit Center and Sequoia Station properties, reserve space for a potential future four-track Caltrain station north of the existing station, as well as circulation improvements to ensure adequate vehicular, bicycle and pedestrian connections. The Transit District is envisioned as a new hub of office, residential and retail. To that end, the Transit District would identify office and residential development caps specifically for the Transit District. These development caps, which would support transit oriented development, would represent an increase beyond what is currently permitted under the DTPP. These development caps would represent all new development potential.



Currently, there are no existing office or residential uses in the Transit District. Existing uses within the Transit District include approximately 170,000 sq. ft. of existing retail space. No additional retail square footage is proposed to support transit-oriented development and no Transit District specific development cap on retail is proposed. The DTPP would continue to govern the Transit District with respect to retail development potential and other permitted uses (e.g., hotels, civic uses). Table 1 depicts the proposed increases to office and residential development specific to the Transit District.

Various elements of the Transit District have been the subject of numerous and on-going planning studies, and the City has been conducting notable outreach with the public in conjunction with interested stakeholders. Any relocation and/or expansion of the Caltrain station, proposed grade separations between the rail tracks and the street, or other specific development proposals (e.g., Sequoia Station) would be subject to separate project-level CEQA review.

The City is aware of the potential reconfiguration of California Street and Winklebleck Street to provide better roadway connectivity for all roadway users (i.e., vehicles, bicyclists, pedestrians). This reconfiguration would generally be consistent with the circulation network that was included in the DTPP and evaluated in the Final EIR for the DTPP, certified in 2011. As a result, the boundary of the Transit District may be revised to align with the reconfigured streets. This revised boundary would not result in a substantial change to the size of the Transit District, compared to the area described herein.

Table 1
PROPOSED LAND USE CAPS IN DOWNTOWN PRECISE PLAN FOR THE TRANSIT DISTRICT

Land Use	Development Cap (Net New)	
Office	1,630,000 square feet	
Residential	1,100 units	

SOURCE: City of Redwood City, 2021

In addition to creating the Transit District boundaries and identifying Transit District specific development caps for office and residential, the proposed Transit District includes adjustments to circulation and other development standards in the DTPP to support transit-oriented development.

#### **SEIR Scope:**

The City has determined, pursuant to CEQA, that the Transit District will require the preparation of a Subsequent EIR (SEIR) to substantially revise the Redwood City Downtown Precise Plan Final Environmental Impact Report (DTPP Final EIR), a programmatic environmental analysis certified in 2011. A SEIR is warranted because there is reasonable potential that the Transit District may result in new or substantially more severe significant environmental effects than those identified in the certified DTPP Final EIR for one or more of the following CEQA topics:

- Land Use and Planning
- Population and Housing

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- Aesthetics and Shadows
- Cultural and Historic Resources (including Paleontological and Tribal Cultural Resources)
- Public Services (including Recreation)
- Transportation
- Utilities and Infrastructure (including Hydrology and Water Quality)
- Noise and Vibration
- Air Quality
- Climate Change (Greenhouse Gas Emissions, Energy and Sea Level Rise)
- Hazards and Hazardous Materials
- Biological Resources
- Geology and Soils

#### The SEIR will also address:

<u>Cumulative Impacts</u>. Consistent with the format for the DTPP Final EIR, a separate cumulative impacts section will be provided in the SEIR. The cumulative analysis will assess where cumulative impacts are significant compared to baseline conditions, and when the Transit District's incremental effect is cumulatively considerable. The cumulative impact analysis in the SEIR will use the same approach as the DTPP Final EIR cumulative impact analysis, which relied on a combined projections/list-based approach. The cumulative impacts section will consider the broader General Plan and DTPP amendments that constitute a separate project for which a separate SEIR is being prepared. Additionally, the City is currently updating its General Plan Housing Element, and the cumulative analysis will consider those updates.

<u>Alternatives</u>. Pursuant to CEQA Guidelines Section 15126.6, the SEIR will also identify and conduct a comparative evaluation of a reasonable range of alternatives to the Transit District. The alternatives assessment in the SEIR will tier from the alternatives analysis in the DTPP Final EIR, and will consider alternatives to the plan amendments proposed to accommodate the Transit District, including the CEQA-required no-project and environmentally superior alternatives.

### Further, CEQA Guidelines section 15165 provides:

"Where individual projects are...to be undertaken and where the total undertaking comprises a project with significant environmental effect, the lead agency shall prepare a single program EIR for the ultimate project."

As described above, the Transit District includes establishing the Transit District boundaries, establishing office and residential maximum allowable development caps specific to the Transit District, and modifying circulation to enhance access to the Transit Center and modifying other development standards for the Transit District. Therefore, the City has determined that a program-level SEIR would be appropriate. Like the programmatic DTPP Final EIR certified in 2011, this program SEIR will analyze General Plan and DTPP

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amendments that would, if adopted, govern future development in the Transit District. Future proposals, such as the relocation and/or expansion of the Caltrain station and proposed grade separations between the rail tracks and the street, would be subject to separate project-level CEQA review. Other specific development proposals (e.g., Sequoia Station development project) would be examined in light of the program SEIR to determine whether additional environmental review is required. The City anticipates using a checklist or similar device to determine whether the environmental effects of future development proposals are within the scope of the program EIR, as described in CEQA Guidelines Section 15168(c)(2), or further review is required.

### **SEIR Purpose**

The purpose of an Environmental Impact Report (subsequent or otherwise) is to inform decision-makers and the general public of the environmental impacts of a proposed project that an agency (in this case, the City of Redwood City) may implement or approve. The SEIR process is intended to: (1) provide information sufficient to evaluate a project and its potential for significant impacts on the environment; (2) examine methods (e.g., project-specific mitigations, uniformly applied development regulations) for avoiding or reducing significant impacts; and (3) consider alternatives to the proposed project.

In accordance with CEQA, the SEIR will include the following:

- A summary of the project, its potential significant environmental impacts, and mitigations required to avoid or reduce those significant impacts;
- A project description, with a focus on changes in the approved DTTP;
- A description of the existing environmental setting, potential environmental impacts, and mitigations
  for the project, with a focus on changes in impacts compared to those identified in the certified DTPP
  Final EIR;
- Alternatives to the proposed project, including an explanation of alternatives from the DTPP Final EIR that are no longer under consideration; and
- Other environmental consequences of the project, including
  - (1) growth-inducing effects
  - (2) significant unavoidable impacts
  - (3) irreversible environmental changes
  - (4) cumulative impacts, and
  - (5) effects found not to be significant.

### **Required Approvals**

City of Redwood City Discretionary Approvals. Implementation of the Transit District would require the following discretionary approvals by the City of Redwood City:

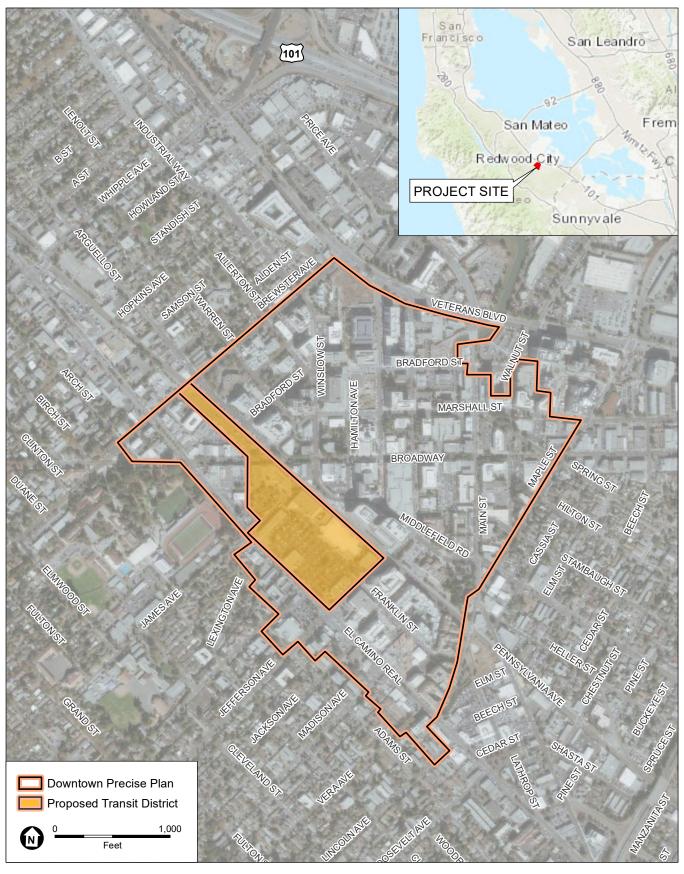
Certification of the Final SEIR

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- Adoption of a Mitigation Monitoring or Reporting Program
- Adoption of General Plan amendments, including revisions to the Downtown maximum allowable development caps for office and residential development therein, to implement the Transit District
- Adoption of DTPP amendments, including, but not necessarily limited to, the following:
  - Amendment to establish the Transit District as an overlay within the DTPP, with supplemental controls in addition to those applicable elsewhere in the DTPP
  - Revisions to the DTTP New Streets (Circulation) Regulations and associated revisions to DTTP maps
  - Revisions to the DTPP maps to accommodate potential future relocation of the Caltrain station to the north side of Broadway and expansion of the station to four tracks as part of Caltrain's 2040 Service Vision plan (the station relocation would be a separate project).
  - Revisions to the DTPP to include the addition of utility and infrastructure requirements in the Transit District
  - Revisions to the DTPP Public Frontages and Use Regulations
  - Conversion of certain design-related Development Regulations from mandatory Standards to advisory Guidelines, from which the City, at its discretion, may grant exceptions; these changes could include, but not necessarily be limited to, build-to-corner requirements and stepdown height requirements
  - Potential addition to the DTTP's list of permitted architectural styles to include Contemporary design
  - Amendment of the maximum allowable development caps for office and residential development to create caps specific to the Transit District
- Potential approval of an associated Zoning Map amendment to reflect the amended DTPP

Other Government Agency Approvals. Amendment of the General Plan and DTPP to implement the Transit District is not anticipated to require review and/or approval from other jurisdictional agencies; however, related circulation improvements may require such approvals.



SOURCE: ESRI Imagery; City of Redwood City, 2021

Transit District DTPP Amendments SEIR





# Appendix B **Transportation Analysis**



# Redwood City Transit District Amendments Draft Transportation Analysis

Prepared for:
ESA and
The City of Redwood City

April 2022

SJ21-2103.01

FEHR & PEERS

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# 1. Introduction

This report presents the results of a transportation analysis (TA) conducted for the proposed Transit District Amendments in downtown Redwood City, California. The purpose of this TA is to identify potentially significant adverse impacts of the proposed project on the surrounding transportation system and to recommend mitigation measures, if needed. This report was prepared for California Environmental Quality Act (CEQA) clearance purposes and to meet requirements from the City of Redwood City's *Transportation Analysis Manual* (TAM) (July 2020), which adopted vehicle miles traveled (VMT) as the primary metric for transportation studies under CEQA.

According to CEQA a project could have a significant transportation impact on the environment if it meets any of the following criteria:

- 1. Conflicts with a plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths
- 2. Conflicts or is inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1); (i.e., VMT impact assessment consistent with the City's TAM)
- 3. Substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- 4. Results in inadequate emergency access

A local transportation analysis (LTA) report will be prepared as a standalone document to provide additional information regarding vehicle, transit, bicycle, and pedestrian network operations and constraints, as well as site access and circulation consistent with the City's TAM. The separate LTA is prepared for General Plan and CMP consistency purposes and is not prepared for CEQA purposes.

This introduction chapter discusses the project description, analysis scenarios, and report organization.

### **Project Description**

The proposed Transit District Amendments ("Project") includes the amendment of the Redwood City General Plan and Downtown Precise Plan (DTPP) to accommodate growth in jobs and housing with a relocated Transit Center for trains and buses in downtown Redwood City. The proposed Transit District is a sub-area within the DTPP, generally located between Brewster Avenue to the north, the Caltrain tracks to the east, Jefferson Avenue to the south, and El Camino Real, California Street, and Perry Street to the west as shown in **Figure 1**.

The Transit District area comprises approximately 16.6 acres and includes approximately 2,200 linear feet along the Caltrain tracks, which form the eastern Transit District boundary.



The Transit District area would include the Caltrain right-of-way, city streets, and the following three areas:

- Perry Parcel (approximately 2.5 acres);
- Transit Center (approximately 2.1 acres); and
- Sequoia Station Shopping Center (approximately 12 acres).

### **Proposed Land Uses**

As shown in **Table 1**, the proposed Transit District Amendments would establish development potential for office and residential uses for this new sub-area of the DTPP. The development potential for office would be a maximum allowable development cap, while the residential component represents an increase in development potential. The Transit District Amendments office cap and residential development potential are distinct from the office caps and residential development potential that apply elsewhere in the DTPP. There are currently no office or residential uses on the parcels that comprise the Transit District; therefore, the proposed new office and residential development would represent all new development potential.

**Table 1: Proposed Land Use Capacities Studied for Transit District Amendments** 

Land Use	Increase in Development (Net New)
Office	1,630,000 square feet
Residential	1,100 units

Source: City of Redwood City, November 2021.

There are currently retail uses in the Transit District that are conditionally permitted, but no change is proposed to retail development potential. Replacement of existing retail space with new retail uses would not necessitate an increase in the retail development cap; and because no change in the retail cap is proposed it is not analyzed as part of this report.

### **Proposed Transportation Changes**

This section discusses the Transit District Amendments proposed transportation changes to the General Plan and DTPP, which are also illustrated on **Figure 1**.

### Roadway Network

The roadway network is the defined in the *Public Frontage Regulation* section of the DTPP, including street typology, as well as, the *New Streets* section of the DTPP, that ensures new streets are created where they are needed. This section describes the changes to the *New Streets* section of the DTPP that would be implemented as part of the Transit District Amendments.



The following previously planned roadways would be eliminated from the City's General Plan and DTPP:

- Lane from Broadway to Jefferson Avenue, between the Caltrain right-of-way and the Transit
  Center and the Sequoia Station Shopping Center site to allow for widening of the Caltrain
  right-of-way in connection with potential future relocation and expansion of the Transit
  Center
- Harrison Avenue, a designated City Street, between Franklin Street and the Caltrain rightof-way

In addition, the following streets would be reclassified/converted City's General Plan and DTPP:

- Hamilton Street between El Camino Real and Franklin would be reclassified from a "Downtown Core Street" to a "City Street"
- Hamilton Street between Franklin Street and Caltrain right-of-way would be converted from a "Downtown Street" to a public open space that allows pedestrian and bicycle travel only, with non-emergency motor vehicles prohibited
- Harrison Street between El Camino Real and Franklin Street would be converted from a "Required New Street" to a "Recommended New Street."

The streets proposed for eliminations and/or reclassifications were proposed in the DTPP as New Streets but to date have not been constructed. These proposed amendments factor in changed conditions, such as anticipated relocation of the Transit Center to the north.

Pedestrian, Bicycle, and Transit Improvements

The Transit District Amendments also proposes pedestrian, bicycle, and transit enhancements to increase safety and to improve connectivity to and from the relocated Transit Center, including an expanded Caltrain Station, and the greater Downtown and surrounding neighborhoods. Among these would be a requirement for protected bike lanes and potential improvements to bus loading along El Camino Real. These pedestrian, bicycle, and transit improvements would generally be consistent with the circulation plan set forth in the DTPP.







### **Analysis Scenarios**

The City/County Association of Governments of San Mateo County Travel Demand Model, also known as the "C/CAG-VTA model," was used to calculate VMT. Two VMT analyses were performed in compliance with CEQA Guidelines: project-generated VMT and project-effect on VMT.

The first analysis method, project-generated VMT, considers all vehicle miles of travel generated by the Project and does not truncate trips within the specified boundary or region, which is San Mateo County. The second method, boundary VMT, considers all vehicle miles traveled within Redwood City and is used to assess the Project's effect on VMT. Both methods are further explained in **Chapter 2** and were analyzed for the following analysis scenarios:

- Scenario 1:
- Existing Conditions Countywide daily VMT per service population for the base year (2015) from the C/CAG-VTA model. The year 2015 model was last adjusted in 2020 by C/CAG to include modifications to centroid connectors and travel outside of the model area. For this Project, the model land uses were updated for the entire DTPP area to reflect current (year 2021) development conditions. All other land uses were assumed to be consistent with the current C/CAG-VTA model assumptions.
- Scenario 2:
- Cumulative (2040) Conditions Countywide daily VMT per service population and Redwood City boundary daily VMT per service population from the future year (2040) C/CAG-VTA model. The cumulative land use information within Redwood City was updated to include preliminary assumptions for the City's recent Regional Housing Needs Assessment (RHNA) allocation, as well as growth associated with the Plan-wide Amendments to the General Plan and DTPP.
- Scenario 3:
- Cumulative (2040) with Project Conditions Countywide daily VMT per service population and Redwood City boundary daily VMT per service population from the C/CAG-VTA future year (2040) model with the addition of the Transit District Amendments Project.

### **Report Organization**

The remainder of this report is divided into the following chapters:

- Chapter 2 Analysis Methods and Thresholds of Significance presents the CEQA analysis methods and thresholds of significance for transit, bicycle, and pedestrian facilities.
- Chapter 3 Existing Conditions describes the transportation system near the Transit District
  including the surrounding roadway network, and existing bicycle, pedestrian, and
  transit facilities.



- Chapter 4 CEQA VMT Analysis presents the CEQA VMT analysis for the Project including the initial VMT screening, model assumptions and adjustments, and the residential and office VMT results.
- Chapter 5 Additional CEQA Impact Analysis presents the CEQA impact analysis for the Project including verification that that Project does not conflict with existing programs, plans, ordinances, or policies, increase hazards, or result in inadequate emergency access.



# 2. Analysis Methods and Thresholds of Significance

This chapter describes the analysis methods used to evaluate potential transportation impacts for vehicle, bicycle, pedestrian, and transit facilities and access.

### Senate Bill (SB) 743

The operations of transportation facilities have traditionally been described with the term *level of service* (LOS). LOS describes traffic flow from the driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. SB 743 was adopted in 2013 and directed the State of California's Office of Planning and Research (OPR) to look at different metrics for identifying transportation impacts and make corresponding revisions to the CEQA Guidelines. Following several years of draft proposals and related public comments, OPR settled upon daily VMT as the preferred metric for assessing passenger vehicle related impacts. OPR issued revised CEQA Guidelines in December 2018 along with a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) to assist practitioners in implementing the CEQA Guidelines to use VMT as the new metric. Under the revised Guidelines, vehicle LOS will no longer be used as a determinant of significant environmental impacts. The City has implemented SB 743 in their TAM, which provides specific guidance for VMT analysis and determination of significant impacts.<sup>1</sup>

### Thresholds of Significance

The criteria for evaluating the significance of a project's environmental impacts are based on the State CEQA Guidelines as implemented by the City's TAM. According to the current version of Appendix G of the CEQA Guidelines, transportation impacts are considered significant if a proposed project meets any of the following criteria:

- 1. Conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities
- 2. Conflicts or is inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (i.e., VMT impact assessment consistent with the City's TAM);
- 3. Substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- 4. Results in inadequate emergency access

<sup>&</sup>lt;sup>1</sup> While LOS is no longer used to determine CEQA impacts, Redwood City's as well as C/CAG still require LOS analysis for select intersection under their development approval processes. The intersection analysis for this project was conducted as part of the standalone LTA.



The impact assessment for each of the CEQA criteria is discussed in this report. Specifically, threshold 2, which relates to the VMT impact assessment, is discussed in **Chapter 4** (CEQA VMT Analysis), and thresholds 1, 3, and 4 are discussed in **Chapter 5** (Additional CEQA Transportation Analysis). The City's specific VMT impact criteria, as outlined in the TAM, is summarized below and used to evaluate program-level impacts of the Project.

### **CEQA Analysis Screening Criteria**

In the first step, the TAM applies specific screening criteria for projects presumed to have a less-than-significant impact, eliminating the need to conduct a VMT analysis for CEQA transportation purposes. The TAM includes a detailed screening criteria related to affordable housing, small projects, local serving public facilities, neighborhood serving retail, and child care projects, as well as projects that are in a Transit Priority Area (TPA). Each component of a mixed-use project is considered separately and each of the project's individual land uses is compared to the screening criteria. Since the Transit District Amendments exceeds the 500,000 square feet size limit for projects within a Transit Priority Area as specified in the TAM, the Project is not eligible for VMT screening.

### **Project-Generated VMT Impact Criteria**

A visual representation of project-generated VMT is provided in **Figure 2**. Per the City's TAM, a significant project-generated VMT impact would occur if the project meets any of the following criteria:

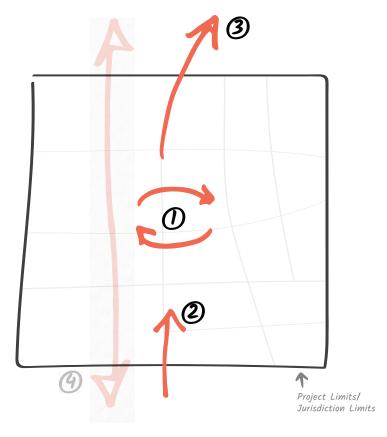
- Residential land uses: The daily project-generated VMT per service population for the
  residential portion of the Project is above the countywide home-based VMT per capita
  threshold of 10.5 miles, which is 15 percent below the countywide home-based VMT of 12.3
  miles.
- Office land uses: The daily project-generated VMT per service population for the office portion of the Project is above the countywide home-based work VMT per employee threshold of 15.0 miles which is 15 percent below the countywide home-based VMT of 17.6 miles.
- Retail land uses: The daily project-generated VMT per service population for the retail, entertainment, and childcare portions of the Project is above the countywide total VMT per service population threshold of 32.0 miles.

For mixed-use development, each individual land use component must be evaluated independently, taking credit for internal capture, and applying the significance criteria for each land use type.

The VMT estimates for the Project, which only include residential and office land uses, are compared to this threshold to identify significant Project impacts. Project-generated VMT below this local threshold indicates the Project is not likely to rely on vehicle travel as much as other developments in the City.



### Project Generated VMT

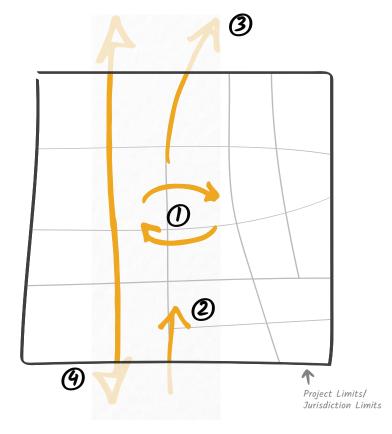


- (1) 2x Internal to Internal (2xII) VMT (3) Internal to External (IX) VMT
- 2 External to Internal (XI) VMT
- (4) External to External (XX) VMT

Notes: External to External (XX) trips (shown as transparent arrow 4) are excluded from this VMT metric. Adjustments to project generated VMT made to include the full length of trips that leave the jurisdiction to capture inter-jurisdiction travel.

# Project Effect on VMT

(Boundary VMT)



- (1) Internal to Internal VMT
- (3) Internal to External (IX) VMT
- External to Internal (XI) VMT
- (4) External to External (XX) VMT

Notes: Boundary VMT is all the VMT on the streets within the Project Limits / Jurisdiction Limits. Transparent portions of arrows 2, 3 and 4 are not included in the VMT metric.



### **Project Effects on VMT Impact Criteria**

A visual representation of a project's effects on VMT is provided in **Figure 2**. As outlined in the TAM, significant project effects on VMT impact would occur if the City's per capita VMT under cumulative conditions (Year 204) applying the boundary method would increase with the project and compared without the project scenario.

### **Pedestrian and Bicycle Facilities**

The Project would cause a significant impact to bicycle and/or pedestrian facilities if an element of the Project:

• Conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities

The 2018 RWCmoves plan and the 2021 San Mateo County Comprehensive Bicycle and Pedestrian Plan describe related policies and programs necessary to ensure pedestrian and bicycle facilities are safe and effective for City residents. Using these plans as a guide, significant impacts to these facilities would occur if the Project, or an element of the Project, meets any of the following criteria:

- Creates a hazardous condition that does not currently exist for pedestrians and bicyclists, or otherwise interferes with pedestrian accessibility to the site and adjoining areas; or
- Conflicts with an existing or planned pedestrian or bicycle facility; or
- Conflicts with policies related to bicycle and pedestrian activity adopted by the City of Redwood City, San Mateo County, or Caltrans for their respective facilities in the study area.

### **Safety and Hazards**

The Project would cause a significant impact related to safety and hazards if the Project would increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. Applicable design standards for this project include the City's *Downtown Precise Plan* (June 2018), *RWCmoves* (July 2018) street typologies, and the *Street Design Criteria* included in the City's 2019 Engineering Standards, all of which include design specifications to ensure safe and efficient travel of vehicles, bicycles, pedestrians, and transit vehicles. Using these plans as a guide, significant impacts related to safety and hazards would occur if the Project, or an element of the Project, conflicts with policies related to street design adopted by Redwood City.

### **Emergency Access**

An emergency access impact is considered significant if implementation of the Project would provide inadequate access to accommodate emergency vehicles. Specifically, assessment should determine if a project has the potential to impact emergency vehicle access by creating conditions that would



substantially affect the ability of drivers to yield the right-of-way to emergency vehicles or preclude the ability of emergency vehicles to access streets within the Project area.



# 3. Existing Conditions

This chapter describes existing transportation conditions including the nearby land uses that affect travel demand and the transportation facilities—the roadway network, transit service, and pedestrian and bicycle facilities—in the vicinity. It also describes existing operations of the study intersections and freeway segments with the level of service calculations results. Future planned facilities that will enhance the existing system are also described.

### **Existing Roadway Network**

The following roadways provide access to the Transit District area: El Camino Real (SR 82), Woodside Road (SR 84), Alameda de Las Pulgas, Arguello Street, Bradford Street, Brewster Avenue, Broadway, Hamilton Street, Hudson Street, Jefferson Avenue, Main Street, Maple Street, Marshall Street, Veterans Boulevard, and Whipple Avenue. Descriptions of these roadways are presented below. For the sake of simplicity, El Camino Real (SR 82) is considered a north-south roadway.

El Camino Real (SR 82) is a four- to six-lane, north-south major arterial and serves as the western boundary for the Project El Camino Real extends from Santa Clara County through San Mateo County. El Camino Real provides direct access to the Project.

Woodside Road (SR 84) is a four-lane, east-west major arterial located toward the southern edge of the City. Woodside Road extends from Redwood City through Woodside. Woodside Road provides regional access to the Project, including access to I-280 and US 101.

Alameda de Las Pulgas is a two-lane, north-south connector street between San Carlos and Woodside and is lined with primarily residential uses. Alameda de las Pulgas provides regional access to the Project.

Arguello Street is a two-lane, north-south neighborhood connector boulevard that provides access between Whipple Avenue and Broadway and primarily serves commercial and residential uses. Arguello Street partially borders the Project to the east.

*Bradford Street* is a two-lane, east-west connector street that stretches from Arguello Street to Walnut Street, with a break at Winslow Street, and provides access to the Transit District and is lined with a mix of residential and commercial uses.

*Brewster Avenue* is a two- to four-lane, east-west local road bicycle boulevard that stretches from Main Street to Upland Road. Brewster Avenue provides direct access to the northern end of the Project and is a mix of retail, office, school, and housing land uses.

*Broadway* is a two-lane, east-west transit street between Elwood Street and Fifth Avenue. Broadway serves as one of the primary roadways connecting the downtown area with surrounding roadways in Redwood



City. Broadway provides direct access to the Transit District. Both sides of Broadway around the railroad tracks are lined with mix of restaurants, office, and retail uses.

Hamilton Street is a two-lane, north-south neighborhood connector street that extends between Winslow Street and Marshall Street and is lined with a mix of restaurants, commercials uses, and offices.

*Hudson Street* is a two-lane north-south connector street that extends from Whipple Avenue to Woodside Road and is lined with primarily residential uses.

Jefferson Avenue is a two- to four-lane, east-west connector street that extends from Cañada Road to Veterans Boulevard. Jefferson Avenue serves regional and local trips throughout Redwood City and provides regional access to the Project. East of El Camino Real, Jefferson Avenue has primarily commercial land uses, whereas west of El Camino Real, the street is primarily residential.

Main Street is a two-lane, east-west neighborhood connector street that extends between Convention Way and El Camino Real. Main Street serves as one of the primary roadways connecting the downtown area with surrounding roadways in Redwood City. Railroad tracks divide the east and west sides, and the street is lined with a mix of restaurants, housing, office, and some small businesses.

Maple Street is a two-lane, east-west neighborhood connector street that provides access between El Camino Real and the industrial and public service uses northeast of US 101 including access to the bay. Maple Street is south of the Transit District and is lined with a mix of housing, restaurants, office, and local serving uses.

Marshall Street is a two-lane, north-south neighborhood connector street that extends between Arguello Street and Chestnut Street. Marshall Street provides direct access to the Project and is lined with a mix of housing, offices, and commercial uses.

Veterans Boulevard is a six-lane, east-west neighborhood connector boulevard that extends between the US 101 southbound off-ramp and Woodside Road (SR 84) and provides regional as well as local access to the Bay Area and the Transit District, and is lined with mix of housing, office, and commercial uses.

Whipple Avenue a four-lane, east-west connector street that extends from East Bayshore Road to Upland Road. Whipple Avenue connects various parts of Redwood City with US 101 including access to the greater Bay Area, and is lined with a mix of housing, offices, retail, restaurants, and local serving uses.

### **Transit Service**

This section summarizes local and regional transit connectivity in the Transit District, including bus and commuter rail. **Figure 3** illustrates the existing transit facilities and routes in the Transit District.

#### SamTrans Bus Service

Bus service is provided by the San Mateo County Transit District (SamTrans). Eight SamTrans routes (95 [school days only], 270, 275, 278, 295, 296, 397, 398) and the El Camino Real (ECR) bus route run along



El Camino Real and stops north of the Jefferson Avenue intersection, Winklebleck Street, Brewster Avenue, and at the Transit Center at Sequoia Station. The Transit Center directly serves the Transit District and the adjacent downtown area. El Camino Real, with SamTrans' ECR service, qualifies as a high-quality transit corridor since the frequency of service is 15 minutes or less during the morning and evening peak commute periods. **Table 2** summarizes the transit service near the Transit District.

### **Commuter Rail Service**

*Caltrain* is a commuter heavy rail service that runs from downtown San Francisco (4<sup>th</sup> and King Streets) to downtown San José (Diridon Station), with a limited number of commute period trains running farther south to Gilroy. The Redwood City Transit Center adjacent to Sequoia Station, includes transit services from Caltrain and multiple SamTrans bus and local commuter shuttle routes and is considered a major transit stop. The Transit Center is included in the Project.

During commute periods, Caltrain offers express service ("Baby Bullet") between downtown San José and San Francisco, which allows the trip between San Francisco and San José to be made in one hour. This service stops at a limited number of stations, including Redwood City. Caltrain also offers local service, which serves all stations and limited-stop service, which serves more stations than Baby Bullet but not all stations. All trains stop at the Redwood City Transit Center. In 2015, which is the base year of the travel demand model used for the VMT analysis discussed in more detail in **Chapter 4**, the average midweekday passenger boardings at Redwood City Transit Center was around 3,230 with a system-wide ridership of just over 58,000. In 2019, the most recent pre-COVID information available, the average midweekday passenger boardings was around 4,220 with a system-wide ridership of approximately 64,000.

The system-wide ridership in 2020 was roughly 25,000, and there was no specific ridership information for Redwood City Transit Center in 2020. The decrease in system-wide ridership in 2020 is due to COVID-19 and the corresponding stay-at-home orders.



**Table 2: Existing Transit Service<sup>1</sup>** 

	From	То	Weekday		Weekends	
Route			Operating Hours	Peak Headway (minutes)	Operating Hours	Peak Headway (minutes)
SamTrans	Local Bus Routes					'
95	Redwood City Transit Center	Alameda/Ralston	7:45 – 8:00 am, 1:20 – 3:40 pm	-One morning run -Two afternoon runs	N/A	
270	Redwood City Transit Center	Redwood City Transit Center	6:30 am – 7:10 pm	60	7:30 am – 7:10 pm	60
275	Woodside/Fernside	Redwood City Transit Center	7:30 – 7:45 am, 2:20 - 3:40pm	-One morning run -Two afternoon runs	N/A	
278	Redwood City Transit Center	Cañada College	6:20 am – 8:20 pm	60	7:20 am – 7:20 pm	60
295	San Mateo Caltrain	Redwood City Transit Center	6:20 am – 6:45 pm	120	N/A	
296	Redwood City Transit Center	Palo Alto Transit Center	3:40 am – 2:10 am	20	3:45 am – 2:20 am	30
SamTrans	Express Bus Routes	•				
ECR	Palo Alto Transit Center	Daly City BART	24 hours	15	24 hours	15
397	San Francisco	Palo Alto Transit Center	12:45 am – 6:30 am	60	12:45 am – 6:30 am	60
398	San Francisco	Redwood City Transit Center	5:10 am – 11:30 pm	60	5:50 am – 11:20 pm	60
Caltrain						
All routes	Gilroy/San Jose	San Francisco	4:20 am – 1:45am	10	7:10 am – 1:50am	60

Source: SamTrans, November 2021.







Figure 3

### **Existing Bicycle Facilities**

Bikeway planning and design in California typically relies upon guidelines and design standards established by California Department of Transportation (Caltrans) in the *Highway Design Manual* (Chapter 1000: Bikeway Planning and Design). The City of Redwood City uses these guidelines to define four general bikeway facility classifications, as outlined below.

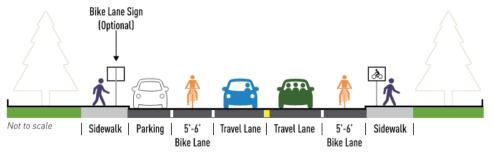
Class I Paths (Shared-Use Paths) provide a completely separate right-of-way and are
designated only for bicycle and pedestrian use. Shared-use paths serve corridors where there
is enough right-of-way, or space, to allow them to be constructed or where on-street facilities
are not appropriate due to vehicular volumes, speeds, or other roadway characteristics. There
are currently no Class I paths serving the Project.



Class II Bikeways (Bicycle Lanes) are dedicated lanes for bicyclists, generally adjacent to the
outer vehicle travel lanes. These lanes have special lane markings, pavement legends and
signage. Bicycle lanes are typically five to six feet wide. Adjacent vehicle parking and
vehicle/pedestrian cross-traffic are permitted. There are segments of Class II bike lanes along
Whipple Avenue, Brewster Avenue, Marshall Street, Winslow Street, Arguello Street, Veterans
Boulevard, Broadway, Main Street, Alameda de las Pulgas, Hudson Street, and Maple Street
between El Camino Real and the Caltrain railroad tracks.

# **BICYCLE LANE (CLASS II)**

On-street striped lane for one-way bike travel

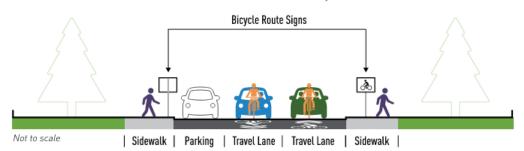




Class III Bikeways (Bicycle Boulevards/Bicycle Routes) are designated by signs or pavement
markings for shared use with pedestrians or motor vehicles but have no separated bike rightof-way or lane striping. Bike routes serve either to a) provide a connection to other bicycle
facilities where dedicated facilities are infeasible, or b) designate preferred routes through
high-demand corridors. There are currently Class III bikeways along segments of Broadway,
Brewster Avenue, Jefferson Avenue and Whipple Avenue that provide access to the Project.
Class III bikeways that will provide additional bicycle access to the Transit District as shown in
RWCmoves are proposed along Arguello Street.

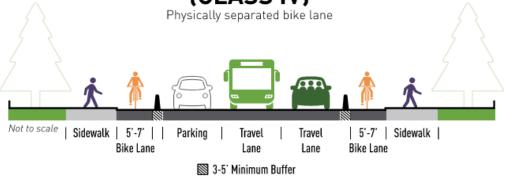
# **BICYCLE ROUTE (CLASS III)**

Shared on-street facility



Class IV Bikeways (Separated Bikeways) provide a right-of-way designated exclusively for
bicycle travel within a street and are protected from other vehicle traffic by physical barriers,
including, but not limited to, grade separation, flexible posts, inflexible vertical barriers such
as raised curbs, or parked cars. Currently, Class IV bicycle exist on Middlefield Road between
Woodside Road and Maple Street. Future Class IV facilities have been proposed along
El Camino Real, Brewster Avenue, Winslow Street, Maple Street south of Main Street, and
Main Street north of Maple Street as shown in the RWCmoves.

# CYCLE TRACK/SEPARATED BIKEWAY (CLASS IV)





Bicyclists who commute to the Transit District can take the following routes:

- Maple Street is an east-west street designated as a Class III bicycle route between Main Street and the Caltrain railroad tracks that transitions into Class II bicycle lanes west of the Caltrain railroad tracks and ends at El Camino Real. This Class III bicycle route provides access to downtown Redwood City.
- **Jefferson Avenue** is designated as a Class III bicycle route west of El Camino Real and provides east-west access to the Transit District.
- **Brewster Avenue** has Class II bike lanes east of Fulton Street and provides east-west access to and through the Project.
- Whipple Avenue has a mixture of Class II and III bike facilities and provides access to the Project from the north via El Camino Real and Veterans Boulevard.
- **Broadway** (Class III bicycle routes) provide access to the Transit District from both Woodside Road and El Camino Real.
- Arguello Street has Class II bike lanes and provides access to the Project from the north.
- Winslow Street has Class II bike lanes which provide access to the Project from the east.
- **Marshall Street** has Class II bike lanes from Main Street to Broadway and provides access to the Project from the east.
- **Veterans Boulevard** (Class II bike lanes) provide access to the Project from the east via Brewster Avenue, Winslow Street, and Jefferson Street.

Figure 4 illustrates the existing bicycle facilities near the Transit District.

# **Existing Pedestrian Facilities**

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. In the immediate vicinity of the Transit District, pedestrian signals and sidewalks are provided on both sides of El Camino Real, Jefferson Avenue, Arguello Street, Whipple Avenue, Brewster Avenue, Veterans Boulevard, Broadway, Main Street, Marshall Street, Hamilton Street, Walnut Street, Alameda de las Pulgas, Hudson Street and Maple Street. The following locations are missing pedestrian facilities:

- No sidewalk on the west side of Whipple Avenue, between Veterans Boulevard and E. Bayshore Road
- No crosswalk on east leg of Arguello Street and Broadway intersection
- No crosswalk on north leg of Whipple Avenue and El Camino Real intersection
- No crosswalk on west leg of Veterans Boulevard and Whipple Avenue intersection



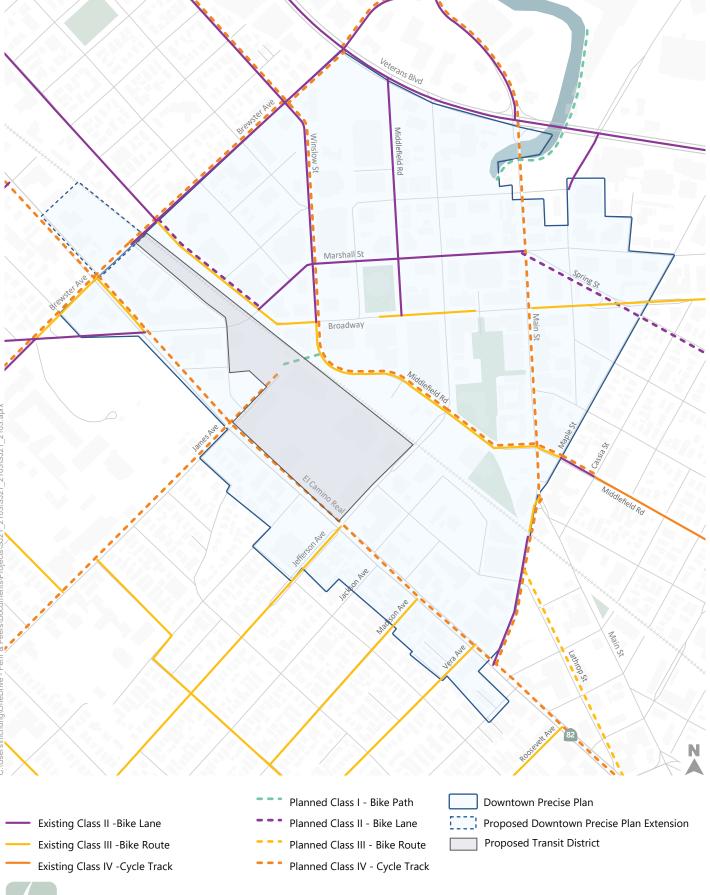




Figure 4

# 4. CEQA VMT Analysis

This chapter provides a description of the process used to estimate the Existing, Cumulative No Project, and Cumulative with Project VMT results of the VMT analysis, including VMT modeling assumptions, and the Project's consistency with *Redwood City General Plan*. VMT estimates are prepared using the C/CAG-VTA model for the years 2015 and 2040, which are the most current versions of the model available.

# **VMT Screening**

In the first step of the VMT evaluation, the Project components are evaluated against the City's screening criteria. Land use projects that meet the City's screening criteria summarized in **Chapter 2** are presumed to be less-than-significant and do not require CEQA transportation analysis. While some land uses in the Project would meet screening criteria (given the proximity to Transit Priority Areas, affordable housing, and locally serving public facilities), the Project exceeds 500,000 square feet it is not eligible for VMT screening and a full VMT analysis was conducted using the VTA-C/CAG model.

### **Model Assumptions**

The C/CAG-VTA model was used to calculate VMT. Specifically, Transportation Analysis Zones (TAZ) 1628 was modified to represent the Transit District in the model. C/CAG provided the most recent copies of the Year 2015 and Year 2040 models for use in this analysis. The Year 2015 and 2040 models were last updated in 2020 with adjustments made to include centroid connectors, and travel outside of the model area and are the best and most recent tool currently available<sup>2</sup>. The Year 2015 model was used to develop existing VMT estimates, and the Year 2040 model was used for VMT impact assessment. Traffic growth estimates were developed using the C/CAG model for the CEQA air and noise analyses but are not directly referenced in this report.

### **Year 2015 Model Adjustments**

For the purpose of this VMT analysis, the year 2015 model land uses were updated for the entire DTPP area to reflect current (year 2021) development conditions. All other land uses were assumed to be consistent with the current C/CAG-VTA model assumptions. As noted, the 2015 model is the best and most recent tool currently available.

### **Year 2040 Model Adjustments**

The Year 2040 No Project model was updated to include reasonably foreseeable projects, including the City-proposed DTPP Plan-wide Amendments and recent Regional Housing Needs Assessment (RHNA) allocation. The RHNA allocations included an additional 2,180 housing units throughout the City and were

<sup>&</sup>lt;sup>2</sup> The updates in 2020 did not include any updates to the volume assumptions and the Year 2015 model is reflective of the year 2015 conditions (i.e., pre-COVID-19).



provided by City staff. The RHNA housing allocation included assumptions as of December 2021 and were draft assumptions for the purpose of this analysis, since the City had not completed final allocation process at the time of this study. The 2040 model was not adjusted outside of Redwood City for the most recent proposed rezoning and associated increased residential development as part of the eight-year RHNA allocations. These rezonings are still under consideration and have not been finalized and any assumptions about their outcomes are still too speculative to rely on for this analysis.

### Grade Separations and VMT

The City, in partnership with Caltrain, SamTrans, and the San Mateo County Transportation Authority, is studying the feasibility of separating all existing at-grade crossings in Redwood City. The six grade crossings are currently located at Whipple Avenue, Brewster Avenue, Broadway, Maple Street, Main Street, and Chestnut Street. The goal of the grade separation study is to evaluate alternatives to address the current challenges of Caltrain at-grade crossings and to separate the railroad from the roadway. The City has not selected a preferred alternative; though currently is considering two main options: a) grade-separate all with Maple Street having bicycle and pedestrian access only and Chestnut Street having either full access or bicycle and pedestrian access only, and b) grade separate the northern crossings and leaving southern crossings at grade.

The cumulative year 2040 conservatively assumes current conditions, i.e., at-grade crossings at the six locations within Redwood City. The primary components in VMT calculations are the number of trips multiplied by the trip distance. It is not anticipated that the VMT for the Transit District Amendments would change substantially between a scenario where the crossings are at-grade or fully grade separated, since the access routes and associated trip lengths to the Transit District Amendments would not change; it is the potential delay at the crossings that would change.

In the scenario where one or two of the southern grade crossings are closed to vehicle access, any changes to grade crossing access at the southern end of the City is not likely to result in any substantial changes to the Transit District Amendments' VMT per employee or VMT per resident, since the downtown and surrounding areas have a grid network that allow for multiple access routes of similar trip lengths. The City is not considering closing all three southern grade crossings to vehicular traffic. For example, for a trip starting at the Chestnut Street/Spring Street intersection and normally traveling down Chestnut Street over the grade crossing to El Camino Real and then heading north to the Transit District, the trip length is about one mile. If crossings were closed for vehicles access at Chestnut Street, one could travel down Chestnut Street and turn right onto Middlefield Street, to westbound Jefferson, and turn right onto northbound El Camino Real. The trip length for this access route is just under one mile. Thus, the City's grid network allows for reasonable alternate routes that have very similar trip lengths and are not likely to change the VMT impact conclusions of the Project.

### **Trip Generation**

Trip generation refers to the amount of travel activity associated with a change in land use at a given location. The C/CAG-VTA model was used to estimate daily vehicle trips for the purposes of this TA. This



represents a conservative approach, since the C/CAG-VTA model uses industry standard/generic trip generation characteristics for the different land uses to estimate vehicle trips. Trip generation studies conducted as part of *RWCmoves*, show that Redwood City's rates are typically lower than standard industry rates. The intersection analysis conducted as part of the standalone LTA, updates the trip generation estimates prepared in this document to use the Redwood City specific rates from *RWCmoves*.

The Project's land uses were allocated to TAZ 1628. The City model adjusts the trip generation to account for internalization, or the trips among uses within the Project that are not expected to leave the Transit District. Therefore, the trip generation is reported for the entire Project and is not broken down by specific land use.

**Table 3** shows the total number of average weekday daily vehicle trips. Based on the model structure the trip generation is reported for the entire Project and is not broken down by specific land use.

**Table 3: Transit District Amendments Project Average Weekday Daily Vehicle Trips** 

	Cumulative No Project	Cumulative + Project	Net New Project Trips
Daily	15,000	35,200	20,200

Notes:

Trip generation estimates are rounded to nearest 100. Source: C/CAG-VTA Model; Fehr & Peers, 2021.

As shown in **Table 3** the Project would generate approximately 20,200 total net new daily vehicle trips.<sup>3</sup>

# **Project Generated VMT: Residential and Office**

The VMT estimate for all residential vehicle trips due to the Project with an origin or destination within the Transit District were divided by the number of residents in TAZ 1628 to obtain VMT per capita. The results were compared to the City's VMT threshold for residential projects. Similarly, the VMT estimate for all Project-related office-generated vehicle trips with an origin or destination within the Project were divided by the number of employees in TAZ 1628 to obtain VMT per employee. The results were compared to the

For comparison purposes, trip generation rates from the industry standard Institute of Transportation Engineers (ITE) Trip Generation Manual were applied to the Transit District Amendments' land use types and quantities. Using ITE's average daily rates of 10.84 trips per thousand square feet of office development and 4.72 trips per housing unit, the Transit District Amendments would generate approximately 22,862 daily vehicle trips (17,670 for office, 5,192 for residential). In comparison to the C/CAG-VTA modeled average daily vehicle trips shown above in **Table 3**, the estimated trip generation using ITE's rates is about 13 percent higher. The raw ITE estimates are slightly higher because the ITE trip generation estimates, unlike the C/CAG-VTA trip generation estimates, are unadjusted and do not take into account vehicle trip efficiencies that are a function of the presence/proximity of complementary land uses and the mode shift to non-vehicle travel modes (i.e., walking, bicycling, transit) that occurs in a dense downtown area in proximity to transit.



City's VMT threshold for office projects. The results for the residential and office components of the Project are summarized in **Table 4.** 

**Table 4: Transit District Amendments Residential and Office VMT Analysis Results** 

Scenario	VMT	VMT Threshold	Exceed VMT Threshold?								
Residential Project Components											
Existing	01		n/a								
Cumulative No Project	01	10.5 VMT per capita	n/a								
Cumulative Plus Project	8.1	vivii pei capita	No								
Office (General Employme	nt) Project Component										
Existing	14.3		n/a								
Cumulative No Project	14.0	15.0 VMT per employee	n/a								
Cumulative Plus Project	11.4	vivii pei employee	No								

#### Notes:

The existing office VMT is below the City's threshold and there are no residential units in the Transit District under the Existing and Cumulative No Project scenarios. With implementation of the Project, both the residential and office VMT are below the City's VMT thresholds, and the Project is considered to have a **less-than-significant VMT impact**, and no VMT mitigation measures are required for the Transit District Amendments project.

While the Transit District Amendments would allow more than 1.6 million s.f. of office uses, the VMT per employee decreases due to the increase in infill development and proximity to and improve connectivity with the Transit Center, which will encourage shorter trip lengths and more trips via transit.

For example, an office project that has 150 employees and is located in a location without good transit service is likely going to have most employees drive; thus, each employee has two trips (one trip to the office and one trip back home). If the average employee commute trip length is 10 miles roundtrip, then this hypothetical project would generate 1,500 total VMT (150 driving employees x 10-mile roundtrip = 1,500 miles) or 10.0 VMT per employee (1,500 miles divided by 150 total employees). If this same company is located near good transit and we assume 1/3 would choose to use transit and only 100 employees would drive. In this scenario, the hypothetical project would generate 1,000 total VMT (100 driving employees x 10-mile roundtrip = 1,000 miles) or 6.7 VMT per employee (1,000 miles divided by 150 total employees). Thus, the proximity to transit can reduce VMT per service population compared to projects that are in more suburban settings with limited commute options; in this hypothetical example the VMT reduced from 10.0 VMT per employee to 6.7 VMT per employee. Please not that this is a hypothetical example for discussion purposes only to demonstrate how access to transit can affect VMT.



<sup>1.</sup> The Transit District Amendments does not include residential units under Existing and Cumulative No Project conditions. n/a = Existing and Cumulative No Project VMT is not evaluated against threshold.

Source: C/CAG-VTA Travel Model; Fehr & Peers, 2021.

### **Redwood City Transportation Demand Management (TDM) Ordinance**

In December 2021, the City of Redwood City adopted a Transportation Demand Management (TDM) ordinance. The TDM ordinance requires all new development in the City that meet specified development thresholds (generally 25 or more units and/or 10,000 s.f. or more commercial development, including offices development) to develop a TDM plan and requires annual monitoring with the potential for financial incentives to meet specified targets. This ordinance would apply even if individual projects qualified for VMT screening discussed previously or do not have a VMT impact. The City's TDM ordinance has the potential to further reduce VMT from the values calculated in **Table 4**, since the TDM program would further incentivize projects to reduce vehicle trips and increase multimodal access. While a requirement for all projects in Redwood City, the effects of the TDM ordinance were not included in this VMT analysis, since the Project is below the City's VMT thresholds.

In addition, many of the proposed Transit District Amendments reflect elements that would reduce single-occupancy vehicle trips and be complimentary to the City's TDM Ordinance goals. Specifically, the Transit District Amendments to right-size/reduce parking ratios, incentivize shared parking, increasing bicycle parking ratios, improving access to long-term and short-term bicycle parking, and improved multimodal access to the Transit District would support the City's goal to increase multimodal access and reduce single-occupancy vehicle trips.

### **Roadway Network Changes**

The Project includes several roadway network changes, summarized below and described in more detail in **Chapter 1** and illustrated on **Figure 1**.

The following roadways would be eliminated:

- Lane between Broadway and Jefferson, and between the Caltrain right-of-way and the Transit Center and Sequoia site to allow for widening of the Caltrain right-of-way in connection with potential future relocation and expansion of the Redwood City Caltrain Station
- Harrison Avenue, a designated City Street, between Franklin Street and the Caltrain right-of-way
- Hamilton Avenue, a designated Downtown Core Street, between Franklin Street and the Caltrain right-of-way

None of the streets exist but were identified in the DTPP as future roadways. The elimination of the one-block segments of Hamilton Avenue and Harrison Avenue are short (about 250 feet) and would not result in any noticeable change in VMT. Similarly, the removal of the lane between Caltrain right-of-way and the Transit Center and Sequoia Station Shopping Center site would not noticeably change VMT, since the Transit District and surrounding area generally provides a small grid network that allows for efficient circulation within the Project. Parallel facilities are available on Franklin Street and El Camino Real.



Since the proposed Transit District generally has a small grid network, there are easily accessible alternate routes for vehicle travel, and on balance the network changes are small and will not substantially increase VMT in the area, the Project is considered to have a **less-than-significant roadway network change impact**.

## **Project Effects on VMT**

The Project effect on VMT is analyzed using the "boundary method." The boundary method evaluates VMT that occurs within a selected geographic boundary (e.g., city, county, or region). The selected regional boundary for this analysis includes the City of Redwood City. This captures all on-road vehicle travel on a roadway network for any purpose and includes local trips as well as trips that pass through the area without stopping.

An example of how a project can affect VMT is the addition of housing in a job-rich downtown. Workers in the downtown that has limited housing options must travel a greater distance between their home and work. Adding the housing in downtown will shorten many of the home-to-work trips and reduce the VMT to/from the downtown. While the new housing itself will "generate" more daily trips, in that there will be more cars coming in and out of the housing develop, it will generally attract those trips *away* from other residential developments located farther away. If the boundary VMT in the area served by the new residential development were to be assessed, it is likely that the total amount of driving in that area will have decreased rather than increased.

**Table 5** below presents the total City VMT under cumulative conditions in 2040 and the calculated citywide VMT per capita, based on the total VMT in Redwood City divided by the total service population (residents and employees).

**Table 5: Boundary Method Citywide Cumulative VMT Estimates** 

Scenario	Cumulative No Project	Cumulative With Project	Exceed VMT Threshold?
Vehicle Miles Traveled	2,035,800	2,059,300	n/a
Service Population	196,100	205,700	n/a
VMT per Capita	10.38	10.01	No

### Notes:

1. Per capita is defined by dividing total VMT by the sum of all employees, residents, and students. Source: C/CAG-VTA Travel Model; Fehr & Peers, 2021.

As shown in **Table 5**, the citywide VMT per capita under 2040 cumulative conditions without the Transit District Amendments would be 10.38 VMT per capita. Under 2040 cumulative conditions with the Transit District Amendments the citywide boundary VMT per capita is estimated to be 10.01 miles, which would be less than the citywide VMT per capita without the Transit District Amendments. Accordingly, the Transit District Amendments' effect on VMT applying the boundary would be a **less-than-significant impact**.



Redwood City Transit District Amendments Transportation Analysis April 2022



# 5. Additional CEQA Transportation Impact Analysis

This chapter presents the transportation impacts related to the other significance criteria not covered in Chapter 4 (CEQA VMT Analysis). Specifically, a project could have a significant transportation impact on the environment if it meets any of the following criteria:

- 1. Conflicts with a plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths
- 2. Substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- 3. Results in inadequate emergency access

### **Plan Conflicts Evaluation**

This section discusses the Project's conformance with the City's General Plan, as well as relevant pedestrian, bikeway, traffic calming, or regional transit plans.

### **City of Redwood City Policies**

Redwood City General Plan

According to the City's TAM, projects must demonstrate consistency with the *Redwood City General Plan* to address cumulative impacts. Relative to transportation, the determination of consistency conformance to the goals and policies set forth in the General Plan. The transportation goals in the General Plan aim to maintain a multimodal transportation system that encourages active transportation, transit use, and appropriate curb management/parking implementation. Policies relevant to the specific context of this Project are listed in **Table 6.** 

The Project is consistent with the General Plan goals by maintaining and enhancing bicycle and pedestrian friendly facilities within the Project. Specifically, the Transit District Amendments proposes pedestrian, bicycle, and transit enhancements to increase safety and connectivity to and from the relocated Transit Center, including an expanded Caltrain Station, and the greater Downtown and surrounding neighborhoods. Among these would be a requirement for protected bike lanes and potential improvements to bus loading along El Camino Real. These pedestrian, bicycle, and transit improvements would generally be consistent with the circulation plan set forth in the DTPP area and are consistent with the City's General Plan goals.



Table 6: Redwood City's 2010-2030 General Plan Transportation Goals

	Transportation Goals	Project Consistency Examples
Goal BE-25	Maintain a local transportation system that balances the needs of bicyclists, pedestrians, and public transit with those of private cars.	The Transit District Amendments proposes pedestrian, bicycle, and transit enhancements to increase safety and connectivity to and from the relocated Transit Center while providing adequate vehicle access and circulation.
Goal BE-26	Improve walking, bicycling, and electric bicycle/scooter facilities to be more convenient, comfortable, and safe, and therefore more common transportation modes in Redwood City	Hamilton Street between Franklin Street and the Caltrain right-of-way would be changed from a Downtown Core Street requirement to an open space with a safe path of travel for pedestrians and bicycles from the Project to downtown.
Goal BE-27	Create conditions to improve utilization of existing public transportation services to increase ridership.	The Project could increase the number of people living and working within a short walking distance of the Transit Center, which would increase transit ridership.
Goal BE-28	Provide maximum opportunities for upgrading passenger rail service for faster and more frequent trains, while making this improved service a positive asset to Redwood City that is attractive, accessible, and safe.	The Project would eliminate the requirement for a new lane from Broadway to Jefferson Avenue, between the Caltrain right-of-way and the Transit Center and the Sequoia Station Shopping Center site to allow for widening of the Caltrain right-of-way in connection with potential future relocation and expansion of the Transit Center which are necessary to increase the amount of train service.
Goal BE-29	Maintain the city's street network to promote the safe and efficient movement of people.	The Project will require a grid street network that allows for safe and efficient movement of people, regardless of mode of access.
Goal BE-31	Encourage developments and implementation of strategies that minimize vehicle trips and vehicle miles traveled.	The Project's location directly adjacent to the Transit Center minimizes vehicle trips and vehicle miles traveled (see <b>Table 4</b> ).

Source: Redwood City General Plan, October 2010

It should be noted that the Project is uniquely positioned to directly supports Goal BE-28 to maximize opportunities for upgrading passenger rail service. By eliminating the Lane between the Caltrain right-of-way and the Transit Center and the Sequoia Station Shopping Center site, the Project allows for widening of the Caltrain right-of-way in connection with potential future relocation and expansion of the Transit Center.

### Downtown Precise Plan

The Downtown Precise Plan (DTPP) was adopted by the City Council on January 24, 2011, and was amended most recently on June 11, 2018. The DTPP describes the vision for the future of Downtown, regulates private development, and recommends potential future City projects. Policies relevant to the specific context of this Project are listed in **Table 7**.



**Table 7: Redwood City's Downtown Precise Plan Goals and Guiding Principles** 

	Transportation Goals and Principles	Project Consistency Examples
А	Revive Downtown by creating a beautiful and memorable urban district interwoven with the City's identity.	The Project will require a grid street network that allows for safe and efficient movement of people, encouraging non-motorized modes of travel. The Project also includes a mix of office, retail, and residential land uses with enhanced streetscapes to promote a walkable / bikeable environment.
D	Provide the choice of "convenience living".	See project consistency example for Goal A. The Project is situated in Downtown Redwood City and provides convenient access to the services, amenities, and regional transit connections provided in Downtown.
F	Create a strong employment district and "vital center".	The Project will allow an additional 1,630,000 square feet of office development with service and amenities that will enhance the vibrant downtown area.
G	Make pedestrians the priority.	The Project will provide for a small grid network that allows for safe and efficient movement of people, regardless of mode of access.
Н	Integrate transit and bicycle use.	The Transit District Amendments proposes pedestrian, bicycle, and transit enhancements to increase safety and connectivity to and from the relocated Transit Center.
I	Provide "just enough" parking and create a "park-once and walk" district.	The Project will incentivize shared parking and allow project applicants to pay a fee to the City in lieu of providing new parking spaces. The Project's location in Downtown Redwood City will also encourage non-vehicle modes of transportation. High-quality connections across the railroad tracks and with the broader downtown area will encourage people to walk between destinations if they have more than one.

Source: Redwood City Downtown Precise Plan, June 2018.

Other than the amendments proposed as part of this Project, the Project does not conflict with any of the overarching transportation goals of the Downtown Precise Plan, as the Project prioritizes pedestrians and creates additional office space and residential units for a vibrant mixed-use downtown. The Project will also promote transit use given its proximity to the Transit Center.

### **RWCmoves**

*RWCmoves* expands on the General Plan in recognition of the importance of improving transportation options in the City. As a result, the guiding vision for *RWCmoves* is to promote the best travel experience possible for everyone in Redwood City by creating and maintaining a safe, multimodal, and accessible transportation network. Through *RWCmoves*, the City identifies and prioritizes the types of projects and programs with the greatest potential to enhance transportation safety, mobility, equity, and access for everyone traveling in Redwood City. The goals included in *RWCmoves* are summarized in **Table 8**.



**Table 8: RWCmoves Goals** 

	Transportation Goals	Project Consistency Examples
Goal 1	Eliminate traffic facilities and severe injuries for all modes by 2030.	The Project will require a grid street network that allows for safe movement of people and discourages speeding and other hazardous vehicle movements. The proposed smaller blocks and grid network in the project will be supplemented by enhanced crosswalks and traffic calming measures to support this goal. The addition of separated bicycle facilities will decrease exposure of bicyclists to vehicles.
Goal 2	Create a walking and bicycling-friendly community that provides a safe, balanced, and convenient transportation system.	Hamilton Street between Franklin Street and the Caltrain right-of-way would be converted from a Downtown Core Street to open space to allow a safe path of travel for pedestrians and bicycles from the Project to downtown.
Goal 3	Provide seamless connections and improved street access to all areas within the City, but especially along mixed-use corridors designated in the General Plan and Citywide Transportation Plan.	See project consistency examples for Goals 1 and 2.
Goal 4	Embrace innovation in all forms of emerging technologies, especially in ways to creatively manage congestion and the transportation system.	The Project will encourage shared parking and provides with the elimination of the Lane from Broadway to Jefferson Avenue, between the Caltrain right-of-way and the Transit Center and the Sequoia Station Shopping Center site will allow for widening of the Caltrain right-of-way in connection with potential future relocation and expansion of the Transit Center. The project will include strategies to manage curbs for TNC activities.
Goal 5	Reach over 50% of all trips being by non-driving modes by 2040; remaining automobile trips should be shared rides and/ or zero emission trips.	The Project's location directly adjacent to the Transit Center minimizes vehicle trips and vehicle miles traveled (see <b>Table 4</b> ).
Goal 6	Invest in projects that support a resilient, equitable and sustainable transportation system.	The Project requires improvements for non-vehicle modes of transportation and is situated near the Transit Center, which promotes transit use.

Source: RWCmoves, July 2018

The proposed Project does not conflict with any of the listed goals, as the Project prioritizes pedestrian and bicyclists by requiring pedestrian and bicycle enhancements consistent with other adopted plans and policies. The Project increases the density of infill development which will reduce the need for vehicle trips and its proximity to the Transit Center will increase access to buses and commuter rail service.

## Transit, Bicycle, and Pedestrian Impacts and Mitigations

The proposed Project will maintain the existing adjacent sidewalks and bicycle lanes. The Transit Center will be relocated to the northwest, but it will not negatively impact the frequency or number of transit services to the Transit District. Any adjustments to transit service while the station is relocated will be



temporary and coordinated to minimize any disruptions. As a result, the anticipated transit, bicycle, or pedestrian impacts are less-than-significant, and no mitigations are needed.

# **Safety and Hazard Assessment**

While conceptual street network changes are proposed, the Project has not advanced to the stage of developing detailed street designs. As it does, any roadway extensions and new streets would need to comply with Redwood City's *Downtown Precise Plan* (June 2018), *RWCmoves* (July 2018) and the Street Design Criteria included in their 2019 Engineering Standards, all of which include design specifications to ensure safe and efficient travel of vehicles, bicycles, pedestrians, and transit vehicles.

For this reason, the proposed Project would not introduce any geometric design features or incompatible uses, and this impact would be less-than-significant.

### **Emergency Vehicle Access**

Efficient operations of City streets help to reduce response times for emergency responders including the Redwood City Police and Fire Department personnel, as well as private ambulance services.

The emergency access assessment was conducted to determine if the Project has the potential to impact emergency vehicle access by creating conditions that would substantially affect the ability of drivers to yield the right-of-way to emergency vehicles or preclude the ability of emergency vehicles to access streets within the Transit District. An emergency access impact is considered significant if implementation of the Project would provide inadequate access to accommodate emergency vehicles.

Any roadway extensions, such as Franklin Street between Jefferson Avenue and James Avenue, would need to comply with the City of Redwood City's Street Design Criteria included in their 2019 Engineering Standards, as well as relevant sections from *RWCmoves*, which include design specifications that consider emergency vehicle access requirements. All new street segments will be designed in accordance with City policies and provide adequate emergency vehicle access and would not impede emergency vehicle access to the Project and surrounding area by emergency vehicles. The fire department and other pertinent City groups will review the final design and on-site circulation, once completed, to ensure that there is adequate emergency access. The Transit District Amendments may also incorporate standards for the closed street segments, with respect to such features as land width, lighting, paving, and emergency access requirements.

Overall, the proposed roadway extensions, closures, modifications, and new streets provide for a grid network that does not substantially affect the ability of drivers to yield the right-of-way to emergency vehicles or preclude the ability of emergency vehicles to access streets within the Project area, and the Project's impact is **less-than-significant.** 



# Appendix C Supplemental Noise and Vibration Information



# Traffic Noise Model



Project Name: Redwood City Transit District Analysis Scenario: 2021

Source of Traffic Volumes: Fehr & Peers

Posture	Ground	Distance from	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level	Noise Level
Roadway Segment	Туре	Roadway to Receiver (feet)	Auto	МТ	нт	Auto	МТ	нт	(Leq(h) dBA)	dBA Ldn
Maple St from El Camino Real to Main St	Hard	50	25	25	25	53	1	1	49.1	49
James Ave from Clinton St to El Camino Real	Hard	50	25	25	25	776	16	8	60.8	61
Jefferson Ave from Clinton St to El Camino Real	Hard	50	25	25	25	1,508	31	16	63.6	64
Jefferson Ave from El Camino Real to Middlefield Rd	Hard	50	25	25	25	0	0	0	NA	NA
El Camino Real to Sequoia Station (Centroid)	Hard	50	35	35	35	2,956	61	30	69.7	70
Sequoia Station (Centroid) to Middlefield Rd	Hard	50	35	35	35	0	0	0	NA	NA
Broadway from El Camino Real to Arguello St	Hard	50	25	25	25	0	0	0	NA	NA
El Camino Real to Perry St	Hard	50	25	25	25	619	13	6	59.8	60
Perry St to Arguello St	Hard	50	30	30	30	704	15	7	61.9	62
Broadway from Arguello St to Jefferson Ave	Hard	50	25	25	25	0	0	0	NA	NA
Arguello St to Winslow St	Hard	50	25	25	25	704	15	7	60.3	61
Winslow St to Jefferson Ave	Hard	50	25	25	25	159	3	2	53.9	54
Marshall St from Arguello St to Winslow St	Hard	50	25	25	25	44	1	0	48.3	49
Brewster Ave from Elwood St to El Camino Real	Hard	50	35	35	35	0	0	0	4.8	5
Fulton St to Broadway	Hard	50	35	35	35	83	2	1	54.2	54
Broadway to El Camino Real	Hard	50	25	25	25	54	1	1	49.2	49
Brewster from Arguello St to Winslow St	Hard	50	35	35	35	0	0	0	NA	NA
Middlefield Road from Jefferson Ave to Main St	Hard	50	25	25	25	626	13	6	59.8	60
Middlefield Road from Main St to Chestnut St (existing 2 segments)(cumulative 3 seg	Hard	50	25	25	25	0	0	0	NA	NA
Main St to Maple St	Hard	50	35	35	35	639	13	7	63.0	63
Maple St to Beech St	Hard	50	40	40	40	0	0	0	NA	NA
Beech St to Chestnut St	Hard	50	25	25	25	691	14	7	60.2	61

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).

The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.

Accuracy of the calculation is within  $\pm 0.1 \ \text{dB}$  when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.

Roadway grade is less than 1.5%.



Project Name: Redwood City Transit District
Analysis Scenario: Existing Plus Project
Source of Traffic Volumes: Fehr & Peers

Roadway Segment	Ground	Distance from Roadway to	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level	Noise Level
noothey segment	Туре		Auto	MT	нт	Auto	MT	нт	(Leq(h) dBA)	dBA Ldn
Maple St from El Camino Real to Main St	Hard	50	25	25	25	48	1	0	48.6	49
James Ave from Clinton St to El Camino Real	Hard	50	25	25	25	770	16	8	60.7	61
Jefferson Ave from Clinton St to El Camino Real	Hard	50	25	25	25	1,596	33	16	63.9	64
Jefferson Ave from El Camino Real to Middlefield Rd	Hard	50	25	25	25	0	0	0	NA	NA
El Camino Real to Sequoia Station (Centroid)	Hard	50	35	35	35	3,443	71	35	70.4	71
Sequoia Station (Centroid) to Middlefield Rd	Hard	50	35	35	35	409	8	4	61.1	61
Broadway from El Camino Real to Arguello St	Hard	50	25	25	25	0	0	0	NA	NA
El Camino Real to Perry St	Hard	50	25	25	25	600	12	6	59.6	60
Perry St to Arguello St	Hard	50	30	30	30	687	14	7	61.8	62
Broadway from Arguello St to Jefferson Ave	Hard	50	25	25	25	0	0	0	NA	NA
Arguello St to Winslow St	Hard	50	25	25	25	686	14	7	60.2	61
Winslow St to Jefferson Ave	Hard	50	25	25	25	155	3	2	53.7	54
Marshall St from Arguello St to Winslow St	Hard	50	25	25	25	44	1	0	48.3	49
Brewster Ave from Elwood St to El Camino Real	Hard	50	35	35	35	0	0	0	NA	NA
Fulton St to Broadway	Hard	50	35	35	35	104	2	1	55.2	55
Broadway to El Camino Real	Hard	50	25	25	25	44	1	0	48.3	49
Brewster from Arguello St to Winslow St	Hard	50	35	35	35	-1	0	0	NA	NA
Middlefield Road from Jefferson Ave to Main St	Hard	50	25	25	25	826	17	9	61.0	61
Middlefield Road from Main St to Chestnut St (existing 2 segments)(cumulative 3 seg	Hard	50	25	25	25	0	0	0	NA	NA
Main St to Maple St	Hard	50	35	35	35	838	17	9	64.2	65
Maple St to Beech St	Hard	50	40	40	40	838	17	9	65.8	66
Beech St to Chestnut St	Hard	50	25	25	25	851	18	9	61.2	61

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).

The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.

Accuracy of the calculation is within  $\pm 0.1$  dB when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.

Roadway grade is less than 1.5%.



Project Name: Redwood City Transit District
Analysis Scenario: Cumulative No Project
Source of Traffic Volumes: Fehr & Peers

Roadway Segment	Ground	Distance from Roadway to	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level	Noise Level
Roadway Segment	Туре		Auto	MT	нт	Auto	MT	НТ	(Leq(h) dBA)	dBA Ldn
Maple St from El Camino Real to Main St	Hard	50	25	25	25	149	3	2	53.6	54
James Ave from Clinton St to El Camino Real	Hard	50	25	25	25	171	4	2	54.2	54
Jefferson Ave from Clinton St to El Camino Real	Hard	50	25	25	25	2,009	41	21	64.9	65
Jefferson Ave from El Camino Real to Middlefield Rd	Hard	50	25	25	25	0	0	0	NA	NA
El Camino Real to Sequoia Station (Centroid)	Hard	50	35	35	35	3,747	77	39	70.7	71
Sequoia Station (Centroid) to Middlefield Rd	Hard	50	35	35	35	3,708	76	38	70.7	71
Broadway from El Camino Real to Arguello St	Hard	50	25	25	25	0	0	0	NA	NA
El Camino Real to Perry St	Hard	50	25	25	25	1,176	24	12	62.6	63
Perry St to Arguello St	Hard	50	30	30	30	1,176	24	12	64.1	64
Broadway from Arguello St to Jefferson Ave	Hard	50	25	25	25	0	0	0	NA	NA
Arguello St to Winslow St	Hard	50	25	25	25	1,108	23	11	62.3	63
Winslow St to Jefferson Ave	Hard	50	25	25	25	263	5	3	56.0	56
Marshall St from Arguello St to Winslow St	Hard	50	25	25	25	68	1	1	50.2	50
Brewster Ave from Elwood St to El Camino Real	Hard	50	35	35	35	0	0	0	NA	NA
Fulton St to Broadway	Hard	50	35	35	35	123	3	1	55.9	56
Broadway to El Camino Real	Hard	50	25	25	25	297	6	3	56.6	57
Brewster from Arguello St to Winslow St	Hard	50	35	35	35	15	0	0	46.9	47
Middlefield Road from Jefferson Ave to Main St	Hard	50	25	25	25	971	20	10	61.7	62
Middlefield Road from Main St to Chestnut St (existing 2 segments)(cumulative 3 seg	Hard	50	25	25	25	0	0	0	NA	NA
Main St to Maple St	Hard	50	35	35	35	970	20	10	64.9	65
Maple St to Beech St	Hard	50	40	40	40	975	20	10	66.5	67
Beech St to Chestnut St	Hard	50	25	25	25	1,080	22	11	62.2	62

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).

The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.

Accuracy of the calculation is within  $\pm 0.1$  dB when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.

Roadway grade is less than 1.5%.



Project Name: Redwood City Transit District
Analysis Scenario: Cumulative with Project
Source of Traffic Volumes: Fehr & Peers

Roadway Segment	Ground	Distance from Roadway to	Sp	Speed (mph)			Hour Vol	ume	Peak Hour Noise Level	Noise Level
nodeway segment	Туре	Receiver (feet)	Auto	MT	нт	Auto	MT	нт	(Leq(h) dBA)	dBA Ldn
Maple St from El Camino Real to Main St	Hard	50	25	25	25	144	3	1	53.4	54
James Ave from Clinton St to El Camino Real	Hard	50	25	25	25	165	3	2	54.0	54
Jefferson Ave from Clinton St to El Camino Real	Hard	50	25	25	25	2,098	43	22	65.1	65
Jefferson Ave from El Camino Real to Middlefield Rd	Hard	50	25	25	25	0	0	0	NA	NA
El Camino Real to Seguoia Station (Centroid)	Hard	50	35	35	35	4,234	87	44	71.3	72
Sequoia Station (Centroid) to Middlefield Rd	Hard	50	35	35	35	4,117	85	42	71.1	71
Broadway from El Camino Real to Arguello St	Hard	50	25	25	25	0	0	0	NA	NA
El Camino Real to Perry St	Hard	50	25	25	25	1,156	24	12	62.5	63
Perry St to Arguello St	Hard	50	30	30	30	1,159	24	12	64.1	64
Broadway from Arguello St to Jefferson Ave	Hard	50	25	25	25	0	0	0	NA	NA
Arguello St to Winslow St	Hard	50	25	25	25	1,090	22	11	62.2	63
Winslow St to Jefferson Ave	Hard	50	25	25	25	258	5	3	56.0	56
Marshall St from Arguello St to Winslow St	Hard	50	25	25	25	69	1	1	50.2	51
Brewster Ave from Elwood St to El Camino Real	Hard	50	35	35	35	0	0	0	NA	NA
Fulton St to Broadway	Hard	50	35	35	35	144	3	1	56.6	57
Broadway to El Camino Real	Hard	50	25	25	25	287	6	3	56.4	57
Brewster from Arguello St to Winslow St	Hard	50	35	35	35	14	0	0	46.6	47
Middlefield Road from Jefferson Ave to Main St	Hard	50	25	25	25	1,171	24	12	62.5	63
Middlefield Road from Main St to Chestnut St (existing 2 segments)(cumulative 3 seg	Hard	50	25	25	25	0	0	0	NA	NA
Main St to Maple St	Hard	50	35	35	35	1,169	24	12	65.7	66
Maple St to Beech St	Hard	50	40	40	40	1,174	24	12	67.3	68
Beech St to Chestnut St	Hard	50	25	25	25	1,241	26	13	62.8	63

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).

The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.

Accuracy of the calculation is within  $\pm 0.1 \ \text{dB}$  when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.

Roadway grade is less than 1.5%.



# Noise Monitoring Output

 File Name on Meter
 LxT\_Data.098

 File Name on PC
 SLM\_0004437\_LxT\_Data\_098.00.ldbin

 Serial Number
 0004437

 Model
 SoundTrack LxT\*

 Firmware Version
 2.404

User C. Sanchez

**Location** ST-1 Jeferson at Franklin SE corner

Job Description RWCTD

Note

### Measurement

Description

 Start
 2022-01-11
 10:27:25

 Stop
 2022-01-11
 10:42:38

 Duration
 00:15:13.6

 Run Time
 00:15:13.6

 Pause
 00:00:00.0

Pre Calibration 2022-01-11 10:07:02
Post Calibration None
Calibration Deviation ---

### Overall Settings

RMS Weight A Weighting
Peak Weight Z Weighting
Detector Slow
Preamp PRMLxT2B
Microphone Correction Off
Integration Method Linear
Overload 142.5 dB

 A
 C
 Z

 Under Range Peak
 98.8
 95.8
 100.8
 dB

 Under Range Limit
 37.2
 36.7
 43.5
 dB

 Noise Floor
 28.0
 27.6
 34.3
 dB

### Results

 LAeq
 67.9

 LAE
 97.5

 EA
 624.260 μPa²h

 EA8
 19.679 mPa²h

 EA40
 98.395 mPa²h

 LZpeak (max)
 2022-01-11
 10:39:48
 105.2 dB

 LASmax
 2022-01-11
 10:39:58
 82.1 dB

 LASmin
 2022-01-11
 10:34:34
 53.5 dB

SEA -99.9 dB

 LAS > 85.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LAS > 115.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 135.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 137.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 140.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LCeq
 77.3 dB

 LAeq
 67.9 dB

 LCeq - LAeq
 9.4 dB

 LAleq
 69.9 dB

 LAeq
 67.9 dB

 LAleq - LAeq
 2.0 dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	TWA1	TWA2	OVLD	Marker
1	Calibration Change	2022-01-11	10:07:02							
2	Run	2022-01-11	10:27:25							
3		2022-01-11	10:27:25	65.5	73.1	53.6	64.4	64.4	No	
4		2022-01-11	10:28:25	68.1	75.4	59.6	67.5	67.5	No	
5		2022-01-11	10:29:25	65.5	71.9	56.3	65.1	65.1	No	
6		2022-01-11	10:30:25	67.6	73.1	55.3	66.9	66.9	No	
7		2022-01-11	10:31:25	67.5	74.4	59.4	66.7	66.7	No	
8		2022-01-11	10:32:25	71.1	77.0	61.0	70.5	70.5	No	
9		2022-01-11	10:33:25	67.9	80.0	55.0	65.7	65.7	No	
10		2022-01-11	10:34:25	69.7	78.0	53.5	68.4	68.4	No	
11		2022-01-11	10:35:25	62.2	68.8	56.4	61.5	61.5	No	
12		2022-01-11	10:36:25	66.2	72.5	55.2	65.4	65.4	No	
13		2022-01-11	10:37:25	64.8	71.8	58.8	64.2	64.2	No	
14		2022-01-11	10:38:25	65.4	75.1	55.0	64.3	64.3	No	
15		2022-01-11	10:39:25	71.8	82.1	54.6	69.3	69.3	No	
16		2022-01-11	10:40:25	68.3	77.0	58.9	67.4	67.4	No	
17		2022-01-11	10:41:25	67.3	75.7	57.3	66.1	66.1	No	
18		2022-01-11	10:42:25	61.8	64.4	58.6	61.5	61.5	No	
19	Stop	2022-01-11	10:42:38							

 File Name on Meter
 LxT\_Data.099

 File Name on PC
 SLM\_0004437\_LxT\_Data\_099.00.ldbin

 Serial Number
 0004437

 Model
 SoundTrack LxT®

 Firmware Version
 2.404

User C. Sanchez

**Location** ST-2 ECR at Jefferson SE corner

Job Description RWC TD

Note

### Measurement

Description

 Start
 2022-01-11
 10:44:36

 Stop
 2022-01-11
 10:59:48

 Duration
 00:15:12.6

 Run Time
 00:015:12.6

 Pause
 00:00:00.00

Pre Calibration 2022-01-11 10:07:00
Post Calibration None
Calibration Deviation ---

### Overall Settings

RMS Weight A Weighting
Peak Weight Z Weighting
Detector Slow
Preamp PRMLxT2B
Microphone Correction Off
Integration Method Linear
Overload 142.5 dB

 A
 C
 Z

 Under Range Peak
 98.8
 95.8
 100.8
 dB

 Under Range Limit
 37.2
 36.7
 43.5
 dB

 Noise Floor
 28.0
 27.6
 34.3
 dB

### Results

 $\begin{array}{ccc} \textbf{LAeq} & & 68.6 \\ \textbf{LAE} & & 98.2 \\ \textbf{EA} & & 726.252 \ \mu \text{Pa}^2 \text{h} \\ \textbf{EA8} & & 22.919 \ m \text{Pa}^2 \text{h} \\ \textbf{EA40} & & 114.596 \ m \text{Pa}^2 \text{h} \\ \end{array}$ 

 LZpeak (max)
 2022-01-11 10:54:26
 104.0 dB

 LASmax
 2022-01-11 10:54:26
 80.1 dB

 LASmin
 2022-01-11 10:51:52
 59.5 dB

SEA -99.9 dB

 LAS > 85.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LAS > 115.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 135.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 137.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 140.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LCeq
 78.2 dB

 LAeq
 68.6 dB

 LCeq - LAeq
 9.7 dB

 LAleq
 69.7 dB

 LAeq
 68.6 dB

 LAleq - LAeq
 1.1 dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	TWA1	TWA2	OVLD	Marker
1	Run	2022-01-11	10:44:36							
2		2022-01-11	10:44:36	67.7	72.2	61.6	67.3	67.3	No	
3		2022-01-11	10:45:36	68.4	72.4	61.7	68.2	68.2	No	
4		2022-01-11	10:46:36	66.6	70.2	61.4	66.3	66.3	No	
5		2022-01-11	10:47:36	68.7	74.8	62.6	68.4	68.4	No	
6		2022-01-11	10:48:36	67.4	73.9	62.7	67.1	67.1	No	
7		2022-01-11	10:49:36	68.8	73.4	62.0	68.4	68.4	No	
8		2022-01-11	10:50:36	66.8	71.9	63.1	66.5	66.5	No	
9		2022-01-11	10:51:36	68.9	73.4	59.5	68.4	68.4	No	
10		2022-01-11	10:52:36	68.0	72.1	62.0	67.6	67.6	No	
11		2022-01-11	10:53:36	71.8	80.1	61.0	70.7	70.7	No	
12		2022-01-11	10:54:36	69.5	77.7	62.0	68.6	68.6	No	
13		2022-01-11	10:55:36	69.3	75.2	65.7	69.2	69.2	No	
14		2022-01-11	10:56:36	67.0	70.9	63.2	66.9	66.9	No	
15		2022-01-11	10:57:36	68.9	75.3	62.6	68.3	68.3	No	
16		2022-01-11	10:58:36	68.2	75.3	63.2	67.8	67.8	No	
17		2022-01-11	10:59:36	64.3	67.4	60.4	63.5	63.5	No	
18	Stop	2022-01-11	10:59:48							

 File Name on Meter
 LxT\_Data.100

 File Name on PC
 SLM\_0004437\_LxT\_Data\_100.00.ldbin

 Serial Number
 0004437

 Model
 SoundTrack LxT®

 Firmware Version
 2.404

User C. Sanchez

**Location** ST-3 Maple Franklin NE corner

Job Description RWC TD

Note

### Measurement

Description

 Start
 2022-01-11 11:05:43

 Stop
 2022-01-11 11:20:51

 Duration
 00:15:07.9

 Run Time
 00:15:07.9

 Pause
 00:00:00:00

Pre Calibration 2022-01-11 10:07:00
Post Calibration None
Calibration Deviation ---

### **Overall Settings**

RMS Weight A Weighting
Peak Weight Z Weighting
Detector Slow
Preamp PRMLXT2B
Microphone Correction Off
Integration Method Linear
Overload 142.5 dB

 A
 C
 Z

 Under Range Peak
 98.8
 95.8
 100.8 dB

 Under Range Limit
 37.2
 36.7
 43.5 dB

 Noise Floor
 28.0
 27.6
 34.3 dB

### Results

 LAeq
 67.2

 LAE
 96.7

 EA
 525.043 μPa²h

 EA8
 16.655 mPa²h

 EA40
 83.276 mPa²h

 LZpeak (max)
 2022-01-11 11:08:55
 101.9 dB

 LASmax
 2022-01-11 11:13:37
 86.7 dB

 LASmin
 2022-01-11 11:11:05
 48.3 dB

**SEA** -99.9 dB

 LAS > 85.0 dB (Exceedance Counts / Duration)
 1
 1.5 s

 LAS > 115.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 135.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 137.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 140.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LCeq
 72.0 dB

 LAeq
 67.2 dB

 LCeq - LAeq
 4.8 dB

 LAleq
 70.7 dB

 LAeq
 67.2 dB

 LAleq - LAeq
 3.6 dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	TWA1	TWA2	OVLD	Marker
1	Run	2022-01-11	11:05:43							
2		2022-01-11	11:05:43	62.8	72.3	53.2	61.4	61.4	No	
3		2022-01-11	11:06:43	60.2	65.3	55.5	60.0	60.0	No	
4		2022-01-11	11:07:43	57.7	63.8	50.0	57.2	57.2	No	
5		2022-01-11	11:08:43	63.6	76.2	54.1	61.8	61.8	No	
6		2022-01-11	11:09:43	59.8	69.5	49.3	57.7	57.7	No	
7		2022-01-11	11:10:43	72.5	82.0	48.3	69.0	69.0	No	
8		2022-01-11	11:11:43	67.2	77.9	59.5	67.2	67.2	No	
9		2022-01-11	11:12:43	75.6	86.7	59.9	73.4	73.4	No	
10		2022-01-11	11:13:43	60.3	72.8	50.3	59.3	59.3	No	
11		2022-01-11	11:14:43	60.0	68.4	49.8	58.9	58.9	No	
12		2022-01-11	11:15:43	59.3	69.9	48.8	57.5	57.5	No	
13		2022-01-11	11:16:43	68.2	80.2	49.5	66.0	66.0	No	
14		2022-01-11	11:17:43	59.8	69.5	49.9	58.9	58.9	No	
15		2022-01-11	11:18:43	58.7	69.1	51.6	57.6	57.6	No	
16		2022-01-11	11:19:43	60.9	66.3	51.7	60.0	60.0	No	
17		2022-01-11	11:20:43	63.2	64.0	60.9	62.9	62.9	No	
18	Stop	2022-01-11	11:20:51							

File Name on Meter LxT\_Data.101

File Name on PC SLM\_0004437\_LxT\_Data\_101.00.ldbin

 Serial Number
 0004437

 Model
 SoundTrack LxT®

 Firmware Version
 2.404

 User
 C. Sanchez

 Location
 ST-4 City Hall

 Job Description
 RWC TD

Note

### Measurement

Description

 Start
 2022-01-11 11:32:13

 Stop
 2022-01-11 11:47:47

 Duration
 00:15:34.3

 Run Time
 00:15:34.3

 Pause
 00:00:00.0

Pre Calibration2022-01-1110:07:00Post CalibrationNoneCalibration Deviation----

### Overall Settings

RMS WeightA WeightingPeak WeightZ WeightingDetectorSlowPreampPRMLxT2BMicrophone CorrectionOffIntegration MethodLinearOverload142.5 dB

 A
 C
 Z

 Under Range Peak
 98.8
 95.8
 100.8 dB

 Under Range Limit
 37.2
 36.7
 43.5 dB

 Noise Floor
 28.0
 27.6
 34.3 dB

### Results

 LAeq
 51.3

 LAE
 81.0

 EA
 14.024 μPa²h

 EA8
 432.290 μPa²h

 EA40
 2.161 mPa²h

 LZpeak (max)
 2022-01-11 11:37:06

 LZpeak (max)
 2022-01-11 11:37:06
 92.3 dB

 LASmax
 2022-01-11 11:32:43
 65.8 dB

 LASmin
 2022-01-11 11:36:27
 45.6 dB

**SEA** -99.9 dB

 LAS > 85.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LAS > 115.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 135.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 137.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 140.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LCeq
 64.5 dB

 LAeq
 51.3 dB

 LCeq - LAeq
 13.2 dB

 LAleq
 54.1 dB

 LAeq
 51.3 dB

 LAleq - LAeq
 2.8 dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	TWA1	TWA2	OVLD	Marker
1	Run	2022-01-11	11:32:13							
2		2022-01-11	11:32:13	57.7	65.8	46.6	56.0	56.0	No	
3		2022-01-11	11:33:13	47.6	51.0	46.0	47.5	47.5	No	
4		2022-01-11	11:34:13	47.8	53.5	45.8	47.7	47.7	No	
5		2022-01-11	11:35:13	53.1	58.8	46.4	52.3	52.3	No	
6		2022-01-11	11:36:13	50.8	61.1	45.6	50.0	50.0	No	
7		2022-01-11	11:37:13	48.7	56.4	46.5	48.4	48.4	No	
8		2022-01-11	11:38:13	47.6	51.2	46.0	47.5	47.5	No	
9		2022-01-11	11:39:13	47.5	50.3	46.3	47.5	47.5	No	
10		2022-01-11	11:40:13	52.6	59.8	46.6	51.6	51.6	No	
11		2022-01-11	11:41:13	54.9	64.3	46.8	53.2	53.2	No	
12		2022-01-11	11:42:13	48.4	57.9	45.9	48.1	48.1	No	
13		2022-01-11	11:43:13	48.2	52.7	47.0	48.1	48.1	No	
14		2022-01-11	11:44:13	47.7	49.7	46.5	47.6	47.6	No	
15		2022-01-11	11:45:13	49.2	52.3	47.1	49.1	49.1	No	
16		2022-01-11	11:46:13	48.5	49.9	47.3	48.5	48.5	No	
17		2022-01-11	11:47:13	48.5	51.8	47.3	48.3	48.3	No	
18	Stop	2022-01-11	11:47:47							

 File Name on Meter
 LxT\_Data.102

 File Name on PC
 SLM\_0004437\_LxT\_Data\_102.00.ldbin

 Serial Number
 0004437

 Model
 SoundTrack LxT®

 Firmware Version
 2.404

User C. Sanchez

**Location** ST-5 ECR at James NW corner

Job Description RWC TD

Note

### Measurement

Description

 Start
 2022-01-11
 12:53:43

 Stop
 2022-01-11
 13:09:58

 Duration
 00:16:14.5

 Run Time
 00:16:08.6

 Pause
 00:00:05.9

Pre Calibration 2022-01-11 10:07:00
Post Calibration None
Calibration Deviation ---

### **Overall Settings**

RMS Weight A Weighting
Peak Weight Z Weighting
Detector Slow
Preamp PRMLXT2B
Microphone Correction Off
Integration Method Linear
Overload 142.5 dB

 A
 C
 Z

 Under Range Peak
 98.8
 95.8
 100.8
 dB

 Under Range Limit
 37.2
 36.7
 43.5
 dB

 Noise Floor
 28.0
 27.6
 34.3
 dB

### Results

 LAeq
 71.5

 LAE
 101.4

 EA
 1.531 mPa²h

 EA8
 45.523 mPa²h

 EA40
 227.617 mPa²h

 LZpeak (max)
 2022-01-11 13:07:24
 105.7 dB

 LASmax
 2022-01-11 13:09:48
 86.1 dB

 LASmin
 2022-01-11 12:56:21
 57.6 dB

**SEA** -99.9 dB

 LAS > 85.0 dB (Exceedance Counts / Duration)
 1
 1.3 s

 LAS > 115.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 135.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 137.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 140.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LCeq
 79.5 dB

 LAeq
 71.5 dB

 LCeq - LAeq
 7.9 dB

 LAleq
 73.7 dB

 LAeq
 71.5 dB

 LAleq - LAeq
 2.1 dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	TWA1	TWA2	OVLD	Marker
1	Run	2022-01-11	12:53:43							
2		2022-01-11	12:53:43	68.6	73.9	59.3	68.0	68.0	No	
3		2022-01-11	12:54:43	71.5	75.2	61.2	71.0	71.0	No	
4		2022-01-11	12:55:43	68.5	74.2	57.6	68.1	68.1	No	
5		2022-01-11	12:56:43	71.8	75.4	59.7	71.1	71.1	No	
6		2022-01-11	12:57:43	70.6	75.4	58.7	69.9	69.9	No	
7		2022-01-11	12:58:43	70.0	74.9	61.7	69.2	69.2	No	
8		2022-01-11	12:59:43	75.8	79.7	73.8	75.5	75.5	No	
9	Pause	2022-01-11	12:59:58							
10	Resume	2022-01-11	13:00:04							
11		2022-01-11	13:00:04	70.5	77.1	64.0	70.2	70.2	No	
12		2022-01-11	13:01:04	73.0	78.2	63.8	72.3	72.3	No	
13		2022-01-11	13:02:04	68.3	75.8	61.2	67.8	67.8	No	
14		2022-01-11	13:03:04	71.5	75.3	61.5	71.0	71.0	No	
15		2022-01-11	13:04:04	69.7	73.6	61.9	69.3	69.3	No	
16		2022-01-11	13:05:04	73.3	77.8	58.2	72.5	72.5	No	
17		2022-01-11	13:06:04	70.4	76.9	61.8	69.7	69.7	No	
18		2022-01-11	13:07:04	75.5	84.3	64.4	74.4	74.4	No	
19		2022-01-11	13:08:04	69.7	74.3	61.5	69.2	69.2	No	
20		2022-01-11	13:09:04	72.7	86.1	62.4	70.6	70.6	No	
21	Stop	2022-01-11	13:09:58							

File Name on Meter LxT\_Data.103

File Name on PC SLM\_0004437\_LxT\_Data\_103.00.ldbin

 Serial Number
 0004437

 Model
 SoundTrack LxT®

 Firmware Version
 2.404

User C. Sanchez

**Location** ST-6 RC Caltrain Park

Job Description RWC TD

Note

### Measurement

Description

 Start
 2022-01-11 13:12:23

 Stop
 2022-01-11 13:27:32

 Duration
 00:15:08.3

 Run Time
 00:15:08.3

 Pause
 00:00:00.0

Pre Calibration2022-01-1110:07:00Post CalibrationNoneCalibration Deviation----

### Overall Settings

RMS WeightA WeightingPeak WeightZ WeightingDetectorSlowPreampPRMLxT2BMicrophone CorrectionOffIntegration MethodLinearOverload142.5 dB

 A
 C
 Z

 Under Range Peak
 98.8
 95.8
 100.8 dB

 Under Range Limit
 37.2
 36.7
 43.5 dB

 Noise Floor
 28.0
 27.6
 34.3 dB

### Results

 LAeq
 62.5

 LAE
 92.1

 EA
 180.811 μPa²h

 EA8
 5.733 mPa²h

 EA40
 28.665 mPa²h

 LZpeak (max)
 2022-01-11 13:14:20

 LZpeak (max)
 2022-01-11 13:14:20
 98.4 dB

 LASmax
 2022-01-11 13:24:19
 74.4 dB

 LASmin
 2022-01-11 13:15:28
 50.7 dB

**SEA** -99.9 dB

 LAS > 85.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LAS > 115.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 135.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 137.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 140.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LCeq
 74.8 dB

 LAeq
 62.5 dB

 LCeq - LAeq
 12.2 dB

 LAleq
 64.9 dB

 LAeq
 62.5 dB

 LAleq - LAeq
 2.3 dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	TWA1	TWA2	OVLD	Marker
1	Run	2022-01-11	13:12:23							
2		2022-01-11	13:12:23	61.7	68.3	55.7	61.2	61.2	No	
3		2022-01-11	13:13:23	60.5	70.2	51.0	58.8	58.8	No	
4		2022-01-11	13:14:23	61.7	70.1	52.0	61.8	61.8	No	
5		2022-01-11	13:15:23	62.7	70.1	50.7	61.8	61.8	No	
6		2022-01-11	13:16:23	59.1	63.2	53.8	58.7	58.7	No	
7		2022-01-11	13:17:23	64.9	73.0	56.1	64.2	64.2	No	
8		2022-01-11	13:18:23	67.2	71.4	58.5	66.9	66.9	No	
9		2022-01-11	13:19:23	60.4	66.7	52.3	59.8	59.8	No	
10		2022-01-11	13:20:23	59.1	65.9	53.6	58.8	58.8	No	
11		2022-01-11	13:21:23	62.3	69.4	53.8	61.4	61.4	No	
12		2022-01-11	13:22:23	62.0	69.1	55.0	61.6	61.6	No	
13		2022-01-11	13:23:23	62.4	74.4	51.5	61.4	61.4	No	
14		2022-01-11	13:24:23	58.4	64.2	51.5	58.2	58.2	No	
15		2022-01-11	13:25:23	61.8	69.4	51.4	60.7	60.7	No	
16		2022-01-11	13:26:23	64.3	72.6	52.3	63.0	63.0	No	
17		2022-01-11	13:27:23	63.0	72.1	60.2	65.1	65.1	No	
18	Stop	2022-01-11	13:27:32							

Summary

File Name on Meter LxT Data.104 File Name on PC SLM\_0004437\_LxT\_Data\_104.00.ldbin **Serial Number** 0004437 SoundTrack LxT® Model **Firmware Version** 2.404

User C. Sanchez

Location ST-7 2601 Broadway SE corner

**Job Description RWCTD** 

Note

Measurement

Description

2022-01-11 13:30:13 Start 2022-01-11 13:45:15 Stop Duration 00:15:01.2 **Run Time** 00:15:01.2 Pause 00:00:00.0

**Pre Calibration** 2022-01-11 10:07:00 **Post Calibration Calibration Deviation** 

**Overall Settings** 

A Weighting **RMS Weight Peak Weight** Z Weighting Detector Slow PRMLxT2B Preamp Off **Microphone Correction Integration Method** Linear

Overload 142.5 dB

c z Α **Under Range Peak** 98.8 95.8 **100.8** dB **Under Range Limit** 37.2 36.7 43.5 dB 27.6 34.3 dB **Noise Floor** 28.0

Results

LAeq 59.9 LAE 89.4 EΑ  $97.779 \mu Pa^2h$ EA8 3.125 mPa<sup>2</sup>h **EA40** 15.624 mPa<sup>2</sup>h

LZpeak (max) 2022-01-11 13:30:43 97.8 dB **LAS**max 2022-01-11 13:37:40 74.5 dB 2022-01-11 13:42:14 47.8 dB LASmin

SEA -99.9 **dB** 

LAS > 85.0 dB (Exceedance Counts / Duration) 0 0.0 s LAS > 115.0 dB (Exceedance Counts / Duration) 0 0.0 s LZpeak > 135.0 dB (Exceedance Counts / Duration) 0 0.0 s LZpeak > 137.0 dB (Exceedance Counts / Duration) 0 0.0 s LZpeak > 140.0 dB (Exceedance Counts / Duration) 0 0.0 s

72.9 dB **LCeq** LAeq 59.9 dB 13.0 dB LCeq - LAeq LAleq 62.1 dB LAeq 59.9 dB LAleq - LAeq 2.2 dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	TWA1	TWA2	OVLD	Marker
1	Run	2022-01-11	13:30:13							
2		2022-01-11	13:30:13	59.1	66.0	55.8	58.7	58.7	No	
3		2022-01-11	13:31:13	64.5	72.5	57.9	63.8	63.8	No	
4		2022-01-11	13:32:13	53.4	61.2	50.7	53.4	53.4	No	
5		2022-01-11	13:33:13	56.7	61.6	53.8	56.6	56.6	No	
6		2022-01-11	13:34:13	53.3	60.6	49.0	52.9	52.9	No	
7		2022-01-11	13:35:13	56.4	62.3	51.0	55.9	55.9	No	
8		2022-01-11	13:36:13	59.9	66.5	58.0	59.8	59.8	No	
9		2022-01-11	13:37:13	67.4	74.5	55.7	66.7	66.7	No	
10		2022-01-11	13:38:13	56.0	60.7	50.8	55.8	55.8	No	
11		2022-01-11	13:39:13	56.3	62.9	48.4	55.5	55.5	No	
12		2022-01-11	13:40:13	52.8	59.7	48.2	52.3	52.3	No	
13		2022-01-11	13:41:13	53.3	61.9	48.1	52.7	52.7	No	
14		2022-01-11	13:42:13	55.6	62.8	47.8	54.5	54.5	No	
15		2022-01-11	13:43:13	55.5	64.2	49.3	55.1	55.1	No	
16		2022-01-11	13:44:13	60.9	71.5	49.5	59.0	59.0	No	
17		2022-01-11	13:45:13	49.7	51.7	50.4	51.0	51.0	No	
18	Stop	2022-01-11	13:45:15							

Summary

File Name on Meter LxT\_Data.105

File Name on PC SLM\_0004437\_LxT\_Data\_105.00.ldbin

 Serial Number
 0004437

 Model
 SoundTrack LxT®

 Firmware Version
 2.404

User C. Sanchez
Location ST-8 75 Perry Street

Job Description RWC TD

Note

## Measurement

Description

 Start
 2022-01-11
 13:49:42

 Stop
 2022-01-11
 14:04:45

 Duration
 00:15:02.5

 Run Time
 00:15:02.5

 Pause
 00:00:00.0

Pre Calibration 2022-01-11 10:07:00
Post Calibration None
Calibration Deviation ---

## Overall Settings

RMS WeightA WeightingPeak WeightZ WeightingDetectorSlowPreampPRMLxT2BMicrophone CorrectionOffIntegration MethodLinearOverload142.5 dB

 A
 C
 Z

 Under Range Peak
 98.8
 95.8
 100.8 dB

 Under Range Limit
 37.2
 36.7
 43.5 dB

 Noise Floor
 28.0
 27.6
 34.3 dB

# Results

 $\begin{array}{ccc} \textbf{LAeq} & & & 67.8 \\ \textbf{LAE} & & 97.3 \\ \textbf{EA} & & 602.812 \ \mu \text{Pa}^2 \text{h} \\ \textbf{EA8} & & 19.237 \ \text{mPa}^2 \text{h} \\ \textbf{EA40} & & 96.183 \ \text{mPa}^2 \text{h} \\ \end{array}$ 

 LZpeak (max)
 2022-01-11
 13:50:52
 108.4 dB

 LASmax
 2022-01-11
 13:50:52
 92.2 dB

 LASmin
 2022-01-11
 13:58:50
 46.6 dB

**SEA** -99.9 dB

 LAS > 85.0 dB (Exceedance Counts / Duration)
 1
 4.9 s

 LAS > 115.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 135.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 137.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 140.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LCeq
 73.9 dB

 LAeq
 67.8 dB

 LCeq - LAeq
 6.1 dB

 LAleq
 71.0 dB

 LAeq
 67.8 dB

 LAleq - LAeq
 3.2 dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	TWA1	TWA2	OVLD	Marker
1	Run	2022-01-11	13:49:42							
2		2022-01-11	13:49:42	62.7	69.1	53.9	62.1	62.1	No	
3		2022-01-11	13:50:42	78.8	92.2	54.5	74.8	74.8	No	
4		2022-01-11	13:51:42	58.5	70.1	49.5	56.8	56.8	No	
5		2022-01-11	13:52:42	58.2	66.7	50.6	57.4	57.4	No	
6		2022-01-11	13:53:42	56.8	63.9	47.1	55.8	55.8	No	
7		2022-01-11	13:54:42	65.8	77.7	48.6	62.1	62.1	No	
8		2022-01-11	13:55:42	60.9	70.6	47.2	59.5	59.5	No	
9		2022-01-11	13:56:42	54.6	65.0	48.2	53.3	53.3	No	
10		2022-01-11	13:57:42	51.8	57.9	46.9	51.4	51.4	No	
11		2022-01-11	13:58:42	48.9	53.6	46.6	48.8	48.8	No	
12		2022-01-11	13:59:42	54.1	65.9	47.0	52.5	52.5	No	
13		2022-01-11	14:00:42	48.9	53.4	47.0	48.8	48.8	No	
14		2022-01-11	14:01:42	55.8	66.7	47.5	54.2	54.2	No	
15		2022-01-11	14:02:42	56.5	60.1	51.3	56.1	56.1	No	
16		2022-01-11	14:03:42	66.1	76.7	54.8	64.1	64.1	No	
17		2022-01-11	14:04:42	62.1	63.4	61.4	62.6	62.6	No	
18	Stop	2022-01-11	14:04:45							

Summary

 File Name on Meter
 LxT\_Data.106

 File Name on PC
 SLM\_0004437\_LxT\_Data\_106.00.ldbin

 Serial Number
 0004437

 Model
 SoundTrack LxT®

 Firmware Version
 2.404

User C. Sanchez

**Location** ST-9 Arguello across from 291 Marshall

Job Description RWC TD

Note

## Measurement

Description

 Start
 2022-01-11 14:10:12

 Stop
 2022-01-11 14:25:13

 Duration
 00:15:01.4

 Run Time
 00:14:45.5

 Pause
 00:00:15:9

Pre Calibration 2022-01-11 10:07:00
Post Calibration None
Calibration Deviation ---

## Overall Settings

RMS Weight A Weighting
Peak Weight Z Weighting
Detector Slow
Preamp PRMLxT2B
Microphone Correction Off
Integration Method Linear
Overload 142.5 dB
A

 A
 C
 Z

 Under Range Peak
 98.8
 95.8
 100.8
 dB

 Under Range Limit
 37.2
 36.7
 43.5
 dB

 Noise Floor
 28.0
 27.6
 34.3
 dB

# Results

 LAeq
 74.4

 LAE
 103.9

 EA
 2.735 mPa²h

 EA8
 88.956 mPa²h

 EA40
 444.779 mPa²h

 LZpeak (max)
 2022-01-11
 14:18:35
 112.7 dB

 LASmax
 2022-01-11
 14:18:16
 97.2 dB

 LASmin
 2022-01-11
 14:15:18
 47.4 dB

SEA -99.9 dB

 LAS > 85.0 dB (Exceedance Counts / Duration)
 4
 16.7 s

 LAS > 115.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 135.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 137.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LZpeak > 140.0 dB (Exceedance Counts / Duration)
 0
 0.0 s

 LCeq
 79.7 dB

 LAeq
 74.4 dB

 LCeq - LAeq
 5.3 dB

 LAleq
 76.7 dB

 LAeq
 74.4 dB

 LAleq - LAeq
 2.3 dB

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	TWA1	TWA2	OVLD	Marker
1	Run	2022-01-11	14:10:12							
2		2022-01-11	14:10:12	53.0	57.8	48.9	52.9	52.9	No	
3		2022-01-11	14:11:12	57.3	66.8	47.9	55.8	55.8	No	
4		2022-01-11	14:12:12	52.5	57.7	48.5	52.3	52.3	No	
5		2022-01-11	14:13:12	54.2	60.4	50.3	53.9	53.9	No	
6		2022-01-11	14:14:12	52.1	56.4	48.6	51.9	51.9	No	
7		2022-01-11	14:15:12	62.0	71.8	47.4	58.4	58.4	No	
8		2022-01-11	14:16:12	70.7	72.7	68.9	70.7	70.7	No	
9		2022-01-11	14:17:12	76.2	85.5	54.2	72.9	72.9	No	
10		2022-01-11	14:18:12	86.3	97.2	58.2	83.8	83.8	No	
11	Pause	2022-01-11	14:19:02							
12	Resume	2022-01-11	14:19:17							
13		2022-01-11	14:19:17	59.4	67.9	51.2	58.5	58.5	No	
14		2022-01-11	14:20:17	54.3	59.2	48.1	53.9	53.9	No	
15		2022-01-11	14:21:17	54.8	63.5	49.0	54.3	54.3	No	
16		2022-01-11	14:22:17	54.8	59.9	49.3	54.3	54.3	No	
17		2022-01-11	14:23:17	53.9	59.9	48.3	53.8	53.8	No	
18		2022-01-11	14:24:17	56.8	64.2	50.3	56.3	56.3	No	
19	Stop	2022-01-11	14:25:13							



# Appendix D Health Risk Assessment



## Sequoia Station - Construction data for AQ/HRA

Data from Applicant	Default/Calculated from CalEEMod	Calculated/Assumed by ESA					
Proposed Land Uses	CalEEMod Land Use	Size	Units	Area	Units	Site Area	Units
Residential		631	dwelling units (DU)	458,177	sqft	3.28	acres
Commercial Office		1230000	sqft	1230000	sqft	8.82	acres
Commercial Retail		173100	sqft	173100	sqft	0.00	acres
Coomon area & amenities		170,923	sqft	170,923	sqft	0.00	acres
Parking		2710	spaces	1001300	sqft	0.00	acres

Project Site Area	12.10 acres
Building area to be demolished	190000 sqft
Demolition area - Phase 1	40000
Demolition area - Phase 2	150000
New asphalt area - Phase 1A	94,071 sqft
New concrete area - Phase 1A	53,131 sqft
New asphalt area - Phase 1B	32,315 sqft
New concrete area - Phase 1B	24,136 sqft
New asphalt area - Pfase 2	30,400 sqft
New concrete area - Phase 2	53,205 sqft
Total proposed building area	3,033,500 sqft
Volume of material to be exported - Phase 1	186,058 cubic yards
Volume of material to be exported - Phase 2	290,152 cubic yards

From 2021.05.25\_project\_data\_sheet.pdf From 2021.05.25\_project\_data\_sheet.pdf

160169 From 2021-0716 Existing Tenants List for Planning.docx

#### **Construction schedule**

Start date of construction - Phase 1	7/3/2023	From 2021-0716 Existing Tenants List for Planning.docx
	7/1/2025	From 2021-0716 Existing Tenants List for Planning.docx
First year of operation	2029	

Construction Phase/Sub-phase	From	То	# of workdays
Phase 1 Demolition	7/3/2023	9/2/2023	54
Phase 1 Excavation & Grading	9/3/2023	1/26/2024	125
Phase 1 Piles	NA	NA	NA
Phase 1 Trenching	1/27/2024	2/10/2024	13
Phase 1 Core & Shell	2/11/2024	6/12/2025	418
Phase 1 Interiors	6/13/2025	1/3/2026	176
Phase 1 Sitework	1/4/2026	5/12/2026	110
Phase 1 Nightwork Unloading	7/3/2023	9/4/2023	55
Phase 1 Nightwork Utilties	9/5/2023	10/9/2023	30
Phase 1 Nightwork Concrete Pour	10/10/2023	10/23/2023	12
Phase 1 - Total	7/3/2023	5/12/2026	896
Phase 2 Demolition	7/1/2025	7/23/2025	20
Phase 2 Excavation & Grading	7/24/2025	2/18/2026	180
Phase 2 Piles	NA	NA	NA
Phase 2 Trenching	2/19/2026	3/16/2026	22
Phase 2 Core & Shell	3/17/2026	9/6/2027	462
Phase 2 Interiors	9/7/2027	7/10/2028	264
Phase 2 Sitework	7/11/2028	12/20/2028	140
Phase 2 Nightwork Unloading	7/1/2025	8/4/2025	30
Phase 2 Nightwork Utilties	8/5/2025	9/8/2025	30
Phase 2 Nightwork Concrete Pour	9/9/2025	9/15/2025	6
Phase 2 - Total			907

Phase 1 duration (2023 - 2025) extends up to mid-2026 with no overlapping of phases

Conservatively assumed to occur in 2023, the first construction year of Phase 1

Phase 2 duration (2025 - 2027) extends up to end of 2028 with no overlapping of phases

Conservatively assumed to occur in 2025, the first construction year of Phase 2

Construction Sub-phase	Number of workers/day	One-way worker trips/day	vendor trips/day	Truck trips/day	One-way Truck trips/phase	HHDT	MHDT
Phase 1 Demolition	15	30	0	25	1350	1026	324
Phase 1 Excavation & Grading	50	100	0	146	36500	13750	4500
Phase 1 Piles	0	0	0	0	0	0	0
Phase 1 Trenching	6	12	0	6	78	39	39
Phase 1 Core & Shell	200	400	0	49	20482	15466	5016
Phase 1 Interiors	400	800	0	97	17072	12848	4224
Phase 1 Sitework	40	80	0	25	2750	2090	660
Phase 1 Hauling	2	4	0	49	3920	2960	960
Phase 1 Nightwork Unloading	4	8	0	0	0	0	0
Phase 1 Nightwork Utilties	10	20	0	0	0	0	0
Phase 1 Nightwork Concrete Pour	6	12	0	0	0	0	0
Phase 2 Demolition	15	30	0	25	500	380	120
Phase 2 Excavation & Grading	75	150	0	158	28440	21240	7200
Phase 2 Piles	0	0	0	0	0	0	0
Phase 2 Trenching	6	12	0	6	132	66	66
Phase 2 Core & Shell	250	500	0	73	33726	25410	8316
Phase 2 Interiors	500	1000	0	145	38280	29040	9240
Phase 2 Sitework	60	120	0	36	5040	3780	1260
Phase 2 Hauling	30	60	0	74	8140	6160	1980
Phase 2 Nightwork Unloading	4	8	0	0	0	0	0
Phase 2 Nightwork Utilties	10	20	0	0	0	0	0
Phase 2 Nightwork Concrete Pour	6	12	0	0	0	0	0

**Construction Equipment** 

Construction Equipment						1
Construction Equipment	CalEEMd Equivalent Equipment	Fuel	Number	Horsepower	Hrs/day used	Days Used/phase
Phase 1 Demolition		B		0.4		
Concrete Saw	Concrete/Industrial Saws	Diesel	4	81	6	54
Excavator	Excavators	Diesel	2	162	8	54
Rubber Tired Dozer	Rubber Tired Dozers	Diesel	1	255	8	54
Air Compressor	Air Compressors	Diesel	2	78	8	54
Tractor/Loader/Backhoe	Tractors/Loaders/Backhoes	Diesel	2	97	8	54
Phase 1 Excavation & Grading						
Excavator	Excavators	Diesel	4	162	8	125
Crawler Tractor	Off-Highway Tractors	Diesel	0	97	8	125
Mini Excavator	Excavators	Diesel	4	55	8	125
Drill Rig	Bore/Drill Rigs	Diesel	2	205	8	125
Air Compressor	Air Compressors	Diesel	2	78	8	125
Tractor/Loader/Backhoe	Tractors/Loaders/Backhoes	Diesel	2	97	8	125
Phase 1 Piles			•	•		
Pile Driver/Drill Rig	Bore/Drill Rigs	Diesel	5	205	8	NA
Phase 1 Trenching	3.		_		-	
Tractor/Loader/Backhoe	Tractors/Loaders/Backhoes	Diesel	4	97	5	13
Excavator	Excavators	Diesel	2	162	4	13
Air Compressor	Air Compressors	Diesel	2	78	8	13
	Generator Sets	Diesel	6	84	8	13
Generator Blate Compactors	Plate Compactors		5		2	13
Plate Compactors	Plate Compactors	Diesel	5	8	2	13
Phase 1 Core & Shell					1	
Crawler Crane	Cranes	Diesel	1	226	8	418
Man & Material Dual Car Lift	Forklifts	Electric	4	356	8	418
Aerial Lift	Aerial Lifts	Electric	12	62	4	418
Welder	Welders	Diesel	10	46	8	418
Generator	Generator Sets	Diesel	8	84	8	418
Air Compressor	Air Compressors	Diesel	6	78	2	418
Rough Terrain Fork Lift	Rough Terrain Forklifts	Diesel	10	100	4	418
Phase 1 Interiors						
Air Compressor	Air Compressors	Diesel	5	78	4	176
Man & Material Lift	Forklifts	Electric	6	226	8	176
Scissor Lift	Forklifts	Electric	45	62	8	176
Phase 1 Sitework						
Paver	Pavers	Diesel	2	125	8	110
Air Compressor	Air Compressors	Diesel	2	78	8	110
Grader	Graders	Diesel	2	174	8	110
Roller	Rollers	Diesel	2	80	8	110
Tractor/Loader/Backhoe	Tractors/Loaders/Backhoes	Diesel	2	97	8	110
		Diesel	4	60		110
Bobcat	Skid Steer Loaders				8	
Rough Terrain Fork Lift	Rough Terrain Forklifts	Diesel	2	100	8	110
Phase 2 Demolition	<u> </u>			1		
Excavator	Excavators	Diesel	1	162	8	20
Air Compressor	Air Compressors	Diesel	2	78	8	20
Rubber Tired Dozer	Rubber Tired Dozers	Diesel	1	255	8	20
Tractor/Loader/Backhoe	Tractors/Loaders/Backhoes	Diesel	1	97	8	20
Phase 2 Excavation & Grading						
Air Compressor	Air Compressors	Diesel	2	78	8	180
Excavator	Excavators	Diesel	2	162	8	180
Crawler Tractor	Off-Highway Tractors	Diesel	2	97	8	180
Mini Excavator	Excavators	Diesel	2	55	8	180
Phase 2 Piles	•					
Air Compressor	Air Compressors	Diesel	2	78	8	NA
Pile Driver/Drill Rig	Bore/Drill Rigs	Diesel	3	205	8	NA NA
Phase 2 Trenching	/	5.6561	·			-111
Tractor/Loader/Backhoe	Tractors/Loaders/Backhoes	Diesel	3	97	5	22
			3	162	4	22
Excavator	Excavators Congretor Sets	Diesel				
Generator	Generator Sets	Diesel	3	84	8	22

Not included as phase duration not provided

Not included as phase duration not provided Not included as phase duration not provided

Construction Equipment	CalEEMd Equivalent Equipment	Fuel	Number	Horsepower	Hrs/day used	Days Used/phase
Plate Compactors	Plate Compactors	Diesel	6	8	2	22
Air Compressor	Air Compressors	Diesel	2	78	8	22
Phase 2 Core & Shell						
Tower Crane	Cranes	Electric	3	226	8	462
Man & Material Lift	Forklifts	Electric	3	226	8	462
Aerial Lift	Aerial Lifts	Electric	6	62	4	462
Welder	Welders	Diesel	6	46	8	462
Generator	Generator Sets	Diesel	6	84	8	462
Air Compressor	Air Compressors	Diesel	3	78	2	462
Rough Terrain Fork Lift	Rough Terrain Forklifts	Diesel	6	100	4	462
Phase 2 Interiors						
Air Compressor	Air Compressors	Diesel	3	78	4	264
Man & Material Lift	Forklifts	Electric	3	226	8	264
Scissor Lift	Forklifts	Electric	30	62	8	264
Phase 2 Sitework						
Paver	Pavers	Diesel	1	125	8	140
Grader	Graders	Diesel	1	174	8	140
Roller	Rollers	Diesel	1	80	8	140
Tractor/Loader/Backhoe	Tractors/Loaders/Backhoes	Diesel	1	97	8	140
Bobcat	Skid Steer Loaders	Diesel	2	60	8	140
Air Compressor	Air Compressors	Diesel	2	78	8	140
Rough Terrain Fork Lift	Rough Terrain Forklifts	Diesel	1	100	8	140

**Construction Equipment - Night Work** 

Construction Equipment	CalEEMd Equivalent Equipment	Fuel	Number	Horsepower	Hrs/night used	Nights Used/phase	Adjusted hrs/day
Phase 1 Unloading Materials							
Tractor/loader/backhoe	Tractors/Loaders/Backhoes	Diesel	1	97	8	55	8.0
Tower crane	Cranes	Electric	1	226	8	55	8.0
Phase 1 Utility Connections							
Tractor/loader/backhoe	Tractors/Loaders/Backhoes	Diesel	1	97	8	30	8.0
Generator	Generator Sets	Diesel	1	84	8	30	8.0
Plate Compactor	Plate Compactors	Diesel	1	8	8	10	2.7
Paver	Pavers	Diesel	1	125	8	5	1.3
Roller	Rollers	Diesel	1	80	8	5	1.3
Phase 1 Concrete Pour							
Concrete mix trucks	Off-Highway Trucks	Diesel	1	402	12	12	12.0
Concrete pumps	Pumps	Diesel	1	84	12	12	12.0
Power trowels	Other Construction Equipment	Diesel	1	172	12	12	12.0
Phase 2 Unloading Materials				·		-	
Tractor/loader/backhoe	Tractors/Loaders/Backhoes	Diesel	1	97	8	30	8.0
Tower crane	Cranes	Electric	1	226	8	30	8.0
Phase 2 Utility Connections							
Tractor/loader/backhoe	Tractors/Loaders/Backhoes	Diesel	1	97	8	30	8.0
Generator	Generator Sets	Diesel	1	84	8	30	8.0
Plate Compactor	Plate Compactors	Diesel	1	8	8	10	2.7
Paver	Pavers	Diesel	1	125	8	5	1.3
Roller	Rollers	Diesel	1	80	8	5	1.3
Phase 2 Concrete Pour							
Concrete mix trucks	Off-Highway Trucks	Diesel	1	402	12	6	12.0
Concrete pumps	Pumps	Diesel	1	84	12	6	12.0
Power trowels	Other Construction Equipment	Diesel	1	172	12	6	12.0

# **CONSTRUCTION EMISSION SUMMARIES - Sequoia Station**

## **UNCONTROLLED CONSTRUCTION EMISSIONS - Criteria Air Pollutants**

W	No. of Construction		Tons over Cor	struction Period	Average Pounds per day					
Year	Wokdays	ROG NOx		Exhaust PM-10 Exhaust PM-2.5		ROG	NOx	Exhaust PM-10	Exhaust PM-2.5	
2023	156	0.27	0.27 3.64		0.10	3.4	46.6	1.3	1.2	
2024	314	0.99	8.06	0.28	0.28	6.3	51.3	1.8	1.8	
2025	313	12.57	12.57 7.03		0.19	80.4 44.9	44.9	1.2	1.2	
2026	313	0.97	6.70	0.21	0.20	6.2	42.8	1.3	1.3	
2027	313	5.13	4.70	0.12	0.12	32.7	30.0	0.8	0.8	
2028	2028 304		2.70	0.06	0.06	51.0	17.8	0.4	0.4	
2023 - 2028	2023 - 2028 1713 27.69 32.81		0.97	0.97 0.94		38.3	1.1	1.1		
2023 - 2027	1409	27.69	32.81	0.97	0.94	39.3	46.6	1.4	1.3	

#### CONSTRUCTION EMISSIONS - Criteria Air Pollutants - Tier 4 Final for all equipment

	Short control Emissions Circuit Air Chiatans Title 4 Time for an equipment													
Year	No. of Construction		Average Pounds per day											
Teal	Wokdays <sup>1</sup>	ROG	NOx	Exhaust PM-10	Exhaust PM-2.5	ROG NOx		Exhaust PM-10	Exhaust PM-2.5					
2023	156	0.11	2.15	0.018	0.018	1.4	27.6	0.2	0.2					
2024	314	0.33	3.19	0.031	0.030	2.1	20.3	0.2	0.2					
2025	313	12.15	12.15 3.84		0.033	77.7	24.5	0.2	0.2					
2026	313	0.52	3.06	0.029	0.029	3.3	19.6	0.2	0.2					
2027	313	4.84	2.57	0.023	0.022	30.9	16.4	0.1	0.1					
2028	2028 304 7.65 1.83		1.83	0.016	0.015	50.4	12.0	0.1	0.1					
2023 - 2028	1713	1713 25.61 16.64		0.15 0.15		29.9	19.4	0.2	0.2					
2023 - 2027	1409	25.61	16.64	0.15	0.15	36.3	23.6	0.2	0.2					

## PM<sub>10</sub> and PM<sub>2.5</sub> Emissions by year and phase (tons per year) - Unmitigated

Construction Year		Onsite Equi	pment	Onroad Vehicle	es (adjusted for mode	led length)	
Construction Year	Number of workdays	Exhaust PM <sub>10</sub> (DPM)	Exhaust PM <sub>2.5</sub>	Exhaust PM <sub>10</sub> (DPM)	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	
2023	156	0.092	0.087	2.39E-04	2.22E-03	2.34E-04	
2024	314	0.271	0.267	1.57E-04	4.05E-03	1.95E-04	
2025	313	0.173	0.169	3.54E-04	8.16E-03	4.21E-04	
2026	313	0.199	0.193	2.14E-04	5.22E-03	2.56E-04	
2027	313	0.109	0.108	2.29E-04	6.94E-03	2.88E-04	
2028	304	0.051	0.051	2.18E-04	6.23E-03	2.65E-04	
Total	1713	0.896	0.875	1.41E-03	3.28E-02	1.66E-03	
2023	156	0.099	0.097	1.56E-04	3.63E-03	1.84E-04	
2024	314	0.200	0.195	3.15E-04	7.31E-03	3.70E-04	
2025	313	0.199	0.194	3.14E-04	7.29E-03	3.69E-04	
2026	313	0.199	0.194	3.14E-04	7.29E-03	3.69E-04	
2027	313	0.199	0.194	3.14E-04	7.29E-03	3.69E-04	
Total	1409	0.896	0.875	1.41E-03	3.28E-02	1.66E-03	

trip length = 20 miles = 32186.8 feet
modeled length = 760 feet
Adj. factor = 0.023612164

PM<sub>10</sub> and PM<sub>2.5</sub> Emissions by year and phase (tons per year) - Mitigated

Construction Year	Number of workdays	Onsite Equi	pment	Onroad Vehicl	es (adjusted for mode	led length)	
Construction real	Number of workdays	Exhaust PM <sub>10</sub> (DPM)	Exhaust PM <sub>2.5</sub>	Exhaust PM <sub>10</sub> (DPM)	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	
2023	156	0.008	0.008	2.39E-04	2.22E-03	2.34E-04	
2024	314	0.022	0.022	1.57E-04	4.05E-03	1.95E-04	
2025	313	0.015	0.015	3.54E-04	8.16E-03	4.21E-04	
2026	313	0.018	0.018	2.14E-04	5.22E-03	2.56E-04	
2027	313	0.010	0.010	2.29E-04	6.94E-03	2.88E-04	
2028	304	0.004	0.004	2.18E-04	6.23E-03	2.65E-04	
Total	1713	0.077	0.077	1.41E-03	3.28E-02	1.66E-03	
2023	156	0.009	0.009	1.56E-04	3.63E-03	1.84E-04	
2024	314	0.017	0.017	3.15E-04	7.31E-03	3.70E-04	
2025	313	0.017	0.017	3.14E-04	7.29E-03	3.69E-04	
2026	313	0.017	0.017	3.14E-04	7.29E-03	3.69E-04	
2027	313	0.017	0.017	3.14E-04	7.29E-03	3.69E-04	
Total	Total 1409		0.077	1.41E-03	3.28E-02	1.66E-03	

# Sequoia Station - Construction Health Risk Assessment Modeled for receptor height of 7.5 m

Cancer Risk, Hazard Index and  $PM_{2.5}$  Concentration Calculations - Offsite Residential - Unmitigated

						Exp	osure Duration (	Days)					
					Start Date	7/3/2023	10/2/2023	10/2/2025		1	DPM	Exhaus	st PM <sub>2.5</sub>
					Stop Date	10/1/2023	10/1/2025			Emisions (tons)	Emission Rate (g/s)	Emisions (tons)	Emission Rate (g/s)
Source Description	Source ID	Year	Start Date	End Date	Calendar Days	3rd Trimester	0<2	2<9	Exposure Duration	Uncontrolled	Uncontrolled	Uncontrolled	Uncontrolled
Truck route 1 (and 3) - primary route	ARLN1	2023	7/3/2023	12/31/2023	182	90	90	1	181	0.00	0.000	0.00	0.000
Truck route 1 (and 3) - primary route	ARLN1	2024	1/1/2024	12/31/2024	366	0	365	1	366	0.00	0.000	0.00	0.000
Truck route 1 (and 3) - primary route	ARLN1	2025	1/1/2025	12/31/2025	365	0	273	92	365	0.00	0.000	0.00	0.000
Truck route 1 (and 3) - primary route	ARLN1	2026	1/1/2026	12/31/2026	365	0	0	365	365	0.00	0.000	0.00	0.000
Truck route 1 (and 3) - primary route	ARLN1	2027	1/1/2027	12/31/2027	365	0	0	365	365	0.00	0.000	0.00	0.000
Onsite construction	PAREA1	2023	7/3/2023	12/31/2023	182	90	90	1	181	0.10	0.012	0.10	0.012
Onsite construction	PAREA1	2024	1/1/2024	12/31/2024	366	0	365	1	366	0.20	0.012	0.19	0.012
Onsite construction	PAREA1	2025	1/1/2025	12/31/2025	365	0	273	92	365	0.20	0.012	0.19	0.012
Onsite construction	PAREA1	2026	1/1/2026	12/31/2026	365	0	0	365	365	0.20	0.012	0.19	0.012
Onsite construction	PAREA1	2027	1/1/2027	12/31/2027	365	0	0	365	365	0.20	0.012	0.19	0.012
Truck route 1 (and 3) - primary route	ARLN3	2023	7/3/2023	12/31/2023	182	90	90	1	181			0.00	0.000
Truck route 1 (and 3) - primary route	ARLN3	2024	1/1/2024	12/31/2024	366	0	365	1	366			0.01	0.000
Truck route 1 (and 3) - primary route	ARLN3	2025	1/1/2025	12/31/2025	365	0	273	92	365			0.01	0.000
Truck route 1 (and 3) - primary route	ARLN3	2026	1/1/2026	12/31/2026	365	0	0	365	365			0.01	0.000
Truck route 1 (and 3) - primary route	ARLN3	2027	1/1/2027	12/31/2027	365	0	0	365	365			0.01	0.000

Fug PM2.5

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## **Cancer Risk Factors**

	Abbreviation	UOM	3rd Trimester	0<2	2<9
Daily Breathing Rate	DBR	L/kg-day	361	1090	631
Fraction Of Time At Home	FAH	unitless	1	1	1
Exposure Frequency	EF	days/year	0.96	0.96	0.96
Age Sensitivity Factor	ASF	unitless	10	10	3
Inhalation Absorption Factor	A	unitless	1	1	1
Conversion Factor	CF <sub>1</sub>	m³/L	0.001	0.001	0.001
Conversion Factor	CF <sub>2</sub>	μg/m³	0.001	0.001	0.001
Cancer Potency Factor (diesel exhaust)	CPF	mg/kg-day <sup>-1</sup>	1.1	1.1	1.1
Averaging Time (for residential exposure)	AT	years	70.00	70.00	70.00

SOURCE: Office of Environmental Health Hazard Assessment, 2015. Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments . February.

Daily breathing rate for residential receptor is based on the OEHHA 95th percentile moderate intensity breathing rates (OEHHA Table 5.7).

Fraction of time at home is set to values per OEHHA Table 8.4 for residential since the nearest school has an unmitigated cancer risk of <1 per million.

Inhalation cancer potency factor from OEHHA Table 7.1

## Hazard Index

MAX UNMITIGATED

Tiazara iliaex			
Chronic Inhalation	REL	μg/m³	5

Intake Factor for Inhalation, IF (m³/kg-day) = DBR\*FAH\*EF\*ED\*ASF\*A\*CF/AT

Source ID	3rd Trimester	0<2	2<9
ARLN1	0.012	0.037	0.000
ARLN1	0.000	0.149	0.000
ARLN1	0.000	0.112	0.007
ARLN1	0.000	0.000	0.026
ARLN1	0.000	0.000	0.026
PAREA1	0.012	0.037	0.000
PAREA1	0.000	0.149	0.000
PAREA1	0.000	0.112	0.007
PAREA1	0.000	0.000	0.026
PAREA1	0.000	0.000	0.026

Cancer Risk	UTM X	UTM Y
127.84	568105.16	4148770.16

Risk Calculation Part 1, R1 = IF\*CPF\*CF

3rd Tri	mester	0<2	2<9
1.34	E-05	4.05E-05	7.81E-08
0.00	E+00	1.64E-04	7.81E-08
0.00	E+00	1.23E-04	7.19E-06
0.00	E+00	0.00E+00	2.85E-05
0.00	E+00	0.00E+00	2.85E-05
1.34	E-05	4.05E-05	7.81E-08
0.00	E+00	1.64E-04	7.81E-08
0.00	E+00	1.23E-04	7.19E-06
0.00	E+00	0.00E+00	2.85E-05
0.00	E+00	0.00E+00	2.85E-05

H	UTM X	UTM Y
0.06	568105.16	4148770.16

Number of receptors exceeding threshold

M<sub>2.5</sub> Conc. UTM X UTM Y
0.310 568105.16 4148770.16

Dicrete receptor 1655 southeast of project site across Jefferson at Cardinal Apartments

 $PM_{2.5}$  concentration,  $C_{PM2.5}$  ( $\mu g/m^3$ ) - at max. HI receptor - Unmitigated

			Project Construction													
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	ARLN3	ARLN3	ARLN3	ARLN3	ARLN3
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDI	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
568105.16	4148770.160	0.000	0.000	0.000	0.000	0.000	0.308	0.308	0.308	0.308	0.308	0.002	0.002	0.002	0.002	0.002

PM<sub>2.5</sub> Conc. μg/m<sup>3</sup> Max. Annual

0.310

			Project Construction								
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
FC722F 4C	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567325.16 567345.16	4148290.16 4148290.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567365.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567565.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567685.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567705.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567725.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567745.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567765.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567785.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567805.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567825.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567845.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567865.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567885.16 567905.16	4148290.16 4148290.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.013 0.014	0.013 0.014	0.013 0.014	0.013 0.014	0.013 0.014
567925.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567945.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567965.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567985.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568005.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568025.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568045.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568065.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568085.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568105.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568125.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568145.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568165.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568185.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568205.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568225.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568245.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568265.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568285.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568305.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568325.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568345.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568365.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568385.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568405.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568425.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568445.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568465.16 568525.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
X575 Th	4148290.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017

Dick	Calc	ulation	Dart	2
KISK	Caic	ulation	Part	2

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.12E-08	5.18E-07	1.02E-07	0.64	0.000
2.25E-08	5.50E-07	1.08E-07	0.68	0.000
2.40E-08	5.86E-07	1.15E-07	0.73	0.000
2.56E-08	6.25E-07	1.23E-07	0.77	0.000
2.73E-08	6.67E-07	1.31E-07	0.83	0.000
2.93E-08	7.16E-07	1.41E-07	0.89	0.000
3.14E-08	7.68E-07	1.51E-07	0.95	0.000
3.38E-08	8.27E-07	1.62E-07	1.02	0.001
3.64E-08	8.91E-07	1.75E-07	1.10	0.001
3.94E-08	9.62E-07	1.89E-07	1.19	0.001
4.27E-08	1.04E-06	2.05E-07	1.29	0.001
4.63E-08	1.13E-06	2.22E-07	1.40	0.001
5.04E-08	1.23E-06	2.42E-07	1.52	0.001
5.48E-08	1.34E-06	2.63E-07	1.66	0.001
6.06E-08	1.48E-06	2.91E-07	1.83	0.001
6.54E-08	1.60E-06	3.14E-07	1.98	0.001
7.14E-08	1.74E-06	3.43E-07	2.16	0.001
8.51E-08	2.08E-06	4.09E-07	2.57	0.001
9.23E-08	2.26E-06	4.43E-07	2.79	0.001
1.00E-07	2.45E-06	4.82E-07	3.04	0.001
1.09E-07	2.66E-06	5.23E-07	3.29	0.002
1.18E-07	2.88E-06	5.65E-07	3.56	0.002
1.27E-07	3.10E-06	6.09E-07	3.83	0.002
1.37E-07	3.35E-06	6.58E-07	4.14	0.002
1.46E-07	3.58E-06	7.03E-07	4.43	0.002
1.55E-07	3.80E-06	7.46E-07	4.70	0.002
1.65E-07	4.02E-06	7.91E-07	4.98	0.002
1.74E-07	4.24E-06	8.34E-07	5.25	0.003
1.81E-07	4.43E-06	8.71E-07	5.48	0.003
1.88E-07	4.60E-06	9.05E-07	5.70	0.003
1.95E-07	4.77E-06	9.37E-07	5.90	0.003
2.00E-07	4.89E-06	9.61E-07	6.05	0.003
2.04E-07	4.98E-06	9.79E-07	6.16	0.003
2.07E-07	5.06E-06	9.94E-07	6.26	0.003
2.09E-07	5.12E-06	1.01E-06	6.33	0.003
2.10E-07	5.14E-06	1.01E-06	6.36	0.003
2.11E-07	5.15E-06	1.01E-06	6.37	0.003
2.11E-07	5.15E-06	1.01E-06	6.37	0.003
2.10E-07	5.14E-06	1.01E-06	6.36	0.003
2.10E-07 2.09E-07	5.13E-06	1.01E-06	6.35 6.33	0.003
	5.11E-06 5.09E-06	1.01E-06		0.003
2.08E-07		1.00E-06 9.96E-07	6.30	0.003 0.003
2.07E-07 2.07E-07	5.07E-06 5.06E-06	9.94E-07	6.27	
2.07E-07 2.07E-07	5.05E-06	9.94E-07 9.93E-07	6.26 6.25	0.003 0.003
2.07E-07 2.07E-07	5.06E-06	9.95E-07 9.95E-07	6.25 6.26	0.003
2.07E-07 2.08E-07	5.09E-06	1.00E-06	6.30	0.003
2.08E-07 2.09E-07	5.12E-06	1.00E-06	6.34	0.003
2.11E-07	5.15E-06	1.01E-06	6.38	0.003
2.11E-07 2.13E-07	5.20E-06	1.01E-06		
2.13E-07 2.15E-07	5.25E-06	1.02E-06 1.03E-06	6.44 6.50	0.003 0.003
2.13E-07 2.17E-07	5.23E-06 5.31E-06	1.03E-06 1.04E-06	6.58	0.003
2.17E-07 2.20E-07	5.31E-06 5.37E-06	1.04E-06 1.06E-06		
		1.06E-06 1.07E-06	6.65 6.73	0.003
2.23E-07	5.44E-06		6.73	0.003
2.25E-07	5.49E-06	1.08E-06	6.80 6.87	0.003
2.27E-07	5.55E-06 5.59E-06	1.09E-06	6.87 6.01	0.003
2.29E-07	5.59E-06 5.59E-06	1.10E-06	6.91 6.91	0.003
2.29E-07	5.59E-06	1.10E-06	6.91	0.003

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568545.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568565.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568585.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568605.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.017	0.016	0.016	0.016
568625.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568645.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568665.16 568685.16	4148290.16 4148290.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.016 0.015	0.016 0.015	0.016 0.015	0.016 0.015	0.016 0.015
568705.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568725.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567325.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567565.16 567585.16	4148310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
567605.16	4148310.16 4148310.16	0.000	0.000	0.000	0.000	0.000 0.000	0.004 0.005	0.004	0.004	0.004	0.004
567625.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567665.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567705.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567725.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567745.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567765.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567785.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567805.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567825.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567845.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567865.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567885.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567905.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567925.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567945.16 567965.16	4148310.16 4148310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.015 0.016	0.015 0.016	0.015 0.016	0.015 0.016	0.015 0.016
567985.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568005.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568025.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568045.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568065.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568085.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568105.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568125.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568145.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568165.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568185.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568205.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568225.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568245.16 568265.16	4148310.16 4148310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.017 0.017	0.017 0.017	0.017 0.017	0.017 0.017	0.017 0.017
568285.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568305.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568325.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568345.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568365.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568385.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568405.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568425.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568445.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568505.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.28E-07	F F0F 0C	1 105 06	6.01	0.003
2.28E-07 2.27E-07	5.58E-06 5.55E-06	1.10E-06 1.09E-06	6.91 6.87	0.003 0.003
2.25E-07	5.49E-06	1.09E-06	6.79	0.003
2.22E-07	5.41E-06	1.06E-06	6.70	0.003
2.18E-07	5.33E-06	1.05E-06	6.59	0.003
2.15E-07	5.26E-06	1.03E-06	6.51	0.003
2.11E-07	5.17E-06	1.02E-06	6.40	0.003
2.07E-07	5.06E-06	9.94E-07	6.26	0.003
2.03E-07	4.96E-06	9.75E-07	6.14	0.003
1.98E-07	4.85E-06	9.53E-07	6.00	0.003
2.12E-08	5.18E-07	1.02E-07	0.64	0.000
2.26E-08	5.51E-07	1.08E-07	0.68	0.000
2.40E-08 2.56E-08	5.87E-07 6.25E-07	1.15E-07 1.23E-07	0.73	0.000
2.74E-08	6.23E-07 6.70E-07	1.23E-07 1.32E-07	0.77 0.83	0.000 0.000
2.94E-08	7.18E-07	1.32L-07 1.41E-07	0.89	0.000
3.15E-08	7.70E-07	1.51E-07	0.95	0.000
3.40E-08	8.31E-07	1.63E-07	1.03	0.001
3.67E-08	8.97E-07	1.76E-07	1.11	0.001
3.96E-08	9.67E-07	1.90E-07	1.20	0.001
4.29E-08	1.05E-06	2.06E-07	1.30	0.001
4.66E-08	1.14E-06	2.24E-07	1.41	0.001
5.08E-08	1.24E-06	2.44E-07	1.54	0.001
5.57E-08	1.36E-06	2.68E-07	1.69	0.001
6.13E-08	1.50E-06	2.94E-07	1.85	0.001
6.69E-08	1.63E-06	3.21E-07	2.02	0.001
7.31E-08	1.79E-06	3.51E-07	2.21	0.001
7.97E-08	1.95E-06	3.83E-07	2.41	0.001
9.50E-08 1.03E-07	2.32E-06 2.53E-06	4.56E-07 4.97E-07	2.87 3.13	0.001 0.002
1.12E-07	2.75E-06	5.40E-07	3.40	0.002
1.22E-07	2.98E-06	5.86E-07	3.69	0.002
1.32E-07	3.23E-06	6.34E-07	3.99	0.002
1.43E-07	3.49E-06	6.85E-07	4.32	0.002
1.53E-07	3.75E-06	7.37E-07	4.64	0.002
1.64E-07	4.00E-06	7.86E-07	4.95	0.002
1.73E-07	4.24E-06	8.32E-07	5.24	0.003
1.83E-07	4.47E-06	8.79E-07	5.53	0.003
1.92E-07	4.69E-06	9.22E-07	5.81	0.003
2.00E-07	4.89E-06	9.61E-07	6.05	0.003
2.07E-07	5.07E-06	9.96E-07	6.27	0.003
2.13E-07	5.21E-06	1.02E-06	6.44	0.003
2.17E-07 2.20E-07	5.31E-06 5.38E-06	1.04E-06 1.06E-06	6.58 6.66	0.003 0.003
2.24E-07	5.47E-06	1.00E-06	6.77	0.003
2.25E-07	5.50E-06	1.08E-06	6.81	0.003
2.25E-07	5.50E-06	1.08E-06	6.81	0.003
2.25E-07	5.50E-06	1.08E-06	6.81	0.003
2.24E-07	5.49E-06	1.08E-06	6.79	0.003
2.24E-07	5.48E-06	1.08E-06	6.78	0.003
2.23E-07	5.46E-06	1.07E-06	6.75	0.003
2.22E-07	5.43E-06	1.07E-06	6.71	0.003
2.22E-07	5.42E-06	1.06E-06	6.70	0.003
2.22E-07	5.41E-06	1.06E-06	6.70	0.003
2.21E-07	5.40E-06	1.06E-06	6.68	0.003
2.22E-07	5.42E-06	1.07E-06	6.71 6.73	0.003
2.22E-07 2.24E-07	5.44E-06 5.48E-06	1.07E-06 1.08E-06	6.73 6.78	0.003 0.003
2.24E-07 2.26E-07	5.48E-06 5.53E-06	1.08E-06 1.09E-06	6.85	0.003
2.28E-07	5.58E-06	1.10E-06	6.90	0.003
2.31E-07	5.64E-06	1.11E-06	6.98	0.003
2.33E-07	5.70E-06	1.12E-06	7.06	0.003
2.36E-07	5.76E-06	1.13E-06	7.13	0.004
2.38E-07	5.82E-06	1.14E-06	7.20	0.004
2.41E-07	5.89E-06	1.16E-06	7.28	0.004
2.42E-07	5.92E-06	1.16E-06	7.32	0.004
2.42E-07	5.91E-06	1.16E-06	7.32	0.004

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568525.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568545.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568565.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568585.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568605.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568625.16 568665.16	4148310.16 4148310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.017 0.016	0.017 0.016	0.017 0.016	0.017 0.016	0.017 0.016
568685.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568705.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568725.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567325.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148330.16 4148330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16 567605.16	4148330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.005	0.004 0.005	0.004 0.005	0.004 0.005	0.004 0.005
567625.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567725.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567745.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567765.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567785.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567805.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567825.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567845.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567865.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567885.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567905.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567925.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567945.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567965.16 567985.16	4148330.16 4148330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.017 0.017	0.017 0.017	0.017 0.017	0.017 0.017	0.017 0.017
568005.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568025.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568045.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568065.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568085.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568105.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568125.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568145.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568165.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568185.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568205.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568225.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568245.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568265.16 568285.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568285.16 568305.16	4148330.16 4148330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.018 0.018	0.018 0.018	0.018	0.018 0.018	0.018 0.018
568305.16	4148330.16	0.000	0.000	0.000	0.000 0.000	0.000	0.018	0.018	0.018 0.018	0.018	0.018
568345.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568365.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568385.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568405.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568425.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568485.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568505.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568525.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019

	Cancer Risk = 5	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2 425 07	E 00E 00	1.165.06	7.24	0.004
2.42E-07 2.40E-07	5.90E-06 5.87E-06	1.16E-06 1.15E-06	7.31 7.27	0.004 0.004
2.36E-07	5.76E-06	1.13E-06	7.13	0.004
2.35E-07	5.73E-06	1.13E-06	7.10	0.004
2.32E-07	5.66E-06	1.11E-06	7.00	0.003
2.28E-07	5.57E-06	1.09E-06	6.89	0.003
2.19E-07	5.35E-06	1.05E-06	6.61	0.003
2.14E-07	5.23E-06	1.03E-06	6.47	0.003
2.09E-07	5.11E-06	1.00E-06	6.32	0.003
2.04E-07	4.98E-06	9.79E-07	6.17	0.003
2.12E-08	5.17E-07	1.02E-07	0.64	0.000
2.26E-08 2.40E-08	5.51E-07	1.08E-07	0.68	0.000
2.40E-08 2.57E-08	5.87E-07 6.27E-07	1.15E-07 1.23E-07	0.73 0.78	0.000 0.000
2.75E-08	6.71E-07	1.32E-07	0.78	0.000
2.94E-08	7.19E-07	1.41E-07	0.89	0.000
3.16E-08	7.73E-07	1.52E-07	0.96	0.000
3.41E-08	8.34E-07	1.64E-07	1.03	0.001
3.68E-08	9.00E-07	1.77E-07	1.11	0.001
3.99E-08	9.75E-07	1.92E-07	1.21	0.001
4.32E-08	1.05E-06	2.07E-07	1.30	0.001
4.70E-08	1.15E-06	2.26E-07	1.42	0.001
5.15E-08	1.26E-06	2.47E-07	1.56	0.001
5.67E-08	1.38E-06	2.72E-07	1.71	0.001
6.23E-08 6.83E-08	1.52E-06 1.67E-06	2.99E-07 3.28E-07	1.88 2.06	0.001 0.001
7.45E-08	1.82E-06	3.58E-07	2.25	0.001
8.13E-08	1.99E-06	3.90E-07	2.46	0.001
1.07E-07	2.61E-06	5.12E-07	3.23	0.002
1.17E-07	2.85E-06	5.60E-07	3.53	0.002
1.27E-07	3.10E-06	6.09E-07	3.83	0.002
1.38E-07	3.37E-06	6.62E-07	4.17	0.002
1.49E-07	3.64E-06	7.15E-07	4.50	0.002
1.60E-07	3.92E-06	7.71E-07	4.85	0.002
1.72E-07	4.21E-06	8.28E-07	5.21	0.003
1.83E-07	4.48E-06	8.80E-07	5.54	0.003
1.94E-07 2.04E-07	4.73E-06 4.98E-06	9.30E-07 9.80E-07	5.85 6.17	0.003
2.04E-07 2.13E-07	5.20E-06	1.02E-06	6.43	0.003 0.003
2.20E-07	5.38E-06	1.06E-06	6.66	0.003
2.27E-07	5.55E-06	1.09E-06	6.86	0.003
2.33E-07	5.69E-06	1.12E-06	7.04	0.003
2.36E-07	5.78E-06	1.14E-06	7.15	0.004
2.39E-07	5.84E-06	1.15E-06	7.23	0.004
2.41E-07	5.89E-06	1.16E-06	7.29	0.004
2.41E-07	5.90E-06	1.16E-06	7.30	0.004
2.41E-07	5.88E-06	1.16E-06	7.28	0.004
2.40E-07	5.87E-06	1.15E-06	7.26	0.004
2.39E-07	5.85E-06	1.15E-06	7.24	0.004
2.39E-07 2.38E-07	5.85E-06 5.82E-06	1.15E-06 1.14E-06	7.23 7.21	0.004 0.004
2.38E-07	5.82E-06 5.81E-06	1.14E-06 1.14E-06	7.21	0.004
2.37E-07	5.80E-06	1.14E-06	7.17	0.004
2.38E-07	5.80E-06	1.14E-06	7.18	0.004
2.38E-07	5.81E-06	1.14E-06	7.19	0.004
2.39E-07	5.84E-06	1.15E-06	7.23	0.004
2.40E-07	5.88E-06	1.15E-06	7.27	0.004
2.43E-07	5.94E-06	1.17E-06	7.35	0.004
2.46E-07	6.01E-06	1.18E-06	7.44	0.004
2.49E-07	6.07E-06	1.19E-06	7.52	0.004
2.51E-07	6.13E-06	1.20E-06	7.59 7.66	0.004
2.53E-07 2.56E-07	6.19E-06 6.25E-06	1.22E-06 1.23E-06	7.66 7.74	0.004 0.004
2.58E-07	6.30E-06	1.23E-06 1.24E-06	7.74 7.79	0.004
2.58E-07	6.30E-06	1.24E-06	7.79	0.004
2.56E-07	6.25E-06	1.23E-06	7.74	0.004
2.55E-07	6.23E-06	1.23E-06	7.71	0.004

						Project	: Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568545.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568565.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568585.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568605.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568625.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568645.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568665.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568685.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568705.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568725.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567325.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16 567465.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16 567485.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16 567525.16	4148350.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.003	0.003 0.003	0.003 0.003	0.003	0.003 0.003
567525.16 567545.16	4148350.16 4148350.16	0.000 0.000	0.000		0.000	0.000 0.000	0.003 0.004	0.003	0.003	0.003 0.004	0.003
567545.16 567565.16	4148350.16 4148350.16	0.000	0.000	0.000 0.000	0.000		0.004	0.004	0.004	0.004	0.004
567585.16 567585.16	4148350.16	0.000	0.000	0.000	0.000	0.000 0.000	0.004	0.004	0.004	0.004	0.004
567585.16 567605.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16 567625.16	4148350.16 4148350.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.003	0.005	0.003	0.006	0.006
567665.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567685.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007
567745.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.009	0.009	0.009
567765.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567785.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567805.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.012	0.011	0.012
567825.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.013	0.013
567845.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.013	0.014	0.014	0.014	0.014
567865.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567885.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567905.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567925.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567945.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567965.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567985.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568005.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568025.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568045.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568065.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568085.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568105.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568125.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568145.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568165.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568185.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568205.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568225.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568245.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568265.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568285.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568305.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568325.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568345.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568365.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568385.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568405.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568485.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568505.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568525.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568545.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020

	Cancer Risk =	∑R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
		4.045.00		
2.52E-07	6.17E-06	1.21E-06	7.63	0.004
2.47E-07 2.43E-07	6.04E-06 5.94E-06	1.19E-06 1.17E-06	7.48 7.34	0.004 0.004
2.43L-07 2.39E-07	5.84E-06	1.17E-06	7.34	0.004
2.36E-07	5.77E-06	1.13E-06	7.15	0.004
2.32E-07	5.66E-06	1.11E-06	7.01	0.003
2.26E-07	5.51E-06	1.08E-06	6.82	0.003
2.21E-07	5.39E-06	1.06E-06	6.67	0.003
2.15E-07	5.26E-06	1.03E-06	6.51	0.003
2.09E-07	5.11E-06	1.00E-06	6.33	0.003
2.12E-08	5.17E-07	1.02E-07	0.64	0.000
2.25E-08	5.50E-07	1.08E-07	0.68	0.000
2.40E-08 2.57E-08	5.87E-07 6.28E-07	1.15E-07 1.23E-07	0.73 0.78	0.000 0.000
2.75E-08	6.71E-07	1.32E-07	0.78	0.000
2.95E-08	7.20E-07	1.41E-07	0.89	0.000
3.18E-08	7.76E-07	1.53E-07	0.96	0.000
3.42E-08	8.36E-07	1.64E-07	1.03	0.001
3.70E-08	9.04E-07	1.78E-07	1.12	0.001
4.02E-08	9.82E-07	1.93E-07	1.22	0.001
4.35E-08	1.06E-06	2.09E-07	1.32	0.001
4.75E-08	1.16E-06	2.28E-07	1.44	0.001
5.21E-08 5.72E-08	1.27E-06 1.40E-06	2.50E-07 2.75E-07	1.57	0.001
6.30E-08	1.40E-06 1.54E-06	3.03E-07	1.73 1.90	0.001 0.001
6.89E-08	1.68E-06	3.31E-07	2.08	0.001
7.50E-08	1.83E-06	3.60E-07	2.27	0.001
8.25E-08	2.02E-06	3.96E-07	2.50	0.001
9.10E-08	2.22E-06	4.37E-07	2.75	0.001
1.20E-07	2.94E-06	5.78E-07	3.64	0.002
1.32E-07	3.22E-06	6.33E-07	3.98	0.002
1.43E-07	3.50E-06	6.89E-07	4.34	0.002
1.56E-07	3.81E-06	7.48E-07	4.71	0.002
1.68E-07 1.81E-07	4.12E-06 4.43E-06	8.09E-07 8.70E-07	5.10 5.48	0.003 0.003
1.94E-07	4.74E-06	9.32E-07	5.87	0.003
2.06E-07	5.03E-06	9.88E-07	6.22	0.003
2.16E-07	5.29E-06	1.04E-06	6.55	0.003
2.27E-07	5.54E-06	1.09E-06	6.86	0.003
2.35E-07	5.75E-06	1.13E-06	7.11	0.004
2.43E-07	5.93E-06	1.17E-06	7.34	0.004
2.49E-07	6.09E-06	1.20E-06	7.54	0.004
2.54E-07 2.56E-07	6.21E-06 6.27E-06	1.22E-06 1.23E-06	7.68 7.76	0.004 0.004
2.59E-07	6.32E-06	1.24E-06	7.70	0.004
2.59E-07	6.34E-06	1.25E-06	7.85	0.004
2.58E-07	6.31E-06	1.24E-06	7.81	0.004
2.58E-07	6.31E-06	1.24E-06	7.80	0.004
2.57E-07	6.28E-06	1.23E-06	7.77	0.004
2.56E-07	6.25E-06	1.23E-06	7.74	0.004
2.56E-07	6.25E-06	1.23E-06	7.73	0.004
2.55E-07 2.55E-07	6.24E-06	1.23E-06	7.72	0.004
2.55E-07 2.55E-07	6.23E-06 6.22E-06	1.22E-06 1.22E-06	7.71 7.70	0.004 0.004
2.56E-07	6.26E-06	1.23E-06	7.74	0.004
2.57E-07	6.28E-06	1.23E-06	7.77	0.004
2.59E-07	6.33E-06	1.24E-06	7.83	0.004
2.62E-07	6.40E-06	1.26E-06	7.92	0.004
2.65E-07	6.47E-06	1.27E-06	8.01	0.004
2.68E-07	6.55E-06	1.29E-06	8.11	0.004
2.71E-07	6.61E-06	1.30E-06	8.18	0.004
2.73E-07	6.66E-06	1.31E-06	8.24	0.004
2.75E-07 2.74E-07	6.72E-06 6.69E-06	1.32E-06 1.32E-06	8.31 8.28	0.004 0.004
2.74L-07 2.71E-07	6.62E-06	1.30E-06	8.20	0.004
2.69E-07	6.57E-06	1.29E-06	8.12	0.004
2.65E-07	6.49E-06	1.27E-06	8.03	0.004

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568565.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568585.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568605.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568625.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568645.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018 0.017
568665.16 568685.16	4148350.16 4148350.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.017 0.017	0.017 0.017	0.017 0.017	0.017 0.017	0.017
568705.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568725.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567325.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148370.16 4148370.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.004	0.004 0.005	0.004 0.005	0.004 0.005	0.004 0.005
567605.16 567625.16	4148370.16	0.000 0.000	0.000	0.000	0.000	0.000 0.000	0.005 0.005	0.005	0.005	0.005	0.005
567645.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.003	0.003	0.006
567665.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567685.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567705.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567765.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567785.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567805.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567825.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567845.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567865.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567885.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567905.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567925.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567945.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567965.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567985.16 568005.16	4148370.16 4148370.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.020 0.020	0.020 0.020	0.020 0.020	0.020 0.020	0.020 0.020
568025.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568045.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568065.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568085.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568105.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568125.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568145.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568165.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568185.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.020	0.021	0.021	0.021	0.021
568205.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568225.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568245.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568265.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568285.16 568205.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568305.16 568325.16	4148370.16 4148370.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.021 0.021	0.021 0.021	0.021 0.021	0.021 0.021	0.021 0.021
568325.16 568345.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568365.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568385.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568445.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568465.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568485.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568505.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568525.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568545.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2 505 07	C 225 0C	1 245 06	7.02	0.004
2.59E-07 2.54E-07	6.33E-06 6.21E-06	1.24E-06 1.22E-06	7.83 7.69	0.004 0.004
2.50E-07	6.10E-06	1.22E-06 1.20E-06	7.55	0.004
2.45E-07	5.99E-06	1.18E-06	7.41	0.004
2.39E-07	5.85E-06	1.15E-06	7.24	0.004
2.34E-07	5.71E-06	1.12E-06	7.06	0.003
2.27E-07	5.55E-06	1.09E-06	6.87	0.003
2.21E-07	5.39E-06	1.06E-06	6.67	0.003
2.14E-07	5.23E-06	1.03E-06	6.47	0.003
2.11E-08	5.16E-07	1.01E-07	0.64	0.000
2.25E-08	5.49E-07	1.08E-07	0.68	0.000
2.40E-08 2.57E-08	5.87E-07 6.27E-07	1.15E-07 1.23E-07	0.73 0.78	0.000 0.000
2.75E-08	6.71E-07	1.32E-07	0.78	0.000
2.95E-08	7.22E-07	1.42E-07	0.89	0.000
3.18E-08	7.77E-07	1.53E-07	0.96	0.000
3.43E-08	8.38E-07	1.65E-07	1.04	0.001
3.71E-08	9.06E-07	1.78E-07	1.12	0.001
4.03E-08	9.86E-07	1.94E-07	1.22	0.001
4.39E-08	1.07E-06	2.11E-07	1.33	0.001
4.79E-08	1.17E-06	2.30E-07	1.45	0.001
5.25E-08	1.28E-06	2.52E-07	1.59	0.001
5.78E-08	1.41E-06	2.78E-07	1.75	0.001
6.31E-08	1.54E-06	3.03E-07	1.91	0.001
6.92E-08 7.60E-08	1.69E-06 1.86E-06	3.32E-07 3.65E-07	2.09 2.30	0.001 0.001
8.40E-08	2.05E-06	4.03E-07	2.54	0.001
9.31E-08	2.28E-06	4.47E-07	2.82	0.001
1.03E-07	2.51E-06	4.93E-07	3.10	0.002
1.37E-07	3.34E-06	6.56E-07	4.13	0.002
1.49E-07	3.65E-06	7.16E-07	4.51	0.002
1.63E-07	3.99E-06	7.84E-07	4.93	0.002
1.77E-07	4.32E-06	8.49E-07	5.35	0.003
1.91E-07	4.66E-06	9.17E-07	5.77	0.003
2.05E-07	5.01E-06	9.85E-07	6.20	0.003
2.19E-07 2.31E-07	5.35E-06 5.64E-06	1.05E-06 1.11E-06	6.62 6.97	0.003 0.003
2.42E-07	5.92E-06	1.11E-06 1.16E-06	7.33	0.003
2.52E-07	6.16E-06	1.21E-06	7.63	0.004
2.61E-07	6.38E-06	1.25E-06	7.90	0.004
2.68E-07	6.55E-06	1.29E-06	8.10	0.004
2.73E-07	6.67E-06	1.31E-06	8.25	0.004
2.77E-07	6.76E-06	1.33E-06	8.37	0.004
2.78E-07	6.79E-06	1.33E-06	8.40	0.004
2.79E-07	6.81E-06	1.34E-06	8.43	0.004
2.79E-07	6.82E-06	1.34E-06	8.44	0.004
2.78E-07	6.79E-06	1.33E-06	8.40	0.004
2.77E-07 2.76E-07	6.77E-06 6.74E-06	1.33E-06 1.32E-06	8.37 8.34	0.004 0.004
2.76E-07 2.74E-07	6.74E-06 6.70E-06	1.32E-06	8.29	0.004
2.75E-07	6.73E-06	1.32E-06	8.32	0.004
2.75E-07	6.71E-06	1.32E-06	8.30	0.004
2.75E-07	6.72E-06	1.32E-06	8.31	0.004
2.76E-07	6.75E-06	1.33E-06	8.36	0.004
2.77E-07	6.77E-06	1.33E-06	8.38	0.004
2.81E-07	6.86E-06	1.35E-06	8.49	0.004
2.83E-07	6.92E-06	1.36E-06	8.56	0.004
2.86E-07	6.99E-06	1.37E-06	8.65	0.004
2.89E-07 2.92E-07	7.06E-06 7.13E-06	1.39E-06 1.40E-06	8.74 8.83	0.004 0.004
2.92E-07 2.93E-07	7.13E-06 7.17E-06	1.40E-06 1.41E-06	8.83 8.87	0.004
2.93E-07 2.93E-07	7.17E-06 7.15E-06	1.41E-06	8.85	0.004
2.91E-07	7.11E-06	1.40E-06	8.80	0.004
2.90E-07	7.08E-06	1.39E-06	8.76	0.004
2.86E-07	6.99E-06	1.37E-06	8.65	0.004
2.83E-07	6.91E-06	1.36E-06	8.55	0.004
2.78E-07	6.80E-06	1.34E-06	8.42	0.004

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568565.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568585.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568605.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568625.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568645.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568665.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568685.16 568705.16	4148370.16 4148370.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.017 0.017	0.017 0.017	0.017 0.017	0.017 0.017	0.017 0.017
568725.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567325.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.002	0.002
567345.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148390.16 4148390.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.004	0.004 0.005	0.004 0.005	0.004 0.005	0.004 0.005
567605.16 567625.16	4148390.16	0.000 0.000	0.000	0.000	0.000	0.000 0.000	0.005 0.005	0.005	0.005	0.005	0.005
567645.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.005	0.003	0.005	0.006
567665.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567685.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567705.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567725.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567785.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567805.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567825.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567845.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567865.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567885.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567905.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567925.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567945.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567965.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567985.16 568005.16	4148390.16 4148390.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.021 0.022	0.022 0.022	0.021 0.022	0.021 0.022	0.021 0.022
568025.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568045.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568065.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568085.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568105.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568125.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568145.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568165.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568185.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568205.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568225.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568245.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568265.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568285.16 568305.16	4148390.16 4148390.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.023 0.023	0.023 0.023	0.023 0.023	0.023 0.023	0.023 0.023
568325.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568345.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568365.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568405.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568425.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568445.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568465.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568485.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568505.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568525.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.73E-07	6.66E-06	1.31E-06	8.24	0.004
2.66E-07 2.60E-07	6.51E-06 6.34E-06	1.28E-06 1.25E-06	8.05	0.004
2.50E-07 2.54E-07	6.34E-06 6.20E-06	1.23E-06 1.22E-06	7.85 7.67	0.004 0.004
2.47E-07	6.03E-06	1.19E-06	7.46	0.004
2.40E-07	5.86E-06	1.15E-06	7.26	0.004
2.33E-07	5.69E-06	1.12E-06	7.04	0.003
2.26E-07	5.51E-06	1.08E-06	6.82	0.003
2.19E-07	5.34E-06	1.05E-06	6.61	0.003
2.10E-08	5.14E-07	1.01E-07	0.64	0.000
2.24E-08	5.48E-07	1.08E-07	0.68	0.000
2.40E-08	5.86E-07	1.15E-07	0.72	0.000
2.56E-08	6.26E-07	1.23E-07	0.77	0.000
2.75E-08	6.72E-07	1.32E-07	0.83	0.000
2.96E-08 3.18E-08	7.22E-07 7.77E-07	1.42E-07 1.53E-07	0.89 0.96	0.000 0.000
3.43E-08	8.39E-07	1.65E-07	1.04	0.000
3.72E-08	9.10E-07	1.79E-07	1.13	0.001
4.04E-08	9.88E-07	1.94E-07	1.22	0.001
4.41E-08	1.08E-06	2.12E-07	1.33	0.001
4.83E-08	1.18E-06	2.32E-07	1.46	0.001
5.30E-08	1.29E-06	2.54E-07	1.60	0.001
5.78E-08	1.41E-06	2.78E-07	1.75	0.001
6.43E-08	1.57E-06	3.09E-07	1.94	0.001
7.03E-08	1.72E-06	3.38E-07	2.13	0.001
7.74E-08	1.89E-06	3.72E-07	2.34	0.001
8.59E-08	2.10E-06	4.13E-07	2.60	0.001
9.51E-08 1.06E-07	2.33E-06 2.58E-06	4.57E-07 5.07E-07	2.88 3.19	0.001 0.002
1.00E-07 1.17E-07	2.85E-06	5.61E-07	3.53	0.002
1.56E-07	3.81E-06	7.48E-07	4.71	0.002
1.71E-07	4.17E-06	8.20E-07	5.16	0.003
1.86E-07	4.55E-06	8.95E-07	5.63	0.003
2.02E-07	4.93E-06	9.68E-07	6.10	0.003
2.17E-07	5.30E-06	1.04E-06	6.56	0.003
2.33E-07	5.68E-06	1.12E-06	7.03	0.003
2.48E-07	6.05E-06	1.19E-06	7.49	0.004
2.59E-07	6.34E-06	1.25E-06	7.84	0.004
2.71E-07	6.63E-06	1.30E-06	8.20	0.004
2.81E-07 2.88E-07	6.86E-06 7.05E-06	1.35E-06 1.38E-06	8.49 8.72	0.004 0.004
2.88E-07 2.93E-07	7.03E-06 7.17E-06	1.41E-06	8.87	0.004
2.99E-07	7.30E-06	1.44E-06	9.04	0.004
3.01E-07	7.35E-06	1.44E-06	9.09	0.004
3.01E-07	7.36E-06	1.45E-06	9.11	0.004
3.01E-07	7.36E-06	1.45E-06	9.10	0.004
3.01E-07	7.35E-06	1.44E-06	9.09	0.004
2.99E-07	7.30E-06	1.44E-06	9.04	0.004
2.97E-07	7.26E-06	1.43E-06	8.99	0.004
2.97E-07	7.26E-06	1.43E-06	8.98	0.004
2.96E-07	7.23E-06	1.42E-06	8.95	0.004
2.96E-07 2.97E-07	7.24E-06 7.27E-06	1.42E-06 1.43E-06	8.96 9.00	0.004 0.004
2.97E-07 2.98E-07	7.27E-06 7.29E-06	1.43E-06 1.43E-06	9.00	0.004
3.00E-07	7.23E-06 7.32E-06	1.43E-06	9.06	0.004
3.03E-07	7.41E-06	1.46E-06	9.17	0.005
3.07E-07	7.50E-06	1.47E-06	9.28	0.005
3.09E-07	7.55E-06	1.48E-06	9.35	0.005
3.12E-07	7.62E-06	1.50E-06	9.43	0.005
3.15E-07	7.69E-06	1.51E-06	9.52	0.005
3.16E-07	7.72E-06	1.52E-06	9.55	0.005
3.14E-07	7.67E-06	1.51E-06	9.49	0.005
3.11E-07	7.61E-06	1.50E-06	9.42	0.005
3.09E-07	7.55E-06	1.48E-06	9.34	0.005
3.06E-07	7.47E-06	1.47E-06	9.25	0.005
3.02E-07	7.37E-06 7.33E-06	1.45E-06	9.12 8.95	0.005
2.96E-07	7.23E-06	1.42E-06	8.95	0.004

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568565.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568585.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568605.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568625.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568645.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568665.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568685.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568705.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568725.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567325.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005 0.005
567625.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	
567645.16	4148410.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.006	0.006 0.007	0.006 0.007	0.006 0.007	0.006 0.007
567665.16 567685.16	4148410.16 4148410.16	0.000	0.000	0.000	0.000	0.000 0.000	0.007 0.007	0.007	0.007	0.007	0.007
567705.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567725.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.009
567745.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.009	0.010	0.010	0.010	0.010
567785.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.012
567805.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.013	0.012	0.013
567825.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567845.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567865.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567885.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567905.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567925.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567945.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
567965.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567985.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568005.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568025.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568045.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568065.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568085.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568105.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568125.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568145.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568165.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568185.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568205.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568225.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568245.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568265.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568285.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568305.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568325.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568385.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568405.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568425.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568445.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568465.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568485.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568505.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568525.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.84E-07	6.94E-06	1.36E-06	8.59	0.004
2.76E-07	6.76E-06	1.33E-06	8.36	0.004
2.69E-07 2.62E-07	6.57E-06 6.39E-06	1.29E-06 1.26E-06	8.13 7.91	0.004 0.004
2.54E-07	6.20E-06	1.20E-06 1.22E-06	7.67	0.004
2.47E-07	6.02E-06	1.18E-06	7.45	0.004
2.38E-07	5.83E-06	1.14E-06	7.21	0.004
2.31E-07	5.64E-06	1.11E-06	6.98	0.003
2.23E-07	5.45E-06	1.07E-06	6.74	0.003
2.10E-08	5.12E-07	1.01E-07	0.63	0.000
2.23E-08	5.46E-07	1.07E-07	0.68	0.000
2.39E-08	5.84E-07	1.15E-07	0.72	0.000
2.56E-08	6.25E-07	1.23E-07	0.77	0.000
2.74E-08	6.70E-07	1.32E-07	0.83	0.000
2.95E-08 3.18E-08	7.22E-07 7.77E-07	1.42E-07 1.53E-07	0.89 0.96	0.000 0.000
3.44E-08	8.40E-07	1.65E-07	1.04	0.000
3.73E-08	9.12E-07	1.79E-07	1.13	0.001
4.05E-08	9.91E-07	1.95E-07	1.23	0.001
4.43E-08	1.08E-06	2.13E-07	1.34	0.001
4.85E-08	1.18E-06	2.33E-07	1.47	0.001
5.31E-08	1.30E-06	2.55E-07	1.61	0.001
5.83E-08	1.42E-06	2.80E-07	1.76	0.001
6.44E-08	1.57E-06	3.09E-07	1.95	0.001
7.20E-08	1.76E-06	3.46E-07	2.18	0.001
7.90E-08	1.93E-06	3.80E-07	2.39	0.001
8.74E-08	2.14E-06	4.20E-07	2.64	0.001
9.75E-08 1.08E-07	2.38E-06 2.65E-06	4.68E-07 5.21E-07	2.95 3.28	0.001 0.002
1.20E-07	2.93E-06	5.75E-07	3.62	0.002
1.33E-07	3.24E-06	6.37E-07	4.01	0.002
1.62E-07	3.97E-06	7.80E-07	4.91	0.002
1.79E-07	4.37E-06	8.59E-07	5.41	0.003
1.96E-07	4.78E-06	9.40E-07	5.92	0.003
2.13E-07	5.22E-06	1.03E-06	6.46	0.003
2.30E-07	5.62E-06	1.11E-06	6.96	0.003
2.48E-07	6.05E-06	1.19E-06	7.49	0.004
2.64E-07	6.46E-06	1.27E-06	7.99	0.004
2.79E-07	6.81E-06	1.34E-06	8.43	0.004
2.92E-07 3.03E-07	7.13E-06 7.40E-06	1.40E-06 1.45E-06	8.82 9.16	0.004 0.005
3.12E-07	7.40E-00 7.62E-06	1.50E-06	9.43	0.005
3.18E-07	7.77E-06	1.53E-06	9.61	0.005
3.22E-07	7.88E-06	1.55E-06	9.75	0.005
3.27E-07	7.99E-06	1.57E-06	9.88	0.005
3.26E-07	7.98E-06	1.57E-06	9.87	0.005
3.25E-07	7.95E-06	1.56E-06	9.84	0.005
3.26E-07	7.97E-06	1.57E-06	9.86	0.005
3.24E-07	7.93E-06	1.56E-06	9.81	0.005
3.22E-07	7.88E-06	1.55E-06	9.75	0.005
3.21E-07	7.84E-06	1.54E-06	9.70	0.005
3.20E-07 3.21E-07	7.82E-06 7.84E-06	1.54E-06 1.54E-06	9.67 9.71	0.005 0.005
3.21E-07 3.23E-07	7.90E-06	1.55E-06	9.78	0.005
3.25E-07	7.94E-06	1.56E-06	9.83	0.005
3.27E-07	7.99E-06	1.57E-06	9.89	0.005
3.30E-07	8.06E-06	1.58E-06	9.98	0.005
3.33E-07	8.13E-06	1.60E-06	10.06	0.005
3.35E-07	8.20E-06	1.61E-06	10.14	0.005
3.40E-07	8.31E-06	1.63E-06	10.29	0.005
3.38E-07	8.26E-06	1.62E-06	10.22	0.005
3.35E-07	8.20E-06	1.61E-06	10.14	0.005
3.32E-07	8.11E-06	1.59E-06	10.04	0.005
3.28E-07 3.23E-07	8.01E-06 7.89E-06	1.57E-06 1.55E-06	9.91 9.76	0.005 0.005
3.23E-07 3.16E-07	7.73E-06	1.53E-06	9.57	0.005
3.09E-07	7.54E-06	1.48E-06	9.34	0.005

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
500.5	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568545.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568565.16 568585.16	4148410.16 4148410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.022 0.021	0.022 0.021	0.022 0.021	0.022 0.021	0.022 0.021
568605.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568625.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568645.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568665.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568685.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568705.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568725.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567325.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16 567425.16	4148430.16 4148430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567445.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16 567645.16	4148430.16	0.000	0.000	0.000 0.000	0.000	0.000	0.005	0.005	0.005	0.005 0.006	0.005 0.006
567645.16 567665.16	4148430.16 4148430.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.006 0.007	0.006 0.007	0.006 0.007	0.006	0.006
567685.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567705.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567725.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567745.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567765.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567805.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567825.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567845.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567865.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567885.16 567905.16	4148430.16 4148430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.020 0.021	0.020 0.021	0.020 0.021	0.020 0.021	0.020 0.021
567925.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567945.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567965.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567985.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568005.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568025.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568045.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568065.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568085.16 568105.16	4148430.16	0.000 0.000	0.000	0.000	0.000	0.000	0.026	0.027 0.026	0.026 0.026	0.026 0.026	0.026
568105.16 568125.16	4148430.16 4148430.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.026 0.026	0.026	0.026	0.026	0.026 0.026
568145.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568165.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568185.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568205.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568225.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568245.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568265.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568285.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568305.16 568365.16	4148430.16 4148430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.027 0.027	0.027 0.027	0.027 0.027	0.027 0.027	0.027 0.027
568385.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568425.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568445.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568465.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568485.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568505.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568525.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024

	Cancer Risk = 2	FR1*CDDM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.02E-07	7.38E-06	1.45E-06	9.13	0.005
2.94E-07 2.86E-07	7.18E-06 6.98E-06	1.41E-06 1.37E-06	8.88 8.64	0.004 0.004
2.78E-07	6.79E-06	1.34E-06	8.41	0.004
2.69E-07	6.57E-06	1.29E-06	8.13	0.004
2.60E-07	6.36E-06	1.25E-06	7.88	0.004
2.52E-07	6.17E-06	1.21E-06	7.63	0.004
2.44E-07	5.96E-06	1.17E-06	7.38	0.004
2.35E-07	5.74E-06	1.13E-06	7.11	0.004
2.27E-07	5.54E-06	1.09E-06	6.86	0.003
2.09E-08	5.10E-07	1.00E-07	0.63	0.000
2.23E-08 2.38E-08	5.45E-07 5.82E-07	1.07E-07 1.14E-07	0.67 0.72	0.000 0.000
2.55E-08	6.23E-07	1.22E-07	0.72	0.000
2.73E-08	6.68E-07	1.31E-07	0.83	0.000
2.95E-08	7.20E-07	1.42E-07	0.89	0.000
3.18E-08	7.76E-07	1.53E-07	0.96	0.000
3.45E-08	8.42E-07	1.65E-07	1.04	0.001
3.73E-08	9.12E-07	1.79E-07	1.13	0.001
4.06E-08	9.92E-07	1.95E-07	1.23	0.001
4.44E-08 4.86E-08	1.09E-06 1.19E-06	2.13E-07 2.33E-07	1.34 1.47	0.001 0.001
5.32E-08	1.19E-06 1.30E-06	2.55E-07 2.56E-07	1.47	0.001
5.88E-08	1.44E-06	2.82E-07	1.78	0.001
6.48E-08	1.58E-06	3.11E-07	1.96	0.001
7.21E-08	1.76E-06	3.46E-07	2.18	0.001
8.09E-08	1.98E-06	3.89E-07	2.45	0.001
8.95E-08	2.19E-06	4.30E-07	2.71	0.001
9.98E-08	2.44E-06	4.79E-07	3.02	0.001
1.11E-07	2.71E-06	5.33E-07	3.36	0.002
1.24E-07 1.37E-07	3.02E-06 3.36E-06	5.94E-07 6.60E-07	3.74	0.002 0.002
1.53E-07	3.75E-06	7.37E-07	4.15 4.64	0.002
1.88E-07	4.58E-06	9.01E-07	5.67	0.003
2.06E-07	5.03E-06	9.89E-07	6.23	0.003
2.25E-07	5.50E-06	1.08E-06	6.81	0.003
2.46E-07	6.00E-06	1.18E-06	7.43	0.004
2.65E-07	6.47E-06	1.27E-06	8.00	0.004
2.83E-07	6.91E-06	1.36E-06	8.55	0.004
3.00E-07	7.33E-06	1.44E-06	9.07	0.004
3.15E-07 3.27E-07	7.71E-06 7.99E-06	1.51E-06 1.57E-06	9.54 9.89	0.005 0.005
3.38E-07	8.25E-06	1.62E-06	10.21	0.005
3.46E-07	8.46E-06	1.66E-06	10.47	0.005
3.52E-07	8.60E-06	1.69E-06	10.64	0.005
3.55E-07	8.67E-06	1.70E-06	10.73	0.005
3.57E-07	8.71E-06	1.71E-06	10.78	0.005
3.55E-07	8.69E-06	1.71E-06	10.75	0.005
3.54E-07	8.64E-06	1.70E-06	10.70	0.005
3.52E-07 3.50E-07	8.60E-06 8.54E-06	1.69E-06 1.68E-06	10.65 10.57	0.005 0.005
3.48E-07	8.51E-06	1.67E-06	10.53	0.005
3.49E-07	8.53E-06	1.68E-06	10.55	0.005
3.49E-07	8.54E-06	1.68E-06	10.57	0.005
3.51E-07	8.59E-06	1.69E-06	10.63	0.005
3.54E-07	8.66E-06	1.70E-06	10.72	0.005
3.57E-07	8.72E-06	1.71E-06	10.78	0.005
3.60E-07	8.79E-06	1.73E-06	10.88	0.005
3.63E-07 3.64E-07	8.86E-06 8.89E-06	1.74E-06 1.75E-06	10.97 11.00	0.005 0.005
3.64E-07 3.64E-07	8.89E-06 8.90E-06	1.75E-06 1.75E-06	11.00	0.005
3.59E-07	8.76E-06	1.73E-06	10.85	0.005
3.53E-07	8.62E-06	1.70E-06	10.67	0.005
3.47E-07	8.47E-06	1.66E-06	10.48	0.005
3.40E-07	8.30E-06	1.63E-06	10.27	0.005
3.31E-07	8.09E-06	1.59E-06	10.01	0.005
3.22E-07	7.87E-06	1.55E-06	9.74	0.005

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568545.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568565.16 568585.16	4148430.16 4148430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.023 0.022	0.023 0.022	0.023 0.022	0.023 0.022	0.023 0.022
568605.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568625.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568645.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.021	0.020	0.020	0.020	0.020
568665.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568685.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568705.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567325.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16 567485.16	4148450.16 4148450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
567505.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.008	0.009	0.009	0.009	0.009
567725.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567745.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567765.16 567785.16	4148450.16 4148450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.012 0.013	0.012 0.013	0.012 0.013	0.012 0.013	0.012 0.013
567825.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.013	0.016	0.015
567845.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.018	0.018
567865.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567885.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567905.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567925.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567945.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
567965.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
567985.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.027	0.028	0.028	0.028	0.028
568005.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568025.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568045.16	4148450.16 4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568065.16 568085.16	4148450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.029 0.029	0.029 0.029	0.029 0.029	0.029 0.029	0.029 0.029
568105.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568125.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568145.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568165.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568185.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568205.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.028	0.029	0.028	0.028	0.028
568225.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568245.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568265.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568285.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568345.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568365.16 568385.16	4148450.16 4148450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.029 0.029	0.029 0.029	0.029 0.029	0.029 0.029	0.029 0.029
568385.16 568405.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568425.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568445.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568465.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568485.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568505.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568525.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025

	Cancer Risk = 2	R1*CDDM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.13E-07	7.65E-06	1.50E-06	9.47	0.005
3.04E-07 2.95E-07	7.43E-06 7.22E-06	1.46E-06 1.42E-06	9.19 8.93	0.005 0.004
2.86E-07	6.98E-06	1.42L-00 1.37E-06	8.64	0.004
2.76E-07	6.75E-06	1.33E-06	8.36	0.004
2.67E-07	6.53E-06	1.28E-06	8.08	0.004
2.58E-07	6.29E-06	1.24E-06	7.79	0.004
2.49E-07	6.09E-06	1.20E-06	7.54	0.004
2.39E-07	5.85E-06	1.15E-06	7.24	0.004
2.08E-08	5.08E-07	9.98E-08	0.63	0.000
2.22E-08	5.43E-07	1.07E-07	0.67	0.000
2.37E-08 2.54E-08	5.80E-07 6.21E-07	1.14E-07 1.22E-07	0.72 0.77	0.000 0.000
2.73E-08	6.68E-07	1.31E-07	0.83	0.000
2.94E-08	7.19E-07	1.41E-07	0.89	0.000
3.17E-08	7.75E-07	1.52E-07	0.96	0.000
3.44E-08	8.41E-07	1.65E-07	1.04	0.001
3.73E-08	9.12E-07	1.79E-07	1.13	0.001
4.07E-08	9.95E-07	1.96E-07	1.23	0.001
4.45E-08	1.09E-06	2.14E-07	1.35	0.001
4.86E-08	1.19E-06	2.33E-07	1.47	0.001
5.34E-08 5.92E-08	1.31E-06 1.45E-06	2.57E-07 2.84E-07	1.62 1.79	0.001 0.001
6.54E-08	1.43E-00 1.60E-06	3.14E-07	1.79	0.001
7.31E-08	1.79E-06	3.51E-07	2.21	0.001
8.15E-08	1.99E-06	3.92E-07	2.47	0.001
9.14E-08	2.23E-06	4.39E-07	2.76	0.001
1.02E-07	2.49E-06	4.89E-07	3.08	0.002
1.14E-07	2.79E-06	5.48E-07	3.45	0.002
1.27E-07	3.12E-06	6.12E-07	3.86	0.002
1.42E-07	3.48E-06	6.84E-07	4.31	0.002
1.59E-07 1.77E-07	3.88E-06 4.33E-06	7.63E-07 8.51E-07	4.80 5.36	0.002 0.003
2.17E-07	5.30E-06	1.04E-06	6.56	0.003
2.39E-07	5.83E-06	1.15E-06	7.22	0.004
2.61E-07	6.38E-06	1.25E-06	7.89	0.004
2.83E-07	6.91E-06	1.36E-06	8.55	0.004
3.04E-07	7.43E-06	1.46E-06	9.19	0.005
3.23E-07	7.90E-06	1.55E-06	9.78	0.005
3.42E-07	8.35E-06	1.64E-06	10.34	0.005
3.57E-07 3.69E-07	8.72E-06 9.02E-06	1.71E-06 1.77E-06	10.79	0.005 0.006
3.77E-07	9.22E-06	1.81E-06	11.16 11.41	0.006
3.84E-07	9.38E-06	1.84E-06	11.61	0.006
3.88E-07	9.47E-06	1.86E-06	11.72	0.006
3.88E-07	9.49E-06	1.87E-06	11.75	0.006
3.89E-07	9.52E-06	1.87E-06	11.78	0.006
3.87E-07	9.46E-06	1.86E-06	11.70	0.006
3.83E-07	9.36E-06	1.84E-06	11.59	0.006
3.83E-07 3.81E-07	9.36E-06 9.32E-06	1.84E-06 1.83E-06	11.58 11.53	0.006 0.006
3.81E-07	9.31E-06	1.83E-06	11.52	0.006
3.82E-07	9.35E-06	1.84E-06	11.56	0.006
3.84E-07	9.38E-06	1.84E-06	11.61	0.006
3.86E-07	9.44E-06	1.86E-06	11.68	0.006
3.89E-07	9.52E-06	1.87E-06	11.77	0.006
3.92E-07	9.58E-06	1.88E-06	11.86	0.006
4.05E-07	9.91E-06	1.95E-06	12.26	0.006
3.91E-07	9.56E-06	1.88E-06	11.83	0.006
3.89E-07	9.50E-06	1.87E-06	11.76 11.67	0.006
3.86E-07 3.80E-07	9.43E-06 9.30E-06	1.85E-06 1.83E-06	11.67 11.50	0.006 0.006
3.74E-07	9.15E-06	1.80E-06	11.32	0.006
3.66E-07	8.95E-06	1.76E-06	11.07	0.005
3.57E-07	8.72E-06	1.71E-06	10.79	0.005
3.46E-07	8.47E-06	1.66E-06	10.48	0.005
3.35E-07	8.20E-06	1.61E-06	10.14	0.005

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568545.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568565.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568585.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568605.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568625.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568645.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568665.16 568685.16	4148450.16 4148450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.020 0.019	0.020 0.019	0.020 0.019	0.020 0.019	0.020 0.019
567325.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.002
567345.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16 567665.16	4148470.16 4148470.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.007	0.006 0.007	0.006 0.007	0.006 0.007	0.006 0.007
567685.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567705.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.009	0.009
567725.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567745.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567765.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567785.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567805.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567845.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567865.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567885.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567905.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567925.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
567945.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
567965.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
567985.16	4148470.16 4148470.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030 0.031	0.030
568005.16 568025.16	4148470.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.031 0.031	0.031 0.031	0.031 0.031	0.031	0.031 0.031
568045.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.032
568065.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568085.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568105.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568125.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568145.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568165.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568185.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568205.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568225.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568245.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568265.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568325.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568345.16 568365.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568365.16 568385.16	4148470.16 4148470.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.032 0.031	0.032 0.031	0.032 0.031	0.032 0.031	0.032 0.031
568385.16 568405.16	4148470.16 4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568405.16 568425.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568445.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.029
568465.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568505.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568525.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568545.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568585.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023

	Cancer Risk = 2	R1*Cnpm		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.25E-07	7.95E-06	1.56E-06	9.84	0.005
3.15E-07 3.05E-07	7.71E-06	1.51E-06 1.46E-06	9.54	0.005
3.05E-07 2.94E-07	7.44E-06 7.19E-06	1.46E-06 1.41E-06	9.21 8.89	0.005 0.004
2.84E-07	6.93E-06	1.36E-06	8.58	0.004
2.73E-07	6.67E-06	1.31E-06	8.25	0.004
2.63E-07	6.43E-06	1.26E-06	7.96	0.004
2.53E-07	6.19E-06	1.22E-06	7.66	0.004
2.07E-08	5.05E-07	9.93E-08	0.63	0.000
2.21E-08	5.40E-07	1.06E-07	0.67	0.000
2.36E-08	5.77E-07	1.13E-07	0.71	0.000
2.53E-08	6.18E-07	1.22E-07	0.77	0.000
2.72E-08	6.66E-07	1.31E-07	0.82	0.000
2.93E-08	7.16E-07	1.41E-07	0.89	0.000
3.16E-08 3.44E-08	7.73E-07 8.40E-07	1.52E-07 1.65E-07	0.96 1.04	0.000 0.001
3.44E-08 3.73E-08	9.11E-07	1.03E-07 1.79E-07	1.13	0.001
4.07E-08	9.95E-07	1.96E-07	1.23	0.001
4.44E-08	1.08E-06	2.13E-07	1.34	0.001
4.86E-08	1.19E-06	2.34E-07	1.47	0.001
5.37E-08	1.31E-06	2.58E-07	1.62	0.001
5.95E-08	1.45E-06	2.86E-07	1.80	0.001
6.60E-08	1.61E-06	3.17E-07	2.00	0.001
7.35E-08	1.80E-06	3.53E-07	2.22	0.001
8.22E-08	2.01E-06	3.95E-07	2.48	0.001
9.34E-08	2.28E-06	4.49E-07	2.83	0.001
1.04E-07	2.54E-06	5.00E-07	3.15	0.002
1.17E-07 1.31E-07	2.86E-06 3.21E-06	5.62E-07 6.31E-07	3.54 3.97	0.002 0.002
1.47E-07	3.60E-06	7.07E-07	4.45	0.002
1.65E-07	4.03E-06	7.93E-07	4.99	0.002
1.85E-07	4.52E-06	8.88E-07	5.59	0.003
2.06E-07	5.04E-06	9.90E-07	6.24	0.003
2.53E-07	6.19E-06	1.22E-06	7.66	0.004
2.78E-07	6.81E-06	1.34E-06	8.42	0.004
3.03E-07	7.41E-06	1.46E-06	9.18	0.005
3.28E-07	8.02E-06	1.58E-06	9.92	0.005
3.50E-07	8.55E-06	1.68E-06	10.58	0.005
3.71E-07	9.06E-06	1.78E-06	11.21	0.006
3.89E-07	9.51E-06	1.87E-06 1.94E-06	11.77	0.006
4.04E-07 4.14E-07	9.86E-06 1.01E-05	1.94E-06 1.99E-06	12.21 12.52	0.006 0.006
4.21E-07	1.03E-05	2.02E-06	12.73	0.006
4.25E-07	1.04E-05	2.04E-06	12.75	0.006
4.28E-07	1.04E-05	2.05E-06	12.93	0.006
4.27E-07	1.04E-05	2.05E-06	12.91	0.006
4.25E-07	1.04E-05	2.04E-06	12.85	0.006
4.21E-07	1.03E-05	2.02E-06	12.74	0.006
4.20E-07	1.03E-05	2.02E-06	12.69	0.006
4.20E-07	1.03E-05	2.02E-06	12.69	0.006
4.19E-07	1.03E-05	2.01E-06	12.68	0.006
4.19E-07 4.21E-07	1.02E-05 1.03E-05	2.01E-06	12.66 12.75	0.006
4.21E-07 4.20E-07	1.03E-05 1.03E-05	2.02E-06 2.02E-06	12.75	0.006 0.006
4.20E-07 4.25E-07	1.03E-05 1.04E-05	2.02E-06 2.04E-06	12.71	0.006
4.26E-07	1.04E-05	2.05E-06	12.89	0.006
4.29E-07	1.05E-05	2.06E-06	12.99	0.006
4.27E-07	1.04E-05	2.05E-06	12.90	0.006
4.17E-07	1.02E-05	2.00E-06	12.61	0.006
4.11E-07	1.00E-05	1.97E-06	12.42	0.006
4.01E-07	9.81E-06	1.93E-06	12.14	0.006
3.94E-07	9.63E-06	1.89E-06	11.91	0.006
3.84E-07	9.39E-06	1.85E-06	11.63	0.006
3.62E-07	8.85E-06	1.74E-06	10.95	0.005
3.49E-07	8.53E-06	1.68E-06	10.55	0.005
3.36E-07 3.12E-07	8.22E-06 7.63E-06	1.61E-06	10.17	0.005
3.12E-07	7.63E-06	1.50E-06	9.45	0.005

						Project Construction						
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	
568605.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022	
568625.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022	
568645.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021	
568665.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020	
568705.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018	
568725.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018	
567325.16 567345.16	4148490.16 4148490.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	
567365.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	
567385.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	
567405.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	
567425.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	
567445.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	
567465.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567485.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567505.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567525.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567545.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567565.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567585.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567605.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567625.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567645.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567665.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567685.16 567705.16	4148490.16 4148490.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.008 0.009	0.008 0.009	0.008 0.009	0.008 0.009	0.008 0.009	
567725.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.010	0.010	
567745.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.011	
567765.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.013	0.013	0.013	
567785.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014	
567805.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016	
567825.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018	
567865.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022	
567885.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024	
567905.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026	
567925.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028	
567945.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030	
567965.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032	
567985.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033	
568005.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034	
568025.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035 0.035	0.035	
568045.16 568065.16	4148490.16 4148490.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.035 0.035	0.035 0.035	0.035 0.035	0.035	0.035 0.035	
568085.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035	
568105.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035	
568125.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035	
568145.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034	
568165.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034	
568185.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034	
568205.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034	
568225.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034	
568245.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035	
568305.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035	
568325.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034	
568345.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034	
568365.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035	
568385.16 568405.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033	
568405.16 568425.16	4148490.16 4148490.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.032 0.032	0.032 0.032	0.032 0.032	0.032 0.032	0.032 0.032	
568425.16 568445.16	4148490.16 4148490.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032	
568445.16 568465.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031	
568485.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.029	
568505.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028	
568545.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026	
568565.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025	
568585.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024	
568605.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023	

	Cancer Risk = 2	R1*CDPM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.01E-07 2.90E-07	7.36E-06 7.08E-06	1.45E-06 1.39E-06	9.10 8.77	0.004 0.004
2.79E-07	6.81E-06	1.39E-06 1.34E-06	8.42	0.004
2.68E-07	6.55E-06	1.29E-06	8.11	0.004
2.47E-07	6.03E-06	1.19E-06	7.46	0.004
2.38E-07	5.82E-06	1.14E-06	7.20	0.004
2.06E-08	5.03E-07	9.90E-08	0.62	0.000
2.20E-08	5.38E-07	1.06E-07	0.67	0.000
2.35E-08	5.75E-07	1.13E-07	0.71	0.000
2.52E-08	6.16E-07	1.21E-07	0.76	0.000
2.71E-08	6.63E-07	1.30E-07	0.82	0.000
2.92E-08	7.14E-07	1.40E-07	0.88	0.000
3.15E-08	7.71E-07	1.52E-07	0.95	0.000
3.43E-08	8.38E-07	1.65E-07	1.04	0.001
3.72E-08 4.07E-08	9.10E-07 9.94E-07	1.79E-07 1.95E-07	1.13 1.23	0.001 0.001
4.43E-08	1.08E-06	2.13E-07	1.34	0.001
4.88E-08	1.19E-06	2.34E-07	1.48	0.001
5.39E-08	1.32E-06	2.59E-07	1.63	0.001
5.96E-08	1.46E-06	2.86E-07	1.80	0.001
6.60E-08	1.61E-06	3.17E-07	2.00	0.001
7.41E-08	1.81E-06	3.56E-07	2.24	0.001
8.30E-08	2.03E-06	3.99E-07	2.51	0.001
9.34E-08	2.28E-06	4.48E-07	2.82	0.001
1.06E-07	2.59E-06	5.09E-07	3.21	0.002
1.20E-07	2.92E-06	5.75E-07	3.62	0.002
1.35E-07	3.31E-06	6.50E-07	4.09	0.002
1.53E-07	3.73E-06	7.33E-07	4.62	0.002
1.72E-07 1.93E-07	4.20E-06 4.72E-06	8.25E-07 9.27E-07	5.19 5.84	0.003 0.003
2.16E-07	5.28E-06	1.04E-06	6.53	0.003
2.42E-07	5.92E-06	1.16E-06	7.33	0.004
2.97E-07	7.25E-06	1.43E-06	8.97	0.004
3.25E-07	7.95E-06	1.56E-06	9.84	0.005
3.53E-07	8.63E-06	1.70E-06	10.68	0.005
3.80E-07	9.29E-06	1.83E-06	11.49	0.006
4.04E-07	9.88E-06	1.94E-06	12.23	0.006
4.26E-07	1.04E-05	2.04E-06	12.87	0.006
4.44E-07	1.09E-05	2.13E-06	13.43	0.007
4.56E-07	1.12E-05	2.19E-06	13.80	0.007
4.65E-07	1.14E-05	2.23E-06	14.06	0.007
4.72E-07 4.73E-07	1.15E-05 1.16E-05	2.27E-06	14.27 14.30	0.007 0.007
4.73E-07 4.69E-07	1.15E-05 1.15E-05	2.27E-06 2.25E-06	14.30	0.007
4.68E-07	1.14E-05	2.25E-06	14.15	0.007
4.66E-07	1.14E-05	2.24E-06	14.08	0.007
4.61E-07	1.13E-05	2.22E-06	13.96	0.007
4.61E-07	1.13E-05	2.22E-06	13.95	0.007
4.61E-07	1.13E-05	2.21E-06	13.95	0.007
4.62E-07	1.13E-05	2.22E-06	13.96	0.007
4.61E-07	1.13E-05	2.22E-06	13.96	0.007
4.65E-07	1.14E-05	2.23E-06	14.06	0.007
4.66E-07	1.14E-05	2.24E-06	14.08	0.007
4.62E-07	1.13E-05	2.22E-06	13.98	0.007
4.58E-07	1.12E-05	2.20E-06	13.84	0.007
4.65E-07 4.47E-07	1.14E-05 1.09E-05	2.23E-06 2.15E-06	14.06 13.52	0.007 0.007
4.47E-07 4.36E-07	1.09E-05 1.06E-05	2.15E-06 2.09E-06	13.52	0.007
4.25E-07	1.00E-05	2.04E-06	12.86	0.007
4.16E-07	1.02E-05	2.00E-06	12.58	0.006
4.02E-07	9.83E-06	1.93E-06	12.17	0.006
3.89E-07	9.50E-06	1.87E-06	11.75	0.006
3.75E-07	9.18E-06	1.80E-06	11.36	0.006
3.48E-07	8.50E-06	1.67E-06	10.52	0.005
3.35E-07	8.17E-06	1.61E-06	10.12	0.005
3.21E-07	7.84E-06	1.54E-06	9.70	0.005
3.07E-07	7.51E-06	1.48E-06	9.30	0.005

						Project	: Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568625.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568685.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568705.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568725.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567325.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16 567525.16	4148510.16 4148510.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16 567565.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16 567585.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567625.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.003	0.006
567645.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007
567685.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.008	0.008
567705.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567725.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567745.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567765.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567785.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567805.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567825.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567845.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567885.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
567905.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
567925.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
567945.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
567965.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
567985.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568005.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568025.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.039	0.039	0.039	0.039
568045.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568065.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568085.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568105.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568125.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568145.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568165.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568185.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568205.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568225.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568285.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568305.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568325.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568345.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568385.16 568405.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568405.16 568425.16	4148510.16 4148510.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.034 0.034	0.034	0.034 0.034	0.034 0.034	0.034 0.034
568425.16 568465.16	4148510.16 4148510.16	0.000 0.000	0.000	0.000 0.000	0.000	0.000	0.034	0.034 0.031	0.034		
568465.16 568485.16	4148510.16 4148510.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031 0.030	0.031 0.030
568505.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568505.16 568525.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568525.16 568565.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568565.16 568585.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568605.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568665.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568685.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568705.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.019	0.019
568725.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
500, 25.20	0010.10	3.000	3.330	0.000	5.550	2.230	5.020	3.020	3.023	0.020	0.020

	Cancer Risk =	∑R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.96E-07	7.24E-06	1.42E-06	8.96	0.004
2.62E-07 2.51E-07	6.40E-06	1.26E-06	7.93	0.004
2.42E-07	6.15E-06 5.91E-06	1.21E-06 1.16E-06	7.60 7.31	0.004 0.004
2.42L-07 2.06E-08	5.02E-07	9.87E-08	0.62	0.004
2.19E-08	5.36E-07	1.05E-07	0.66	0.000
2.34E-08	5.73E-07	1.13E-07	0.71	0.000
2.51E-08	6.14E-07	1.21E-07	0.76	0.000
2.70E-08	6.61E-07	1.30E-07	0.82	0.000
2.91E-08	7.12E-07	1.40E-07	0.88	0.000
3.15E-08	7.69E-07	1.51E-07	0.95	0.000
3.42E-08	8.36E-07	1.64E-07	1.03	0.001
3.71E-08	9.08E-07	1.78E-07	1.12	0.001
4.05E-08 4.44E-08	9.90E-07	1.95E-07	1.23	0.001
4.44E-08 4.88E-08	1.09E-06 1.19E-06	2.13E-07 2.35E-07	1.34 1.48	0.001 0.001
5.38E-08	1.32E-06	2.59E-07	1.63	0.001
5.96E-08	1.46E-06	2.86E-07	1.80	0.001
6.67E-08	1.63E-06	3.20E-07	2.02	0.001
7.48E-08	1.83E-06	3.59E-07	2.26	0.001
8.39E-08	2.05E-06	4.03E-07	2.54	0.001
9.50E-08	2.32E-06	4.56E-07	2.87	0.001
1.07E-07	2.63E-06	5.16E-07	3.25	0.002
1.22E-07	2.99E-06	5.88E-07	3.70	0.002
1.39E-07	3.39E-06	6.67E-07	4.20	0.002
1.57E-07	3.85E-06	7.56E-07	4.76	0.002
1.78E-07 2.02E-07	4.35E-06 4.93E-06	8.55E-07 9.70E-07	5.38 6.10	0.003 0.003
2.28E-07	5.57E-06	1.10E-06	6.90	0.003
2.56E-07	6.24E-06	1.23E-06	7.73	0.004
2.85E-07	6.97E-06	1.37E-06	8.63	0.004
3.50E-07	8.54E-06	1.68E-06	10.57	0.005
3.81E-07	9.31E-06	1.83E-06	11.52	0.006
4.14E-07	1.01E-05	1.99E-06	12.51	0.006
4.42E-07	1.08E-05	2.12E-06	13.37	0.007
4.67E-07	1.14E-05	2.24E-06	14.13	0.007
4.89E-07	1.19E-05	2.35E-06	14.78	0.007
5.06E-07 5.17E-07	1.24E-05 1.26E-05	2.43E-06 2.48E-06	15.30 15.62	0.008 0.008
5.17L-07 5.22E-07	1.28E-05	2.48L-00 2.51E-06	15.79	0.008
5.22E-07	1.28E-05	2.51E-06	15.78	0.008
5.20E-07	1.27E-05	2.50E-06	15.74	0.008
5.16E-07	1.26E-05	2.48E-06	15.61	0.008
5.16E-07	1.26E-05	2.48E-06	15.60	0.008
5.14E-07	1.26E-05	2.47E-06	15.54	0.008
5.11E-07	1.25E-05	2.45E-06	15.45	0.008
5.08E-07	1.24E-05	2.44E-06	15.37	0.008
5.12E-07	1.25E-05 1.25E-05	2.46E-06	15.47	0.008
5.13E-07 5.10E-07	1.25E-05 1.25E-05	2.46E-06 2.45E-06	15.51 15.41	0.008 0.008
5.10E-07 5.12E-07	1.25E-05	2.45E-06	15.41	0.008
5.06E-07	1.24E-05	2.43E-06	15.30	0.008
4.94E-07	1.21E-05	2.37E-06	14.94	0.007
4.87E-07	1.19E-05	2.34E-06	14.73	0.007
4.61E-07	1.13E-05	2.22E-06	13.96	0.007
4.51E-07	1.10E-05	2.16E-06	13.62	0.007
4.20E-07	1.03E-05	2.02E-06	12.71	0.006
4.04E-07	9.88E-06	1.94E-06	12.22	0.006
3.88E-07	9.47E-06	1.86E-06	11.72	0.006
3.72E-07	9.10E-06 8.30E-06	1.79E-06	11.26	0.006
3.43E-07 3.28E-07	8.39E-06 8.02E-06	1.65E-06 1.58E-06	10.39 9.93	0.005 0.005
3.28L-07 3.14E-07	7.68E-06	1.51E-06	9.51	0.005
2.77E-07	6.78E-06	1.33E-06	8.39	0.004
2.66E-07	6.49E-06	1.28E-06	8.03	0.004
2.55E-07	6.22E-06	1.22E-06	7.70	0.004
2.45E-07	5.98E-06	1.17E-06	7.40	0.004

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567325.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16 567465.16	4148530.16 4148530.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003
567485.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567725.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567745.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567765.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567785.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567805.16 567825.16	4148530.16 4148530.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.018 0.020	0.018 0.020	0.018 0.020	0.018 0.020	0.018 0.020
567845.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.023
567905.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567925.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
567945.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
567965.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
567985.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
568005.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568025.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568045.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568065.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568085.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568105.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568125.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568145.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568165.16	4148530.16 4148530.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568185.16 568205.16	4148530.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.042 0.042	0.042 0.042	0.042 0.042	0.042 0.042	0.042 0.042
568265.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568285.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.041
568305.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568325.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.041	0.041	0.041	0.041	0.041
568345.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
568365.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568385.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568405.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568425.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
568445.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568465.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568485.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568505.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568525.16 568545.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568545.16 568565.16	4148530.16 4148530.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.027 0.026	0.027 0.026	0.027 0.026	0.027 0.026	0.027 0.026
568565.16 568585.16	4148530.16 4148530.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568625.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568645.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568665.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568685.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568705.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568725.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567325.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.005.00	F 02F 07	0.075.00	0.62	0.000
2.06E-08 2.19E-08	5.02E-07 5.35E-07	9.87E-08 1.05E-07	0.62 0.66	0.000 0.000
2.34E-08	5.71E-07	1.03E-07 1.12E-07	0.71	0.000
2.51E-08	6.13E-07	1.20E-07	0.76	0.000
2.70E-08	6.59E-07	1.29E-07	0.82	0.000
2.90E-08	7.09E-07	1.39E-07	0.88	0.000
3.14E-08	7.68E-07	1.51E-07	0.95	0.000
3.41E-08	8.33E-07	1.64E-07	1.03	0.001
3.71E-08	9.06E-07	1.78E-07	1.12	0.001
4.05E-08	9.90E-07	1.94E-07	1.22	0.001
4.43E-08	1.08E-06	2.13E-07	1.34	0.001
4.88E-08	1.19E-06	2.34E-07	1.48	0.001
5.39E-08 5.99E-08	1.32E-06 1.46E-06	2.59E-07 2.88E-07	1.63 1.81	0.001 0.001
6.70E-08	1.46E-06 1.64E-06	3.22E-07	2.03	0.001
7.51E-08	1.84E-06	3.61E-07	2.27	0.001
8.50E-08	2.08E-06	4.08E-07	2.57	0.001
9.61E-08	2.35E-06	4.62E-07	2.91	0.001
1.09E-07	2.67E-06	5.24E-07	3.30	0.002
1.27E-07	3.10E-06	6.09E-07	3.84	0.002
1.42E-07	3.47E-06	6.82E-07	4.29	0.002
1.63E-07	3.97E-06	7.81E-07	4.92	0.002
1.85E-07	4.52E-06	8.89E-07	5.60	0.003
2.12E-07	5.17E-06	1.02E-06	6.40	0.003
2.40E-07	5.85E-06	1.15E-06	7.24	0.004
2.69E-07	6.58E-06	1.29E-06	8.14	0.004
3.03E-07	7.42E-06	1.46E-06	9.18	0.005
4.17E-07 4.53E-07	1.02E-05 1.11E-05	2.00E-06 2.18E-06	12.61 13.71	0.006 0.007
4.85E-07	1.11E-05 1.19E-05	2.18E-06 2.33E-06	14.67	0.007
5.17E-07	1.26E-05	2.48E-06	15.63	0.008
5.43E-07	1.33E-05	2.61E-06	16.41	0.008
5.63E-07	1.38E-05	2.70E-06	17.02	0.008
5.76E-07	1.41E-05	2.77E-06	17.43	0.009
5.81E-07	1.42E-05	2.79E-06	17.57	0.009
5.79E-07	1.41E-05	2.78E-06	17.50	0.009
5.79E-07	1.41E-05	2.78E-06	17.50	0.009
5.77E-07	1.41E-05	2.77E-06	17.45	0.009
5.75E-07	1.40E-05	2.76E-06	17.38	0.009
5.73E-07	1.40E-05	2.75E-06	17.32	0.009
5.71E-07	1.39E-05	2.74E-06	17.26	0.009
5.67E-07 5.68E-07	1.39E-05 1.39E-05	2.72E-06 2.73E-06	17.15 17.18	0.008 0.008
5.60E-07	1.37E-05	2.73E-06 2.69E-06	16.92	0.008
5.56E-07	1.36E-05	2.67E-06	16.81	0.008
5.65E-07	1.38E-05	2.72E-06	17.10	0.008
5.54E-07	1.35E-05	2.66E-06	16.75	0.008
5.35E-07	1.31E-05	2.57E-06	16.19	0.008
5.19E-07	1.27E-05	2.49E-06	15.70	0.008
5.10E-07	1.25E-05	2.45E-06	15.42	0.008
4.97E-07	1.21E-05	2.39E-06	15.03	0.007
4.76E-07	1.16E-05	2.29E-06	14.39	0.007
4.57E-07	1.12E-05	2.20E-06	13.82	0.007
4.38E-07	1.07E-05	2.10E-06	13.25	0.007
4.20E-07 4.00E-07	1.03E-05 9.78E-06	2.02E-06 1.92E-06	12.69 12.11	0.006 0.006
4.00E-07 3.83E-07	9.78E-06 9.37E-06	1.92E-06 1.84E-06	11.60	0.006
3.68E-07	8.99E-06	1.77E-06	11.12	0.005
3.53E-07	8.62E-06	1.69E-06	10.66	0.005
3.36E-07	8.21E-06	1.61E-06	10.16	0.005
3.08E-07	7.52E-06	1.48E-06	9.30	0.005
2.94E-07	7.19E-06	1.41E-06	8.90	0.004
2.82E-07	6.88E-06	1.35E-06	8.52	0.004
2.70E-07	6.60E-06	1.30E-06	8.16	0.004
2.58E-07	6.30E-06	1.24E-06	7.80	0.004
2.47E-07	6.04E-06	1.19E-06	7.47	0.004
2.06E-08	5.02E-07	9.87E-08	0.62	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567345.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16 567485.16	4148550.16 4148550.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
567505.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567725.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567745.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.012	0.013	0.012	0.012	0.012
567765.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567785.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567805.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567825.16 567845.16	4148550.16 4148550.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.021 0.024	0.021 0.024	0.021 0.024	0.021 0.024	0.021 0.024
567865.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567925.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
567945.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
567965.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
567985.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.045	0.045	0.045
568005.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
568025.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568045.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568065.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568085.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568105.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568125.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568145.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568165.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568225.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
568245.16 568265.16	4148550.16 4148550.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.047 0.046	0.047 0.046	0.047 0.046	0.047 0.046	0.047 0.046
568285.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.045	0.045	0.045
568305.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.045	0.045	0.045
568325.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
568345.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568365.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.041	0.041	0.041	0.041	0.041
568385.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
568405.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568425.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568445.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568465.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568485.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568505.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568525.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568545.16 568565.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568565.16 568605.16	4148550.16 4148550.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.027 0.024	0.027 0.024	0.027 0.024	0.027 0.024	0.027 0.024
568605.16 568625.16	4148550.16 4148550.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568645.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568665.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568685.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.021	0.020	0.020	0.020	0.020
568705.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568725.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567325.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Cancer Risk = ∑	R1*CnpM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.19E-08	5.35E-07	1.05E-07	0.66	0.000
2.33E-08 2.51E-08	5.70E-07 6.12E-07	1.12E-07 1.20E-07	0.71 0.76	0.000
2.69E-08	6.57E-07	1.20E-07 1.29E-07	0.70	0.000
2.89E-08	7.07E-07	1.39E-07	0.88	0.000
3.13E-08	7.66E-07	1.51E-07	0.95	0.000
3.40E-08	8.31E-07	1.63E-07	1.03	0.001
3.71E-08	9.07E-07	1.78E-07	1.12	0.001
4.04E-08	9.88E-07	1.94E-07	1.22	0.001
4.43E-08	1.08E-06	2.13E-07	1.34	0.001
4.87E-08	1.19E-06	2.34E-07	1.47	0.001
5.40E-08	1.32E-06	2.59E-07	1.63	0.001
6.01E-08	1.47E-06	2.89E-07	1.82	0.001
6.74E-08	1.65E-06	3.24E-07	2.04	0.001
7.58E-08	1.85E-06	3.64E-07	2.29	0.001
8.56E-08 9.71E-08	2.09E-06	4.11E-07	2.59	0.001
9.71E-08 1.11E-07	2.37E-06 2.71E-06	4.66E-07 5.32E-07	2.94 3.35	0.001 0.002
1.11E-07 1.27E-07	3.10E-06	6.09E-07	3.84	0.002
1.48E-07	3.61E-06	7.09E-07	4.46	0.002
1.68E-07	4.10E-06	8.05E-07	5.07	0.002
1.93E-07	4.71E-06	9.25E-07	5.82	0.003
2.20E-07	5.38E-06	1.06E-06	6.66	0.003
2.51E-07	6.14E-06	1.21E-06	7.60	0.004
2.86E-07	6.98E-06	1.37E-06	8.64	0.004
3.24E-07	7.91E-06	1.55E-06	9.79	0.005
3.65E-07	8.92E-06	1.75E-06	11.03	0.005
4.99E-07	1.22E-05	2.40E-06	15.10	0.007
5.34E-07	1.31E-05	2.56E-06	16.15	0.008
5.73E-07	1.40E-05	2.75E-06	17.31	0.009
6.07E-07	1.48E-05	2.91E-06	18.34	0.009
6.32E-07	1.55E-05	3.04E-06	19.12	0.009
6.46E-07	1.58E-05	3.10E-06	19.55	0.010
6.52E-07 6.53E-07	1.59E-05 1.60E-05	3.13E-06 3.14E-06	19.72 19.76	0.010 0.010
6.53E-07	1.60E-05	3.14E-00 3.13E-06	19.74	0.010
6.47E-07	1.58E-05	3.11E-06	19.58	0.010
6.43E-07	1.57E-05	3.09E-06	19.45	0.010
6.41E-07	1.57E-05	3.08E-06	19.39	0.010
6.40E-07	1.57E-05	3.08E-06	19.37	0.010
6.32E-07	1.54E-05	3.03E-06	19.10	0.009
6.27E-07	1.53E-05	3.01E-06	18.96	0.009
6.15E-07	1.50E-05	2.95E-06	18.59	0.009
6.07E-07	1.48E-05	2.91E-06	18.35	0.009
6.06E-07	1.48E-05	2.91E-06	18.32	0.009
5.95E-07	1.46E-05	2.86E-06	18.01	0.009
5.74E-07	1.40E-05	2.76E-06	17.37	0.009
5.54E-07	1.35E-05	2.66E-06	16.74	0.008
5.35E-07	1.31E-05	2.57E-06	16.19	0.008
5.27E-07 5.00E-07	1.29E-05 1.22E-05	2.53E-06 2.40E-06	15.93 15.11	0.008 0.007
4.78E-07	1.22E-05 1.17E-05	2.40E-06 2.29E-06	14.45	0.007
4.76E-07 4.56E-07	1.17E-05 1.12E-05	2.29E-06 2.19E-06	13.80	0.007
4.35E-07	1.06E-05	2.09E-06	13.16	0.006
4.14E-07	1.01E-05	1.99E-06	12.51	0.006
3.95E-07	9.65E-06	1.90E-06	11.94	0.006
3.76E-07	9.20E-06	1.81E-06	11.38	0.006
3.60E-07	8.79E-06	1.73E-06	10.88	0.005
3.28E-07	8.01E-06	1.57E-06	9.91	0.005
3.13E-07	7.64E-06	1.50E-06	9.46	0.005
2.99E-07	7.30E-06	1.43E-06	9.03	0.004
2.85E-07	6.97E-06	1.37E-06	8.63	0.004
2.73E-07	6.67E-06	1.31E-06	8.25	0.004
2.61E-07	6.39E-06	1.26E-06	7.91	0.004
2.50E-07	6.12E-06	1.20E-06	7.57	0.004
2.06E-08	5.03E-07	9.88E-08	0.62	0.000
2.19E-08	5.35E-07	1.05E-07	0.66	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567365.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148570.16	0.000	0.000	0.000	0.000	0.000 0.000	0.002	0.002 0.003	0.002	0.002	0.002 0.003
567465.16 567485.16	4148570.16 4148570.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.003 0.003	0.003	0.003 0.003	0.003 0.003	0.003
567505.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567745.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567765.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567785.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567805.16 567825.16	4148570.16	0.000	0.000	0.000 0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567825.16 567845.16	4148570.16 4148570.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.023 0.026	0.023 0.026	0.023 0.026	0.023 0.026	0.023 0.026
567845.16 567865.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
567885.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.033	0.023	0.033
567945.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
567965.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
567985.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.051	0.051	0.051	0.051	0.051
568005.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.053	0.053	0.053	0.053	0.053
568025.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.055	0.055	0.055	0.055	0.055
568045.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.056	0.056	0.056	0.056	0.056
568065.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.056	0.056	0.056	0.056	0.056
568085.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.055	0.055	0.055	0.055	0.055
568105.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.055	0.055	0.055	0.055	0.055
568125.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.054	0.054	0.054	0.054	0.054
568145.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.054	0.054	0.054	0.054	0.054
568205.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.053	0.053	0.053	0.053	0.053
568225.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568245.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568265.16	4148570.16 4148570.16	0.000	0.000	0.000	0.000	0.000	0.051	0.051	0.051	0.051	0.051
568285.16 568305.16	4148570.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.050 0.048	0.050 0.048	0.050 0.048	0.050 0.048	0.050 0.048
568325.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.047
568345.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.045	0.047	0.045
568365.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
568405.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.041	0.041	0.041	0.041	0.041
568425.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
568445.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568465.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
568485.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568505.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568525.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568585.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568605.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568625.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568645.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568665.16 568685.16	4148570.16	0.000 0.000	0.000	0.000	0.000 0.000	0.000	0.021	0.021 0.021	0.021	0.021	0.021 0.021
568685.16 568705.16	4148570.16 4148570.16	0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.021 0.020	0.021	0.021 0.020	0.021 0.020	0.021
568705.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.019	0.020
567325.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.34E-08	5.71E-07	1.12E-07	0.71	0.000
2.54E-08 2.50E-08	6.12E-07	1.12E-07 1.20E-07	0.71	0.000
2.68E-08	6.56E-07	1.29E-07	0.81	0.000
2.89E-08	7.07E-07	1.39E-07	0.87	0.000
3.13E-08	7.65E-07	1.50E-07	0.95	0.000
3.40E-08	8.31E-07	1.63E-07	1.03	0.001
3.71E-08	9.07E-07	1.78E-07	1.12	0.001
4.05E-08	9.89E-07	1.94E-07	1.22	0.001
4.43E-08	1.08E-06	2.13E-07	1.34	0.001
4.88E-08	1.19E-06	2.34E-07	1.47	0.001
5.40E-08 6.02E-08	1.32E-06 1.47E-06	2.59E-07 2.89E-07	1.63 1.82	0.001 0.001
6.77E-08	1.65E-06	3.25E-07	2.05	0.001
7.61E-08	1.86E-06	3.66E-07	2.30	0.001
8.60E-08	2.10E-06	4.13E-07	2.60	0.001
9.82E-08	2.40E-06	4.71E-07	2.97	0.001
1.12E-07	2.74E-06	5.39E-07	3.39	0.002
1.29E-07	3.15E-06	6.19E-07	3.90	0.002
1.49E-07	3.65E-06	7.16E-07	4.51	0.002
1.73E-07	4.22E-06	8.30E-07	5.22	0.003
1.99E-07	4.87E-06	9.58E-07	6.03	0.003
2.30E-07 2.65E-07	5.63E-06 6.48E-06	1.11E-06 1.27E-06	6.97 8.01	0.003
3.03E-07	7.41E-06	1.46E-06	9.17	0.004 0.005
3.45E-07	8.44E-06	1.66E-06	10.44	0.005
3.91E-07	9.56E-06	1.88E-06	11.83	0.006
4.41E-07	1.08E-05	2.12E-06	13.32	0.007
5.91E-07	1.44E-05	2.84E-06	17.88	0.009
6.39E-07	1.56E-05	3.07E-06	19.34	0.010
6.81E-07	1.66E-05	3.27E-06	20.60	0.010
7.13E-07	1.74E-05	3.43E-06	21.57	0.011
7.32E-07 7.46E-07	1.79E-05	3.52E-06	22.14	0.011
7.46E-07 7.47E-07	1.82E-05 1.83E-05	3.58E-06 3.59E-06	22.55 22.59	0.011 0.011
7.40E-07	1.81E-05	3.56E-06	22.39	0.011
7.36E-07	1.80E-05	3.54E-06	22.27	0.011
7.28E-07	1.78E-05	3.50E-06	22.01	0.011
7.26E-07	1.77E-05	3.49E-06	21.96	0.011
7.10E-07	1.74E-05	3.41E-06	21.48	0.011
7.00E-07	1.71E-05	3.36E-06	21.15	0.010
6.95E-07	1.70E-05	3.34E-06	21.02	0.010
6.79E-07	1.66E-05	3.26E-06	20.53	0.010
6.65E-07 6.50E-07	1.62E-05 1.59E-05	3.19E-06 3.12E-06	20.11 19.66	0.010 0.010
6.30E-07	1.54E-05	3.03E-06	19.06	0.009
6.02E-07	1.47E-05	2.89E-06	18.20	0.009
5.86E-07	1.43E-05	2.82E-06	17.73	0.009
5.47E-07	1.34E-05	2.63E-06	16.54	0.008
5.40E-07	1.32E-05	2.59E-06	16.32	0.008
4.97E-07	1.21E-05	2.39E-06	15.03	0.007
4.72E-07	1.15E-05	2.27E-06	14.28	0.007
4.49E-07	1.10E-05	2.15E-06	13.57	0.007
4.25E-07 4.05E-07	1.04E-05 9.89E-06	2.04E-06 1.94E-06	12.87 12.24	0.006 0.006
3.50E-07	8.56E-06	1.68E-06	10.59	0.005
3.33E-07	8.13E-06	1.60E-06	10.07	0.005
3.18E-07	7.76E-06	1.53E-06	9.61	0.005
3.03E-07	7.40E-06	1.46E-06	9.16	0.005
2.89E-07	7.07E-06	1.39E-06	8.75	0.004
2.77E-07	6.77E-06	1.33E-06	8.37	0.004
2.65E-07	6.48E-06	1.27E-06	8.01	0.004
2.54E-07	6.20E-06	1.22E-06	7.67	0.004
2.06E-08 2.20E-08	5.04E-07 5.37E-07	9.91E-08 1.06E-07	0.62 0.66	0.000 0.000
2.20E-08 2.34E-08	5.37E-07 5.73E-07	1.06E-07 1.13E-07	0.66	0.000
2.50E-08	6.12E-07	1.13E 07 1.20E-07	0.76	0.000
2.68E-08	6.56E-07	1.29E-07	0.81	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567425.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16 567565.16	4148590.16 4148590.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
567585.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.005
567605.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567745.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567765.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567785.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567805.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567825.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567845.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
567865.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
567885.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
567905.16 567965.16	4148590.16 4148590.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.040 0.054	0.040 0.054	0.040 0.054	0.040 0.054	0.040 0.054
567985.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.054	0.054	0.057	0.057	0.057
568005.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.060	0.060	0.060	0.060	0.060
568025.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.062	0.062	0.062	0.062	0.062
568045.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.063	0.064	0.063	0.063	0.063
568065.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.064	0.064	0.064	0.064	0.064
568085.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.063	0.063	0.063	0.063	0.063
568105.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.063	0.063	0.063	0.063	0.063
568125.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.062	0.062	0.062	0.062	0.062
568185.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.060	0.060	0.060	0.060	0.060
568205.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.059	0.059	0.059	0.059	0.059
568225.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.058	0.058	0.058	0.058	0.058
568245.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.057	0.057	0.057	0.057	0.057
568265.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.056	0.056	0.056	0.056	0.056
568285.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.054	0.054	0.054	0.054	0.054
568305.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568325.16	4148590.16 4148590.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.050 0.048	0.050 0.048	0.050 0.048	0.050 0.048	0.050 0.048
568345.16 568365.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568385.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
568405.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568425.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.041	0.042	0.042	0.042	0.042
568445.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568465.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568485.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568565.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568585.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568605.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568625.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568645.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568665.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568685.16 568705.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568705.16 568725.16	4148590.16 4148590.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.020 0.019	0.020 0.019	0.020 0.019	0.020 0.019	0.020 0.019
568725.16 567325.16	4148590.16 4148610.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567325.16 567345.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003

	Cancer Risk = ∑	R1*CDDM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.89E-08	7.07E-07	1.39E-07	0.87	0.000
3.13E-08 3.39E-08	7.64E-07 8.30E-07	1.50E-07 1.63E-07	0.95 1.03	0.000 0.001
3.69E-08	9.01E-07	1.77E-07	1.03	0.001
4.05E-08	9.91E-07	1.95E-07	1.23	0.001
4.44E-08	1.09E-06	2.13E-07	1.34	0.001
4.87E-08	1.19E-06	2.34E-07	1.47	0.001
5.41E-08	1.32E-06	2.60E-07	1.64	0.001
6.06E-08	1.48E-06	2.91E-07	1.83	0.001
6.78E-08	1.66E-06	3.25E-07	2.05	0.001
7.62E-08	1.86E-06	3.66E-07	2.30	0.001
8.63E-08	2.11E-06	4.14E-07	2.61	0.001
9.89E-08	2.42E-06	4.75E-07	2.99	0.001
1.13E-07	2.77E-06	5.44E-07	3.43	0.002
1.31E-07	3.20E-06	6.29E-07	3.96	0.002
1.52E-07	3.73E-06	7.32E-07	4.61	0.002
1.78E-07	4.34E-06	8.53E-07	5.37	0.003
2.07E-07	5.05E-06	9.92E-07	6.25	0.003
2.40E-07	5.87E-06	1.15E-06	7.26	0.004
2.79E-07 3.22E-07	6.81E-06 7.86E-06	1.34E-06 1.54E-06	8.43 9.72	0.004 0.005
3.70E-07	9.04E-06	1.78E-06	11.18	0.003
4.22E-07	1.03E-05	2.03E-06	12.76	0.006
4.78E-07	1.17E-05	2.30E-06	14.46	0.007
5.36E-07	1.31E-05	2.58E-06	16.22	0.008
7.19E-07	1.76E-05	3.45E-06	21.73	0.011
7.68E-07	1.88E-05	3.69E-06	23.23	0.011
8.09E-07	1.98E-05	3.89E-06	24.46	0.012
8.37E-07	2.05E-05	4.02E-06	25.32	0.012
8.51E-07	2.08E-05	4.09E-06	25.75	0.013
8.56E-07	2.09E-05	4.11E-06	25.88	0.013
8.50E-07	2.08E-05	4.08E-06	25.70	0.013
8.39E-07	2.05E-05	4.03E-06	25.39	0.013
8.35E-07	2.04E-05	4.01E-06	25.25	0.012
8.06E-07	1.97E-05 1.94E-05	3.87E-06	24.39	0.012
7.96E-07 7.84E-07	1.94E-05 1.92E-05	3.82E-06 3.76E-06	24.07 23.70	0.012 0.012
7.70E-07	1.88E-05	3.70E-06	23.70	0.012
7.47E-07	1.83E-05	3.59E-06	22.58	0.011
7.29E-07	1.78E-05	3.50E-06	22.05	0.011
7.04E-07	1.72E-05	3.38E-06	21.30	0.011
6.72E-07	1.64E-05	3.23E-06	20.33	0.010
6.49E-07	1.59E-05	3.12E-06	19.61	0.010
6.22E-07	1.52E-05	2.99E-06	18.80	0.009
5.94E-07	1.45E-05	2.85E-06	17.98	0.009
5.67E-07	1.39E-05	2.73E-06	17.16	0.008
5.58E-07	1.36E-05	2.68E-06	16.87	0.008
5.12E-07	1.25E-05	2.46E-06	15.49	0.008
4.86E-07	1.19E-05	2.33E-06	14.69	0.007
4.61E-07	1.13E-05	2.21E-06	13.94	0.007
3.75E-07	9.16E-06	1.80E-06	11.34	0.006
3.56E-07 3.39E-07	8.70E-06	1.71E-06	10.77 10.24	0.005 0.005
	8.28E-06	1.63E-06		
3.22E-07 3.07E-07	7.87E-06 7.50E-06	1.55E-06 1.47E-06	9.74 9.29	0.005 0.005
2.93E-07	7.30E-06 7.17E-06	1.41E-06	8.87	0.003
2.80E-07	6.84E-06	1.34E-06	8.47	0.004
2.68E-07	6.55E-06	1.29E-06	8.10	0.004
2.57E-07	6.27E-06	1.23E-06	7.76	0.004
2.08E-08	5.07E-07	9.97E-08	0.63	0.000
2.21E-08	5.39E-07	1.06E-07	0.67	0.000
2.35E-08	5.74E-07	1.13E-07	0.71	0.000
2.51E-08	6.13E-07	1.20E-07	0.76	0.000
2.69E-08	6.57E-07	1.29E-07	0.81	0.000
2.90E-08	7.08E-07	1.39E-07	0.88	0.000
3.13E-08	7.66E-07	1.51E-07	0.95	0.000
3.38E-08	8.26E-07	1.62E-07	1.02	0.001

					Project Construction						
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567485.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567605.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148610.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000	0.010	0.010 0.012	0.010	0.010	0.010 0.012
567725.16 567745.16	4148610.16 4148610.16	0.000 0.000	0.000	0.000 0.000		0.000	0.012 0.014		0.012 0.014	0.012 0.014	0.012
567765.16	4148610.16	0.000	0.000	0.000	0.000 0.000	0.000 0.000	0.014	0.014 0.016	0.014	0.014	0.014
567785.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.019	0.019
567805.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.022	0.022	0.022
567825.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
567845.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.030	0.030
567865.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.034	0.034
567885.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.039	0.039	0.039
567905.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
567925.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
567965.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.060	0.061	0.060	0.060	0.060
567985.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.065	0.065	0.065	0.065	0.065
568005.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.069	0.069	0.069	0.069	0.069
568025.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.072	0.072	0.072	0.072	0.072
568045.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.074	0.074	0.074	0.074	0.074
568065.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.074	0.074	0.074	0.074	0.074
568085.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.073	0.073	0.073	0.073	0.073
568105.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.073	0.073	0.073	0.073	0.073
568165.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.070	0.070	0.070	0.070	0.070
568185.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.068	0.068	0.068	0.068	0.068
568205.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.067	0.067	0.067	0.067	0.067
568225.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.065	0.066	0.066	0.066	0.066
568245.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.064	0.064	0.064	0.064	0.064
568265.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.061	0.061	0.061	0.061	0.061
568285.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.059	0.059	0.059	0.059	0.059
568325.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.054	0.054	0.054	0.054	0.054
568345.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.051	0.051	0.051	0.051	0.051
568365.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568385.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
568405.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
568425.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568445.16 568465.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568465.16 568485.16	4148610.16 4148610.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.037 0.035	0.037 0.035	0.037 0.035	0.037 0.035	0.037 0.035
568485.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
568545.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.031	0.032	0.032	0.032	0.032
568565.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.028	0.028
568585.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.027	0.028
568605.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568625.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568645.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568665.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568685.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568705.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568725.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567325.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003

	Cancer Risk = 2	R1*CDDM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.67E-08	8.97E-07	1.76E-07	1.11	0.001
4.02E-08 4.45E-08	9.83E-07 1.09E-06	1.93E-07 2.14E-07	1.22 1.35	0.001 0.001
4.43E-08 4.89E-08	1.19E-06	2.14E-07 2.35E-07	1.48	0.001
5.43E-08	1.33E-06	2.61E-07	1.64	0.001
6.06E-08	1.48E-06	2.91E-07	1.83	0.001
6.76E-08	1.65E-06	3.25E-07	2.04	0.001
7.63E-08	1.87E-06	3.67E-07	2.31	0.001
8.70E-08	2.13E-06	4.18E-07	2.63	0.001
9.94E-08	2.43E-06	4.77E-07	3.00	0.001
1.15E-07	2.80E-06	5.51E-07	3.47	0.002
1.33E-07	3.26E-06	6.40E-07	4.03	0.002
1.56E-07	3.81E-06	7.49E-07	4.71	0.002
1.82E-07	4.45E-06	8.75E-07	5.51	0.003
2.17E-07	5.29E-06	1.04E-06	6.55 7.58	0.003
2.51E-07 2.93E-07	6.13E-06 7.16E-06	1.20E-06 1.41E-06	7.58 8.86	0.004 0.004
3.43E-07	8.38E-06	1.65E-06	10.37	0.005
3.96E-07	9.68E-06	1.90E-06	11.97	0.006
4.54E-07	1.11E-05	2.18E-06	13.74	0.007
5.21E-07	1.27E-05	2.50E-06	15.75	0.008
5.90E-07	1.44E-05	2.83E-06	17.85	0.009
6.63E-07	1.62E-05	3.18E-06	20.05	0.010
8.11E-07	1.98E-05	3.90E-06	24.53	0.012
8.77E-07	2.14E-05	4.21E-06	26.52	0.013
9.31E-07	2.28E-05	4.47E-06	28.17	0.014
9.67E-07	2.36E-05	4.65E-06	29.25	0.014
9.87E-07	2.41E-05	4.74E-06	29.84	0.015
9.88E-07 9.82E-07	2.42E-05 2.40E-05	4.75E-06 4.72E-06	29.89 29.70	0.015 0.015
9.76E-07	2.40E-05 2.38E-05	4.72E-06 4.69E-06	29.50	0.015
9.34E-07	2.28E-05	4.49E-06	28.25	0.013
9.12E-07	2.23E-05	4.38E-06	27.58	0.014
8.94E-07	2.18E-05	4.29E-06	27.03	0.013
8.79E-07	2.15E-05	4.22E-06	26.58	0.013
8.55E-07	2.09E-05	4.11E-06	25.86	0.013
8.22E-07	2.01E-05	3.95E-06	24.87	0.012
7.93E-07	1.94E-05	3.81E-06	23.98	0.012
7.19E-07	1.76E-05	3.45E-06	21.75	0.011
6.86E-07	1.68E-05	3.30E-06	20.75	0.010
6.58E-07	1.61E-05	3.16E-06	19.89	0.010
6.27E-07	1.53E-05	3.01E-06 2.84E-06	18.96	0.009 0.009
5.92E-07 5.63E-07	1.45E-05 1.38E-05	2.70E-06	17.90 17.02	0.009
5.28E-07	1.29E-05	2.54E-06	15.98	0.008
4.99E-07	1.22E-05	2.40E-06	15.10	0.007
4.72E-07	1.15E-05	2.27E-06	14.26	0.007
4.24E-07	1.04E-05	2.04E-06	12.82	0.006
4.01E-07	9.79E-06	1.92E-06	12.12	0.006
3.81E-07	9.32E-06	1.83E-06	11.53	0.006
3.62E-07	8.85E-06	1.74E-06	10.95	0.005
3.44E-07	8.42E-06	1.65E-06	10.42	0.005
3.27E-07	7.99E-06	1.57E-06	9.89	0.005
3.12E-07 2.97E-07	7.61E-06 7.27E-06	1.50E-06 1.43E-06	9.42 8.99	0.005 0.004
2.97E-07 2.84E-07	6.93E-06	1.43E-06 1.36E-06	8.99 8.58	0.004
2.71E-07	6.63E-06	1.30E-06	8.21	0.004
2.59E-07	6.34E-06	1.25E-06	7.84	0.004
2.09E-08	5.10E-07	1.00E-07	0.63	0.000
2.22E-08	5.42E-07	1.06E-07	0.67	0.000
2.36E-08	5.76E-07	1.13E-07	0.71	0.000
2.52E-08	6.15E-07	1.21E-07	0.76	0.000
2.69E-08	6.58E-07	1.29E-07	0.81	0.000
2.90E-08	7.10E-07	1.40E-07	0.88	0.000
3.13E-08	7.64E-07	1.50E-07	0.95	0.000
3.38E-08	8.26E-07	1.62E-07	1.02	0.001
3.67E-08	8.96E-07	1.76E-07	1.11	0.001

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567505.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004 0.005
567605.16 567625.16	4148630.16 4148630.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.006	0.005 0.006	0.005 0.006	0.005 0.006	0.005
567645.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567745.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567765.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567785.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567805.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567825.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
567845.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
567865.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
567885.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
567905.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
567925.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.055	0.055	0.055	0.055	0.055
567945.16 567985.16	4148630.16 4148630.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.062 0.075	0.062 0.075	0.062 0.075	0.062 0.075	0.062 0.075
568005.16	4148630.16	0.000 0.000	0.000	0.000	0.000	0.000 0.000	0.075	0.073	0.075	0.073	0.073
568025.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.081	0.081	0.081	0.081	0.084
568045.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.084	0.084	0.086	0.086	0.086
568065.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.086	0.086	0.086	0.086	0.086
568085.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.086	0.086	0.086	0.086	0.086
568145.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.081	0.081	0.081	0.081	0.081
568165.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.079	0.079	0.079	0.079	0.079
568185.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.078	0.078	0.078	0.078	0.078
568205.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.075	0.075	0.075	0.075	0.075
568225.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.073	0.073	0.073	0.073	0.073
568245.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.070	0.070	0.070	0.070	0.070
568265.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.067	0.067	0.067	0.067	0.067
568305.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.061	0.061	0.061	0.061	0.061
568325.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.057	0.057	0.057	0.057	0.057
568345.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.054	0.054	0.054	0.054	0.054
568365.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.051	0.051	0.051	0.051	0.051
568385.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568405.16 568425.16	4148630.16 4148630.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.050 0.043	0.050 0.043	0.050 0.043	0.050 0.043	0.050 0.043
568445.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568465.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568505.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.034	0.034
568525.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568545.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568565.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568585.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568605.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568625.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568645.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568665.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568685.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568705.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568725.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567325.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16 567365.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16 567385.16	4148650.16 4148650.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567385.16 567405.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003

	Cancer Risk = ∑	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
4.00E-08	9.79E-07	1.92E-07	1.21	0.001
4.43E-08	1.08E-06	2.13E-07 2.35E-07	1.34	0.001
4.90E-08 5.43E-08	1.20E-06 1.33E-06	2.33E-07 2.61E-07	1.48 1.64	0.001 0.001
6.03E-08	1.47E-06	2.90E-07	1.82	0.001
6.76E-08	1.65E-06	3.25E-07	2.04	0.001
7.63E-08	1.87E-06	3.67E-07	2.31	0.001
8.71E-08	2.13E-06	4.18E-07	2.63	0.001
9.99E-08	2.44E-06	4.80E-07	3.02	0.001
1.16E-07	2.83E-06	5.56E-07	3.50	0.002
1.35E-07	3.30E-06	6.49E-07	4.08	0.002
1.59E-07	3.87E-06	7.62E-07	4.80	0.002
1.86E-07	4.55E-06	8.95E-07	5.64	0.003
2.21E-07	5.40E-06	1.06E-06	6.69	0.003
2.61E-07	6.38E-06	1.25E-06	7.89	0.004
3.08E-07	7.52E-06	1.48E-06	9.31	0.005
3.63E-07	8.88E-06	1.75E-06	10.99	0.005
4.25E-07 4.91E-07	1.04E-05 1.20E-05	2.04E-06 2.36E-06	12.84 14.84	0.006 0.007
4.91E-07 5.67E-07	1.39E-05	2.72E-06	17.15	0.007
6.50E-07	1.59E-05	3.12E-06	19.64	0.010
7.35E-07	1.80E-05	3.53E-06	22.22	0.011
8.26E-07	2.02E-05	3.97E-06	24.99	0.012
1.01E-06	2.47E-05	4.86E-06	30.60	0.015
1.08E-06	2.65E-05	5.21E-06	32.81	0.016
1.13E-06	2.77E-05	5.43E-06	34.22	0.017
1.16E-06	2.83E-05	5.55E-06	34.97	0.017
1.16E-06	2.83E-05	5.56E-06	35.01	0.017
1.15E-06	2.82E-05	5.54E-06	34.85	0.017
1.09E-06	2.66E-05	5.24E-06	32.97	0.016
1.06E-06	2.60E-05	5.10E-06	32.12	0.016
1.04E-06	2.54E-05	5.00E-06	31.49	0.016
1.01E-06	2.46E-05	4.84E-06	30.50	0.015
9.78E-07 9.39E-07	2.39E-05 2.29E-05	4.70E-06 4.51E-06	29.59 28.39	0.015 0.014
9.04E-07	2.23E-05 2.21E-05	4.31E-00 4.34E-06	27.33	0.013
8.15E-07	1.99E-05	3.91E-06	24.64	0.012
7.68E-07	1.88E-05	3.69E-06	23.23	0.011
7.26E-07	1.77E-05	3.49E-06	21.95	0.011
6.87E-07	1.68E-05	3.30E-06	20.77	0.010
6.55E-07	1.60E-05	3.15E-06	19.81	0.010
6.68E-07	1.63E-05	3.21E-06	20.21	0.010
5.82E-07	1.42E-05	2.79E-06	17.59	0.009
5.44E-07	1.33E-05	2.61E-06	16.46	0.008
5.13E-07	1.25E-05	2.47E-06	15.52	0.008
4.56E-07	1.11E-05	2.19E-06	13.79	0.007
4.33E-07	1.06E-05	2.08E-06	13.09	0.006
4.09E-07	9.99E-06	1.96E-06	12.36	0.006
3.87E-07 3.68E-07	9.46E-06 8.99E-06	1.86E-06 1.77E-06	11.71 11.12	0.006 0.005
3.68E-07 3.49E-07	8.53E-06	1.77E-06 1.68E-06	10.55	0.005
3.43E-07 3.33E-07	8.13E-06	1.60E-06	10.06	0.005
3.16E-07	7.73E-06	1.52E-06	9.56	0.005
3.01E-07	7.36E-06	1.45E-06	9.11	0.004
2.87E-07	7.02E-06	1.38E-06	8.69	0.004
2.75E-07	6.71E-06	1.32E-06	8.30	0.004
2.63E-07	6.42E-06	1.26E-06	7.94	0.004
2.10E-08	5.13E-07	1.01E-07	0.63	0.000
2.23E-08	5.45E-07	1.07E-07	0.67	0.000
2.37E-08	5.79E-07	1.14E-07	0.72	0.000
2.53E-08	6.18E-07	1.21E-07	0.76	0.000
2.70E-08	6.61E-07	1.30E-07	0.82	0.000
2.91E-08	7.10E-07	1.40E-07	0.88	0.000
3.13E-08	7.64E-07	1.50E-07	0.95	0.000
3.39E-08	8.29E-07	1.63E-07	1.03	0.001
3.67E-08	8.97E-07	1.76E-07	1.11	0.001
4.00E-08	9.78E-07	1.92E-07	1.21	0.001

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567525.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16 567565.16	4148650.16 4148650.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
567585.16 567585.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567665.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567685.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567745.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567765.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567785.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567805.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567825.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
567845.16 567865.16	4148650.16 4148650.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.034 0.040	0.034 0.040	0.034 0.040	0.034 0.040	0.034 0.040
567885.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.046	0.046	0.046
567905.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.053	0.053	0.053	0.053	0.053
567925.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.061	0.061	0.061	0.061	0.061
567945.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.069	0.070	0.069	0.069	0.069
567965.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.078	0.078	0.078	0.078	0.078
568005.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.095	0.096	0.095	0.095	0.095
568025.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.100	0.100	0.100	0.100	0.100
568045.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.102	0.102	0.102	0.102	0.102
568065.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.103	0.103	0.103	0.103	0.103
568125.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.097	0.097	0.097	0.097	0.097
568145.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.094	0.094	0.094	0.094	0.094
568165.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.091	0.091	0.091	0.091	0.091
568185.16 568225.16	4148650.16 4148650.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.088 0.081	0.088 0.081	0.088 0.081	0.088 0.081	0.088 0.081
568245.16 568245.16	4148650.16	0.000 0.000	0.000	0.000	0.000	0.000	0.081	0.081	0.081	0.081	0.081
568265.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.074	0.074	0.074	0.074	0.074
568285.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.069	0.069	0.069	0.069	0.069
568305.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.065	0.065	0.065	0.065	0.065
568325.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.061	0.061	0.061	0.061	0.061
568345.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.057	0.057	0.057	0.057	0.057
568365.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.054	0.054	0.054	0.054	0.054
568385.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.051	0.051	0.051	0.051	0.051
568405.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568425.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
568485.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568505.16 568525.16	4148650.16 4148650.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.035 0.033	0.035 0.033	0.035	0.035	0.035 0.033
568545.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033 0.031	0.033 0.031	0.033
568565.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568585.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568605.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568625.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568645.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568665.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.022	0.023	0.023	0.023	0.023
568685.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568705.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568725.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567325.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16 567365.16	4148670.16 4148670.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567385.16 567385.16	4148670.16 4148670.16	0.000	0.000	0.000 0.000	0.000	0.000	0.002 0.002	0.002	0.002	0.002	0.002
567405.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004

	HI			
3rd Trimester	Cancer Risk = 2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
4.39E-08	1.07E-06	2.11E-07	1.33	0.001
4.87E-08	1.19E-06	2.34E-07	1.47	0.001
5.44E-08	1.33E-06	2.61E-07	1.64	0.001
6.04E-08	1.48E-06	2.90E-07	1.83	0.001
6.76E-08	1.65E-06	3.25E-07	2.05	0.001
7.66E-08	1.87E-06	3.68E-07	2.32	0.001
8.74E-08	2.14E-06	4.20E-07	2.64	0.001
1.01E-07	2.46E-06	4.84E-07	3.05	0.002
1.17E-07 1.36E-07	2.86E-06 3.33E-06	5.62E-07	3.54	0.002
1.61E-07	3.92E-06	6.55E-07 7.71E-07	4.12 4.86	0.002 0.002
1.91E-07	4.67E-06	9.18E-07	5.78	0.002
2.28E-07	5.57E-06	1.09E-06	6.89	0.003
2.75E-07	6.73E-06	1.32E-06	8.33	0.004
3.24E-07	7.92E-06	1.56E-06	9.81	0.005
3.84E-07	9.39E-06	1.84E-06	11.61	0.006
4.56E-07	1.11E-05	2.19E-06	13.79	0.007
5.36E-07	1.31E-05	2.57E-06	16.20	0.008
6.22E-07	1.52E-05	2.99E-06	18.82	0.009
7.15E-07	1.75E-05	3.43E-06	21.62	0.011
8.19E-07 9.32E-07	2.00E-05 2.28E-05	3.93E-06 4.47E-06	24.76 28.17	0.012 0.014
1.05E-06	2.56E-05	5.04E-06	31.72	0.014
1.28E-06	3.13E-05	6.15E-06	38.73	0.010
1.35E-06	3.29E-05	6.47E-06	40.72	0.020
1.37E-06	3.35E-05	6.59E-06	41.50	0.020
1.38E-06	3.38E-05	6.65E-06	41.85	0.021
1.31E-06	3.19E-05	6.28E-06	39.51	0.019
1.26E-06	3.09E-05	6.07E-06	38.20	0.019
1.22E-06	2.98E-05	5.86E-06	36.90	0.018
1.18E-06	2.89E-05	5.68E-06	35.77	0.018
1.08E-06 1.04E-06	2.65E-05 2.53E-05	5.20E-06 4.98E-06	32.75 31.33	0.016 0.015
9.88E-07	2.41E-05	4.75E-06	29.88	0.015
9.26E-07	2.26E-05	4.45E-06	28.01	0.013
8.73E-07	2.13E-05	4.19E-06	26.41	0.013
8.17E-07	2.00E-05	3.93E-06	24.72	0.012
7.68E-07	1.88E-05	3.69E-06	23.22	0.011
7.21E-07	1.76E-05	3.46E-06	21.82	0.011
6.81E-07	1.66E-05	3.27E-06	20.59	0.010
6.40E-07	1.57E-05	3.08E-06	19.37	0.010
5.97E-07	1.46E-05	2.87E-06	18.06	0.009
4.96E-07 4.65E-07	1.21E-05 1.14E-05	2.38E-06 2.23E-06	14.99 14.05	0.007 0.007
4.40E-07	1.08E-05	2.23L-06 2.11E-06	13.31	0.007
4.17E-07	1.02E-05	2.00E-06	12.61	0.006
3.94E-07	9.62E-06	1.89E-06	11.91	0.006
3.73E-07	9.13E-06	1.79E-06	11.29	0.006
3.54E-07	8.66E-06	1.70E-06	10.71	0.005
3.37E-07	8.23E-06	1.62E-06	10.18	0.005
3.20E-07	7.83E-06	1.54E-06	9.68	0.005
3.05E-07	7.44E-06	1.46E-06	9.21	0.005
2.91E-07 2.78E-07	7.10E-06 6.78E-06	1.40E-06 1.33E-06	8.79	0.004
2.78E-07 2.66E-07	6.49E-06	1.33E-06 1.28E-06	8.39 8.03	0.004 0.004
2.11E-08	5.16E-07	1.01E-07	0.64	0.000
2.24E-08	5.47E-07	1.07E-07	0.68	0.000
2.38E-08	5.83E-07	1.15E-07	0.72	0.000
2.54E-08	6.21E-07	1.22E-07	0.77	0.000
2.72E-08	6.64E-07	1.31E-07	0.82	0.000
2.91E-08	7.11E-07	1.40E-07	0.88	0.000
3.14E-08	7.68E-07	1.51E-07	0.95	0.000
3.39E-08	8.29E-07	1.63E-07	1.03	0.001
3.69E-08 4.01E-08	9.02E-07 9.79E-07	1.77E-07 1.92E-07	1.12 1.21	0.001 0.001
4.01E-08 4.39E-08	1.07E-06	2.11E-07	1.33	0.001
4.83E-08	1.18E-06	2.32E-07	1.46	0.001

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567565.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16 567605.16	4148670.16 4148670.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005
567625.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007
567665.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567685.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567745.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567785.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567805.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
567825.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
567845.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
567865.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
567885.16 567905.16	4148670.16 4148670.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.051 0.059	0.051 0.059	0.051 0.059	0.051 0.059	0.051 0.059
567925.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.059	0.059	0.059	0.068	0.068
567945.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.008	0.079	0.079	0.079	0.079
567965.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.090	0.090	0.090	0.090	0.090
568025.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.121	0.121	0.121	0.121	0.121
568125.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.116	0.116	0.116	0.116	0.116
568145.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.110	0.110	0.110	0.110	0.110
568165.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.105	0.105	0.105	0.105	0.105
568185.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.099	0.099	0.099	0.099	0.099
568205.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.095	0.095	0.095	0.095	0.095
568225.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.090	0.090	0.090	0.090	0.090
568245.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.084	0.084	0.084	0.084	0.084
568265.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.079	0.079	0.079	0.079	0.079
568285.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.074	0.074	0.074	0.074	0.074
568305.16 568325.16	4148670.16 4148670.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.069 0.064	0.069 0.064	0.069 0.064	0.069 0.064	0.069 0.064
568345.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.060	0.060	0.060	0.060	0.060
568365.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.056	0.056	0.056	0.056	0.056
568385.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568405.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568445.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568465.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
568485.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568505.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
568525.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568545.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568565.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568585.16 568605.16	4148670.16 4148670.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.028 0.027	0.028 0.027	0.028 0.027	0.028 0.027	0.028 0.027
568625.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.025	0.027
568645.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568665.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568685.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568705.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568725.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567325.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16 567435.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16 567445.16	4148690.16 4148690.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567445.16 567465.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
5.38E-08	1.32E-06	2.59E-07	1.63	0.001
6.06E-08	1.48E-06	2.91E-07	1.83	0.001
6.77E-08	1.65E-06	3.25E-07	2.05	0.001
7.67E-08	1.87E-06	3.68E-07	2.32	0.001
8.77E-08	2.14E-06	4.21E-07	2.65	0.001
1.01E-07	2.47E-06	4.85E-07	3.06	0.002
1.17E-07	2.86E-06	5.63E-07	3.54	0.002
1.37E-07	3.35E-06	6.59E-07	4.15	0.002
1.63E-07 1.95E-07	3.98E-06	7.81E-07	4.92	0.002
2.35E-07	4.76E-06 5.74E-06	9.35E-07 1.13E-06	5.89 7.11	0.003 0.004
2.83E-07	6.92E-06	1.36E-06	8.56	0.004
3.47E-07	8.47E-06	1.67E-06	10.49	0.005
4.11E-07	1.00E-05	1.97E-06	12.42	0.006
4.91E-07	1.20E-05	2.36E-06	14.86	0.007
5.80E-07	1.42E-05	2.79E-06	17.54	0.009
6.82E-07	1.67E-05	3.28E-06	20.64	0.010
7.92E-07	1.94E-05	3.81E-06	23.96	0.012
9.17E-07	2.24E-05	4.40E-06	27.72	0.014
1.06E-06	2.58E-05	5.07E-06	31.91	0.016
1.21E-06 1.63E-06	2.95E-05 3.98E-05	5.81E-06 7.82E-06	36.57 49.23	0.018 0.024
1.55E-06	3.79E-05	7.82E-06 7.45E-06	46.93	0.024
1.48E-06	3.61E-05	7.10E-06	44.73	0.023
1.40E-06	3.43E-05	6.74E-06	42.46	0.021
1.33E-06	3.26E-05	6.40E-06	40.32	0.020
1.27E-06	3.10E-05	6.10E-06	38.40	0.019
1.20E-06	2.94E-05	5.78E-06	36.38	0.018
1.13E-06	2.77E-05	5.44E-06	34.23	0.017
1.06E-06	2.58E-05	5.07E-06	31.93	0.016
9.88E-07	2.41E-05	4.74E-06	29.87	0.015
9.26E-07 8.61E-07	2.26E-05 2.10E-05	4.45E-06 4.13E-06	28.01 26.03	0.014 0.013
8.08E-07	1.97E-05	3.88E-06	24.44	0.013
7.55E-07	1.84E-05	3.62E-06	22.82	0.012
7.04E-07	1.72E-05	3.38E-06	21.30	0.011
6.56E-07	1.60E-05	3.15E-06	19.84	0.010
5.75E-07	1.40E-05	2.76E-06	17.39	0.009
5.39E-07	1.32E-05	2.59E-06	16.30	0.008
5.04E-07	1.23E-05	2.42E-06	15.25	0.008
4.73E-07	1.16E-05	2.27E-06	14.30	0.007
4.47E-07	1.09E-05	2.15E-06	13.52	0.007
4.23E-07 4.00E-07	1.03E-05 9.77E-06	2.03E-06 1.92E-06	12.80 12.09	0.006 0.006
3.78E-07	9.23E-06	1.81E-06	11.42	0.006
3.59E-07	8.77E-06	1.72E-06	10.85	0.005
3.41E-07	8.33E-06	1.64E-06	10.31	0.005
3.24E-07	7.92E-06	1.56E-06	9.80	0.005
3.08E-07	7.53E-06	1.48E-06	9.32	0.005
2.94E-07	7.19E-06	1.41E-06	8.90	0.004
2.81E-07	6.87E-06	1.35E-06	8.50	0.004
2.69E-07	6.57E-06	1.29E-06	8.13	0.004
2.13E-08 2.25E-08	5.20E-07	1.02E-07	0.64	0.000 0.000
2.40E-08	5.50E-07 5.85E-07	1.08E-07 1.15E-07	0.68 0.72	0.000
2.55E-08	6.24E-07	1.23E-07	0.72	0.000
2.73E-08	6.67E-07	1.31E-07	0.83	0.000
2.92E-08	7.14E-07	1.40E-07	0.88	0.000
3.14E-08	7.68E-07	1.51E-07	0.95	0.000
3.41E-08	8.33E-07	1.64E-07	1.03	0.001
3.69E-08	9.01E-07	1.77E-07	1.12	0.001
4.04E-08	9.87E-07	1.94E-07	1.22	0.001
4.42E-08	1.08E-06	2.12E-07	1.34	0.001
4.84E-08 5.37E-08	1.18E-06 1.31E-06	2.33E-07	1.47	0.001
6.00E-08	1.31E-06 1.47E-06	2.58E-07 2.88E-07	1.62 1.81	0.001 0.001
6.81E-08	1.66E-06	3.27E-07	2.06	0.001

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567625.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567665.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567685.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567745.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567785.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
567805.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
567825.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
567845.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
567865.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
567885.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.056	0.056	0.056	0.056	0.056
567905.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.066	0.066	0.066	0.066	0.066
567925.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.077	0.077	0.077	0.077	0.077
567945.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.090	0.090	0.090	0.090	0.090
567965.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.104	0.105	0.105	0.105	0.105
567985.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.120	0.120	0.120	0.120	0.120
568085.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.151	0.151	0.151	0.151	0.151
568105.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.145	0.145	0.145	0.145	0.145
568145.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.129	0.129	0.129	0.129	0.129
568165.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.120	0.120	0.120	0.120	0.120
568185.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.113	0.113	0.113	0.113	0.113
568205.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.106	0.106	0.106	0.106	0.106
568225.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.098	0.099	0.099	0.099	0.099
568245.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.091	0.091	0.091	0.091	0.091
568265.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.085	0.085	0.085	0.085	0.085
568285.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.079	0.079	0.079	0.079	0.079
568305.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.073	0.073	0.073	0.073	0.073
568325.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.067	0.067	0.067	0.067	0.067
568345.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.063	0.063	0.063	0.063	0.063
568365.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.058	0.058	0.058	0.058	0.058
568385.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.054	0.054	0.054	0.054	0.054
568425.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
568445.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
568465.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.041	0.041	0.041	0.041	0.041
568485.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568505.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568525.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568545.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568565.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568585.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568605.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568625.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568645.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568665.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568685.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568705.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567325.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567665.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008

	Cancer Risk = ∑	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
7.69E-08	1.88E-06	3.69E-07	2.33	0.001
8.77E-08 1.01E-07	2.14E-06 2.47E-06	4.21E-07	2.65	0.001
1.01E-07 1.17E-07	2.47E-06 2.87E-06	4.85E-07 5.63E-07	3.05 3.55	0.002 0.002
1.38E-07	3.38E-06	6.64E-07	4.18	0.002
1.65E-07	4.03E-06	7.92E-07	4.99	0.002
1.98E-07	4.85E-06	9.53E-07	6.00	0.003
2.42E-07	5.91E-06	1.16E-06	7.32	0.004
2.96E-07	7.22E-06	1.42E-06	8.94	0.004
3.60E-07	8.80E-06	1.73E-06	10.88	0.005
4.56E-07	1.11E-05	2.19E-06	13.78	0.007
5.30E-07	1.30E-05	2.55E-06	16.03	0.008
6.33E-07	1.55E-05	3.04E-06	19.13	0.009
7.55E-07	1.85E-05	3.63E-06	22.84	0.011
8.89E-07 1.04E-06	2.17E-05 2.53E-05	4.27E-06 4.97E-06	26.89 31.32	0.013 0.015
1.21E-06	2.95E-05	5.80E-06	36.52	0.013
1.40E-06	3.42E-05	6.73E-06	42.38	0.021
1.60E-06	3.92E-05	7.71E-06	48.54	0.024
2.02E-06	4.94E-05	9.71E-06	61.11	0.030
1.94E-06	4.74E-05	9.32E-06	58.71	0.029
1.73E-06	4.22E-05	8.29E-06	52.18	0.026
1.61E-06	3.94E-05	7.75E-06	48.81	0.024
1.52E-06	3.70E-05	7.28E-06	45.83	0.023
1.42E-06	3.47E-05	6.82E-06	42.92	0.021
1.32E-06	3.23E-05	6.35E-06	39.99	0.020
1.22E-06	2.99E-05	5.88E-06	37.01	0.018
1.14E-06 1.05E-06	2.78E-05 2.58E-05	5.45E-06 5.06E-06	34.34 31.89	0.017 0.016
9.78E-07	2.39E-05	4.70E-06	29.56	0.015
9.05E-07	2.21E-05	4.34E-06	27.36	0.014
8.45E-07	2.06E-05	4.06E-06	25.55	0.013
7.84E-07	1.92E-05	3.77E-06	23.71	0.012
7.26E-07	1.78E-05	3.49E-06	21.97	0.011
6.29E-07	1.54E-05	3.02E-06	19.04	0.009
5.86E-07	1.43E-05	2.81E-06	17.71	0.009
5.50E-07	1.34E-05	2.64E-06	16.62	0.008
5.12E-07	1.25E-05	2.46E-06	15.49	0.008
4.84E-07 4.55E-07	1.18E-05	2.33E-06 2.19E-06	14.65	0.007
4.55E-07 4.28E-07	1.11E-05 1.05E-05	2.19E-06 2.06E-06	13.76 12.95	0.007 0.006
4.05E-07	9.90E-06	1.95E-06	12.25	0.006
3.82E-07	9.35E-06	1.84E-06	11.57	0.006
3.62E-07	8.86E-06	1.74E-06	10.96	0.005
3.45E-07	8.42E-06	1.66E-06	10.42	0.005
3.28E-07	8.00E-06	1.57E-06	9.91	0.005
3.11E-07	7.61E-06	1.50E-06	9.42	0.005
2.96E-07	7.24E-06	1.42E-06	8.96	0.004
2.83E-07	6.92E-06	1.36E-06	8.57	0.004
2.13E-08	5.21E-07	1.02E-07	0.65	0.000
2.26E-08	5.53E-07	1.09E-07	0.68	0.000
2.40E-08 2.57E-08	5.87E-07 6.27E-07	1.15E-07 1.23E-07	0.73 0.78	0.000 0.000
2.74E-08	6.69E-07	1.23E-07 1.31E-07	0.78	0.000
2.93E-08	7.16E-07	1.41E-07	0.89	0.000
3.15E-08	7.70E-07	1.51E-07	0.95	0.000
3.40E-08	8.32E-07	1.63E-07	1.03	0.001
3.70E-08	9.04E-07	1.78E-07	1.12	0.001
4.05E-08	9.89E-07	1.94E-07	1.22	0.001
4.42E-08	1.08E-06	2.13E-07	1.34	0.001
4.85E-08	1.19E-06	2.33E-07	1.47	0.001
5.36E-08	1.31E-06	2.58E-07	1.62	0.001
5.97E-08	1.46E-06	2.87E-07	1.81	0.001
6.76E-08 7.67E-08	1.65E-06 1.88E-06	3.24E-07 3.69E-07	2.04 2.32	0.001 0.001
8.74E-08	2.14E-06	4.20E-07	2.64	0.001
1.01E-07	2.46E-06	4.84E-07	3.05	0.002

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567685.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567745.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567785.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567805.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
567825.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
567845.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
567865.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
567885.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.062	0.062	0.062	0.062	0.062
567905.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.075	0.075	0.075	0.075	0.075
567925.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.088	0.088	0.088	0.088	0.088
567945.16 567965.16	4148710.16 4148710.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.103 0.121	0.104 0.121	0.104 0.121	0.104	0.104 0.121
567965.16 567985.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.121	0.121	0.121	0.121 0.142	0.121
568065.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.142	0.142	0.142	0.142	0.142
568085.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.199	0.199	0.199	0.199	0.188
568105.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.188	0.188	0.188	0.176	0.176
568125.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.176	0.176	0.176	0.176	0.163
568165.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.103	0.139	0.139	0.139	0.139
568185.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.137	0.133	0.127	0.127	0.127
568205.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.118	0.118	0.118	0.118	0.118
568225.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.118	0.109	0.108	0.108	0.108
568245.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.099	0.099	0.099	0.099	0.099
568265.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.090	0.090	0.090	0.090	0.090
568285.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.083	0.083	0.083	0.083	0.083
568305.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.077	0.077	0.077	0.077	0.077
568325.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.071	0.071	0.071	0.071	0.071
568345.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.065	0.065	0.065	0.065	0.065
568405.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.051	0.052	0.052	0.052	0.052
568425.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568445.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
568465.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568485.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568505.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568525.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568545.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568565.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568585.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568605.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568625.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568645.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568665.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568685.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
567325.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16 567505.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16 567525.16	4148730.16 4148730.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000	0.003	0.003 0.003	0.003 0.003	0.003	0.003 0.003
567525.16 567545.16	4148730.16 4148730.16	0.000 0.000	0.000	0.000 0.000	0.000	0.000 0.000	0.003 0.004	0.003	0.003	0.003 0.004	0.003
56/545.16 567565.16	4148730.16 4148730.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16 567585.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16 567605.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567625.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.006	0.005
567625.16 567645.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.007	0.008	0.007	0.007	0.007
567705.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.010	0.010
567725.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.012	0.012
567745.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.015
30	0. 00.10	3.000	3.330	0.000	0.000	0.000	5.525	3.023	3.023	0.020	0.010

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.17E-07	2.87E-06	5.64E-07	3.55	0.002
1.39E-07	3.39E-06	6.66E-07	4.20	0.002
1.66E-07	4.06E-06	7.98E-07	5.02	0.002
2.02E-07	4.94E-06	9.71E-07	6.12	0.003
2.48E-07	6.06E-06	1.19E-06	7.49	0.004
3.07E-07	7.49E-06	1.47E-06	9.27	0.005
3.77E-07	9.22E-06	1.81E-06	11.41	0.006
4.71E-07 5.71E-07	1.15E-05 1.40E-05	2.26E-06 2.74E-06	14.24 17.27	0.007 0.009
6.92E-07	1.69E-05	3.33E-06	20.94	0.010
8.37E-07	2.04E-05	4.02E-06	25.30	0.012
1.00E-06	2.45E-05	4.82E-06	30.34	0.015
1.18E-06	2.89E-05	5.68E-06	35.74	0.018
1.39E-06	3.39E-05	6.67E-06	41.97	0.021
1.62E-06	3.96E-05	7.79E-06	49.05	0.024
1.90E-06 2.67E-06	4.65E-05 6.52E-05	9.13E-06 1.28E-05	57.48 80.74	0.028 0.040
2.52E-06	6.15E-05	1.21E-05	76.14	0.040
2.36E-06	5.77E-05	1.13E-05	71.35	0.035
2.19E-06	5.36E-05	1.05E-05	66.32	0.033
1.86E-06	4.54E-05	8.93E-06	56.21	0.028
1.71E-06	4.18E-05	8.21E-06	51.72	0.026
1.58E-06	3.86E-05	7.59E-06	47.76	0.024
1.46E-06	3.56E-05	6.99E-06	44.03	0.022
1.33E-06 1.21E-06	3.24E-05 2.95E-05	6.38E-06 5.80E-06	40.14 36.51	0.020 0.018
1.12E-06	2.73E-05	5.36E-06	33.75	0.017
1.03E-06	2.52E-05	4.95E-06	31.19	0.015
9.48E-07	2.32E-05	4.55E-06	28.66	0.014
8.77E-07	2.14E-05	4.21E-06	26.53	0.013
6.92E-07	1.69E-05	3.33E-06	20.94	0.010
6.43E-07 5.98E-07	1.57E-05 1.46E-05	3.09E-06 2.87E-06	19.43 18.09	0.010 0.009
5.60E-07	1.40L-05	2.69E-06	16.93	0.003
5.24E-07	1.28E-05	2.52E-06	15.84	0.008
4.90E-07	1.20E-05	2.35E-06	14.82	0.007
4.60E-07	1.12E-05	2.21E-06	13.91	0.007
4.32E-07	1.06E-05	2.08E-06	13.07	0.006
4.09E-07	9.99E-06	1.96E-06 1.86E-06	12.36	0.006
3.87E-07 3.65E-07	9.45E-06 8.93E-06	1.86E-06 1.75E-06	11.70 11.05	0.006 0.005
3.47E-07	8.49E-06	1.67E-06	10.50	0.005
3.31E-07	8.08E-06	1.59E-06	10.00	0.005
3.14E-07	7.68E-06	1.51E-06	9.51	0.005
2.99E-07	7.31E-06	1.44E-06	9.05	0.004
2.13E-08	5.22E-07	1.03E-07	0.65	0.000
2.27E-08	5.55E-07	1.09E-07	0.69	0.000
2.41E-08 2.57E-08	5.89E-07 6.29E-07	1.16E-07 1.24E-07	0.73 0.78	0.000 0.000
2.74E-08	6.70E-07	1.32E-07	0.78	0.000
2.94E-08	7.18E-07	1.41E-07	0.89	0.000
3.16E-08	7.72E-07	1.52E-07	0.96	0.000
3.41E-08	8.33E-07	1.64E-07	1.03	0.001
3.70E-08	9.03E-07	1.77E-07	1.12	0.001
4.03E-08	9.84E-07	1.93E-07	1.22	0.001
4.42E-08	1.08E-06	2.12E-07	1.34	0.001
4.86E-08 5.37E-08	1.19E-06 1.31E-06	2.33E-07 2.58E-07	1.47 1.62	0.001 0.001
5.98E-08	1.46E-06	2.87E-07	1.81	0.001
6.71E-08	1.64E-06	3.22E-07	2.03	0.001
7.62E-08	1.86E-06	3.66E-07	2.30	0.001
8.77E-08	2.14E-06	4.21E-07	2.65	0.001
1.01E-07	2.46E-06	4.83E-07	3.04	0.002
1.17E-07	2.86E-06	5.63E-07	3.54	0.002
1.39E-07 1.68E-07	3.39E-06 4.09E-06	6.66E-07 8.05E-07	4.20 5.07	0.002 0.003
2.04E-07	4.09E-06	9.81E-07	6.18	0.003

						Project	: Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567765.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567785.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567805.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
567825.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
567845.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
567865.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.057	0.057	0.057	0.057	0.057
567885.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.069	0.069	0.069	0.069	0.069
567905.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.084	0.084	0.084	0.084	0.084
567925.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.102	0.102	0.102	0.102	0.102
567945.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.120	0.121	0.121	0.121	0.121
567965.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.142	0.143	0.142	0.142	0.142
568085.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.237	0.238	0.237	0.237	0.237
568105.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.214	0.215	0.214	0.214	0.214
568125.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.194	0.194	0.194	0.194	0.194
568145.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.175	0.175	0.175	0.175	0.175
568165.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.159	0.159	0.159	0.159	0.159
568185.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.143	0.144	0.143	0.143	0.143
568205.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.130	0.130	0.130	0.130	0.130
568225.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.118	0.118	0.118	0.118	0.118
568245.16 568265.16	4148730.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.107	0.107 0.095	0.107 0.095	0.107	0.107 0.095
568265.16 568285.16	4148730.16 4148730.16	0.000 0.000	0.000		0.000	0.000 0.000	0.095 0.087	0.095	0.095	0.095 0.087	0.095
568285.16 568205.16	4148730.16 4148730.16	0.000		0.000				0.087			
568305.16 568325.16	4148730.16 4148730.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.080 0.073	0.080	0.080 0.073	0.080 0.073	0.080 0.073
568325.16 568365.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.073	0.074	0.073	0.073	0.073
568385.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.062	0.062	0.062	0.058	0.052
568405.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.058	0.058	0.053	0.053	0.053
568425.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.049	0.049
568465.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.043	0.043	0.042
568485.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568505.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568525.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568545.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568565.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.032	0.031	0.031	0.031	0.031
568585.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568605.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568625.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568645.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568705.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568725.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567325.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.007	0.008	0.007	0.007	0.007
567685.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567745.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567785.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567805.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
567825.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
567845.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.051	0.051	0.051	0.051	0.051

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.52E-07	6.15E-06	1.21E-06	7.61	0.004
3.16E-07	7.73E-06	1.52E-06	9.56	0.004 0.005
3.96E-07	9.69E-06	1.90E-06	11.99	0.006
4.98E-07	1.22E-05	2.39E-06	15.05	0.007
6.30E-07	1.54E-05	3.03E-06	19.05	0.009
7.62E-07	1.86E-05	3.66E-06	23.05	0.011
9.29E-07	2.27E-05	4.46E-06	28.10	0.014
1.13E-06	2.77E-05	5.44E-06	34.24	0.017
1.37E-06	3.34E-05	6.57E-06	41.35	0.020
1.62E-06 1.91E-06	3.95E-05 4.67E-05	7.76E-06 9.18E-06	48.86 57.78	0.024 0.029
3.18E-06	7.78E-05	1.53E-05	96.29	0.029
2.88E-06	7.03E-05	1.38E-05	86.98	0.043
2.60E-06	6.36E-05	1.25E-05	78.67	0.039
2.35E-06	5.75E-05	1.13E-05	71.12	0.035
2.13E-06	5.20E-05	1.02E-05	64.34	0.032
1.93E-06	4.71E-05	9.25E-06	58.23	0.029
1.75E-06	4.27E-05	8.39E-06	52.84	0.026
1.58E-06	3.86E-05	7.58E-06	47.75	0.024
1.44E-06 1.28E-06	3.51E-05 3.13E-05	6.91E-06 6.14E-06	43.49 38.67	0.021 0.019
1.17E-06	2.86E-05	5.62E-06	35.40	0.013
1.07E-06	2.62E-05	5.16E-06	32.46	0.016
9.87E-07	2.41E-05	4.74E-06	29.85	0.015
8.28E-07	2.02E-05	3.98E-06	25.05	0.012
7.77E-07	1.90E-05	3.73E-06	23.49	0.012
7.07E-07	1.73E-05	3.40E-06	21.40	0.011
6.54E-07	1.60E-05	3.14E-06	19.78	0.010
5.65E-07	1.38E-05	2.72E-06	17.10	0.008
5.29E-07 4.95E-07	1.29E-05 1.21E-05	2.54E-06 2.38E-06	16.00 14.97	0.008 0.007
4.65E-07	1.21E-05 1.14E-05	2.36E-06 2.24E-06	14.97	0.007
4.35E-07	1.06E-05	2.09E-06	13.17	0.006
4.13E-07	1.01E-05	1.98E-06	12.48	0.006
3.89E-07	9.50E-06	1.87E-06	11.75	0.006
3.68E-07	8.98E-06	1.77E-06	11.12	0.005
3.49E-07	8.53E-06	1.68E-06	10.56	0.005
3.32E-07	8.12E-06	1.60E-06	10.05	0.005
2.85E-07 2.72E-07	6.98E-06 6.64E-06	1.37E-06 1.30E-06	8.63 8.21	0.004 0.004
2.72E-07 2.13E-08	5.22E-07	1.03E-07	0.65	0.004
2.27E-08	5.54E-07	1.09E-07	0.69	0.000
2.41E-08	5.89E-07	1.16E-07	0.73	0.000
2.57E-08	6.28E-07	1.23E-07	0.78	0.000
2.74E-08	6.70E-07	1.32E-07	0.83	0.000
2.94E-08	7.18E-07	1.41E-07	0.89	0.000
3.16E-08	7.72E-07	1.52E-07	0.96	0.000
3.42E-08	8.36E-07	1.64E-07	1.03	0.001
3.70E-08 4.02E-08	9.04E-07 9.83E-07	1.78E-07 1.93E-07	1.12 1.22	0.001 0.001
4.40E-08	1.08E-06	2.11E-07	1.33	0.001
4.83E-08	1.18E-06	2.32E-07	1.46	0.001
5.35E-08	1.31E-06	2.57E-07	1.62	0.001
5.95E-08	1.45E-06	2.86E-07	1.80	0.001
6.69E-08	1.64E-06	3.22E-07	2.02	0.001
7.60E-08	1.86E-06	3.65E-07	2.30	0.001
8.67E-08	2.12E-06	4.16E-07	2.62	0.001
1.01E-07	2.46E-06	4.83E-07	3.04	0.002
1.17E-07 1.39E-07	2.85E-06 3.39E-06	5.60E-07 6.67E-07	3.53 4.20	0.002 0.002
1.67E-07	4.09E-06	8.03E-07	5.06	0.002
2.05E-07	5.01E-06	9.84E-07	6.19	0.003
2.56E-07	6.25E-06	1.23E-06	7.73	0.004
3.25E-07	7.94E-06	1.56E-06	9.83	0.005
4.18E-07	1.02E-05	2.01E-06	12.66	0.006
5.32E-07	1.30E-05	2.56E-06	16.10	0.008
6.83E-07	1.67E-05	3.28E-06	20.64	0.010

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567865.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.063	0.063	0.063	0.063	0.063
567885.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.078	0.078	0.078	0.078	0.078
567905.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.095	0.095	0.095	0.095	0.095
567925.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.117	0.117	0.117	0.117	0.117
567945.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.143	0.143	0.143	0.143	0.143
568085.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.304	0.304	0.304	0.304	0.304
568105.16 568125.16	4148750.16 4148750.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.261 0.229	0.261 0.230	0.261 0.229	0.261 0.229	0.261 0.229
568165.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.229	0.230	0.229	0.229	0.179
568185.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.179	0.179	0.179	0.159	0.159
568205.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.142	0.142	0.142	0.142	0.142
568225.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.127	0.128	0.127	0.127	0.127
568245.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.111	0.112	0.111	0.111	0.111
568265.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.099	0.100	0.099	0.099	0.099
568285.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.091	0.091	0.091	0.091	0.091
568305.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.083	0.083	0.083	0.083	0.083
568345.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.069	0.069	0.069	0.069	0.069
568365.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.062	0.062	0.062	0.062	0.062
568385.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.058	0.058	0.058	0.058	0.058
568405.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.053	0.053	0.053	0.053	0.053
568425.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568445.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.045	0.045	0.045
568465.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568485.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568505.16 568525.16	4148750.16 4148750.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.037 0.035	0.037 0.035	0.037 0.035	0.037 0.035	0.037 0.035
568545.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568565.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568585.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568605.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568665.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568685.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568705.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568725.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567325.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16 567485.16	4148770.16 4148770.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
567505.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567745.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567785.16 567805.16	4148770.16 4148770.16	0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.025 0.033	0.025 0.033	0.025 0.033	0.025 0.033	0.025 0.033
567805.16 567825.16	4148770.16 4148770.16	0.000 0.000	0.000 0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
567825.16 567845.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.056	0.043
567865.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.070	0.030	0.070
567885.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.088	0.088	0.088	0.088	0.088
567905.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.109	0.110	0.110	0.110	0.110
567925.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.137	0.137	0.137	0.137	0.137
568105.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.315	0.315	0.315	0.315	0.315
568145.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.230	0.230	0.230	0.230	0.230

	Cancer Risk = 5	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
8.45E-07	2.06E-05	4.06E-06	25.55	0.013
1.04E-06 1.28E-06	2.55E-05	5.00E-06	31.51	0.016
1.28E-06 1.57E-06	3.12E-05 3.84E-05	6.13E-06 7.55E-06	38.58 47.54	0.019 0.023
1.91E-06	4.68E-05	9.19E-06	57.88	0.023
4.07E-06	9.96E-05	1.96E-05	123.22	0.061
3.50E-06	8.56E-05	1.68E-05	105.97	0.052
3.08E-06	7.52E-05	1.48E-05	93.09	0.046
2.40E-06	5.86E-05	1.15E-05	72.50	0.036
2.14E-06	5.23E-05	1.03E-05	64.70	0.032
1.91E-06	4.67E-05	9.17E-06	57.76	0.029
1.71E-06	4.18E-05	8.22E-06	51.73	0.026
1.50E-06	3.66E-05	7.19E-06	45.27	0.022
1.34E-06	3.26E-05	6.42E-06	40.39	0.020
1.22E-06	2.98E-05	5.85E-06	36.83	0.018
1.12E-06	2.74E-05 2.27E-05	5.38E-06	33.88	0.017
9.28E-07		4.46E-06	28.06 25.37	0.014 0.013
8.39E-07 7.81E-07	2.05E-05 1.91E-05	4.03E-06 3.75E-06	23.62	0.013
7.81E-07 7.14E-07	1.75E-05	3.43E-06	21.60	0.012
6.59E-07	1.61E-05	3.43E-06	19.93	0.011
6.11E-07	1.49E-05	2.94E-06	18.49	0.009
5.69E-07	1.39E-05	2.73E-06	17.20	0.008
5.32E-07	1.30E-05	2.55E-06	16.08	0.008
4.99E-07	1.22E-05	2.39E-06	15.08	0.007
4.67E-07	1.14E-05	2.24E-06	14.12	0.007
4.40E-07	1.08E-05	2.11E-06	13.31	0.007
4.15E-07	1.01E-05	1.99E-06	12.55	0.006
3.91E-07	9.54E-06	1.88E-06	11.81	0.006
3.70E-07	9.04E-06	1.78E-06	11.19	0.006
3.14E-07	7.67E-06	1.51E-06	9.50	0.005
2.99E-07	7.32E-06	1.44E-06	9.06	0.004
2.84E-07	6.94E-06	1.36E-06	8.59	0.004
2.70E-07 2.12E-08	6.60E-06 5.19E-07	1.30E-06 1.02E-07	8.17 0.64	0.004 0.000
2.12E-08 2.25E-08	5.51E-07	1.02E-07 1.08E-07	0.68	0.000
2.40E-08	5.87E-07	1.15E-07	0.73	0.000
2.56E-08	6.26E-07	1.23E-07	0.77	0.000
2.73E-08	6.68E-07	1.31E-07	0.83	0.000
2.93E-08	7.17E-07	1.41E-07	0.89	0.000
3.16E-08	7.71E-07	1.52E-07	0.95	0.000
3.41E-08	8.34E-07	1.64E-07	1.03	0.001
3.69E-08	9.03E-07	1.77E-07	1.12	0.001
4.00E-08	9.77E-07	1.92E-07	1.21	0.001
4.38E-08	1.07E-06	2.10E-07	1.32	0.001
4.82E-08	1.18E-06	2.32E-07	1.46	0.001
5.31E-08	1.30E-06	2.55E-07	1.61	0.001
5.91E-08	1.44E-06	2.84E-07	1.79	0.001
6.67E-08	1.63E-06	3.20E-07	2.02	0.001
7.52E-08 8.57E-08	1.84E-06	3.61E-07	2.28 2.59	0.001
8.57E-08 9.97E-08	2.09E-06 2.44E-06	4.12E-07 4.79E-07	3.02	0.001 0.001
1.16E-07	2.44E-06 2.84E-06	5.59E-07	3.52	0.001
1.38E-07	3.37E-06	6.62E-07	4.17	0.002
1.66E-07	4.05E-06	7.96E-07	5.01	0.002
2.05E-07	5.00E-06	9.84E-07	6.19	0.003
2.59E-07	6.32E-06	1.24E-06	7.82	0.004
3.33E-07	8.14E-06	1.60E-06	10.07	0.005
4.38E-07	1.07E-05	2.10E-06	13.24	0.007
5.71E-07	1.40E-05	2.74E-06	17.26	0.009
7.49E-07	1.83E-05	3.60E-06	22.65	0.011
9.45E-07	2.31E-05	4.54E-06	28.58	0.014
1.18E-06	2.89E-05	5.67E-06	35.73	0.018
1.47E-06	3.59E-05	7.05E-06	44.42	0.022
1.83E-06	4.48E-05	8.80E-06	55.43	0.027
4.23E-06	1.03E-04	2.03E-05	127.84	0.063
3.09E-06	7.55E-05	1.48E-05	93.47	0.046

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
500.05	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568165.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.199	0.199	0.199	0.199	0.199
568185.16 568205.16	4148770.16 4148770.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.175 0.154	0.175 0.154	0.175 0.154	0.175 0.154	0.175 0.154
568205.16 568225.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.134	0.134	0.134	0.134	0.135
568245.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.133	0.133	0.133	0.120	0.120
568265.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.104	0.104	0.104	0.104	0.104
568285.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.094	0.094	0.094	0.094	0.094
568325.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.078	0.078	0.078	0.078	0.078
568345.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.070	0.070	0.070	0.070	0.070
568365.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.064	0.064	0.064	0.064	0.064
568385.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.058	0.058	0.058	0.058	0.058
568405.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.053	0.053	0.053	0.053	0.053
568445.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.046	0.046	0.046
568465.16 568485.16	4148770.16 4148770.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.042 0.039	0.042 0.039	0.042 0.039	0.042 0.039	0.042 0.039
568505.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568525.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.034	0.037
568545.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568565.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568625.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568645.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568665.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568685.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568705.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568725.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567325.16 567345.16	4148790.16	0.000	0.000	0.000 0.000	0.000	0.000	0.002	0.002	0.002	0.002 0.002	0.002 0.002
567365.16 567365.16	4148790.16 4148790.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002	0.002
567385.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16 567585.16	4148790.16 4148790.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
567605.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.005	0.004
567625.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567745.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16 567785.16	4148790.16 4148790.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.019 0.025	0.019 0.025	0.019 0.025	0.019 0.025	0.019 0.025
567805.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
567825.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.046	0.046	0.046
567845.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.062	0.062	0.062	0.062	0.062
567865.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.079	0.079	0.079	0.079	0.079
567885.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.101	0.101	0.101	0.101	0.101
567905.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.128	0.128	0.128	0.128	0.128
568125.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.315	0.315	0.315	0.315	0.315
568145.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.258	0.258	0.258	0.258	0.258
568165.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.219	0.219	0.219	0.219	0.219
568185.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.189	0.189	0.189	0.189	0.189
568205.16 568225.16	4148790.16 4148790.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.164 0.143	0.164 0.143	0.164 0.143	0.164 0.143	0.164 0.143
568245.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.143	0.143	0.143	0.143	0.143
568305.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.087	0.087	0.087	0.087	0.087
568325.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.078	0.078	0.078	0.078	0.078
568345.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.068	0.068	0.068	0.068	0.068
568365.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.064	0.065	0.064	0.064	0.064
568385.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.058	0.058	0.058	0.058	0.058

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.67E-06	6.52E-05	1.28E-05	80.67	0.040
2.35E-06	5.75E-05	1.13E-05	71.18	0.035
2.07E-06	5.05E-05	9.93E-06	62.55	0.031
1.82E-06	4.44E-05	8.73E-06	54.97	0.027
1.61E-06	3.94E-05	7.74E-06	48.74	0.024
1.40E-06	3.41E-05	6.70E-06	42.20	0.021
1.26E-06	3.09E-05	6.07E-06	38.20	0.019
1.04E-06	2.55E-05	5.01E-06	31.55	0.016
9.37E-07 8.58E-07	2.29E-05 2.10E-05	4.50E-06 4.12E-06	28.34	0.014
7.77E-07	1.90E-05	4.12E-06 3.73E-06	25.95 23.49	0.013 0.012
7.18E-07	1.75E-05	3.45E-06	21.71	0.012
6.14E-07	1.50E-05	2.95E-06	18.56	0.009
5.71E-07	1.40E-05	2.74E-06	17.27	0.009
5.32E-07	1.30E-05	2.55E-06	16.08	0.008
5.00E-07	1.22E-05	2.40E-06	15.14	0.007
4.67E-07	1.14E-05	2.24E-06	14.11	0.007
4.39E-07	1.07E-05	2.11E-06	13.28	0.007
4.15E-07	1.01E-05	1.99E-06	12.55	0.006
3.49E-07 3.31E-07	8.53E-06	1.68E-06 1.59E-06	10.56	0.005
3.31E-07 3.13E-07	8.09E-06 7.65E-06	1.59E-06 1.50E-06	10.01 9.47	0.005 0.005
2.97E-07	7.03L-00 7.27E-06	1.43E-06	8.99	0.003
2.83E-07	6.91E-06	1.36E-06	8.55	0.004
2.68E-07	6.56E-06	1.29E-06	8.12	0.004
2.11E-08	5.15E-07	1.01E-07	0.64	0.000
2.24E-08	5.47E-07	1.08E-07	0.68	0.000
2.38E-08	5.82E-07	1.14E-07	0.72	0.000
2.54E-08	6.21E-07	1.22E-07	0.77	0.000
2.72E-08	6.66E-07	1.31E-07	0.82	0.000
2.92E-08 3.15E-08	7.15E-07 7.69E-07	1.40E-07	0.88	0.000
3.38E-08	8.27E-07	1.51E-07 1.63E-07	0.95 1.02	0.000
3.67E-08	8.97E-07	1.76E-07	1.11	0.001
3.99E-08	9.75E-07	1.92E-07	1.21	0.001
4.34E-08	1.06E-06	2.09E-07	1.31	0.001
4.79E-08	1.17E-06	2.30E-07	1.45	0.001
5.28E-08	1.29E-06	2.54E-07	1.60	0.001
5.86E-08	1.43E-06	2.81E-07	1.77	0.001
6.54E-08	1.60E-06	3.14E-07	1.98	0.001
7.46E-08	1.82E-06	3.58E-07	2.26	0.001
8.49E-08 9.79E-08	2.08E-06 2.39E-06	4.08E-07 4.70E-07	2.57 2.96	0.001 0.001
1.15E-07	2.81E-06	5.52E-07	3.48	0.001
1.37E-07	3.34E-06	6.57E-07	4.14	0.002
1.64E-07	4.02E-06	7.90E-07	4.97	0.002
2.04E-07	4.97E-06	9.78E-07	6.16	0.003
2.60E-07	6.35E-06	1.25E-06	7.86	0.004
3.40E-07	8.30E-06	1.63E-06	10.27	0.005
4.54E-07	1.11E-05	2.18E-06	13.73	0.007
6.10E-07	1.49E-05	2.93E-06	18.46	0.009
8.35E-07	2.04E-05	4.01E-06 5.08E-06	25.26	0.012
1.06E-06 1.36E-06	2.58E-05 3.32E-05	6.52E-06	31.98 41.07	0.016 0.020
1.71E-06	4.19E-05	8.23E-06	51.79	0.026
4.22E-06	1.03E-04	2.03E-05	127.75	0.063
3.46E-06	8.46E-05	1.66E-05	104.64	0.052
2.94E-06	7.19E-05	1.41E-05	88.98	0.044
2.54E-06	6.20E-05	1.22E-05	76.74	0.038
2.21E-06	5.39E-05	1.06E-05	66.73	0.033
1.92E-06	4.69E-05	9.22E-06	58.04	0.029
1.67E-06	4.09E-05	8.03E-06	50.57	0.025
1.17E-06 1.05E-06	2.86E-05 2.55E-05	5.63E-06 5.02E-06	35.42 31.60	0.017
9.20E-07	2.55E-05 2.25E-05	4.42E-06	31.60 27.82	0.016 0.014
8.68E-07	2.12E-05	4.17E-06	26.24	0.014
7.81E-07	1.91E-05	3.75E-06	23.63	0.012

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568405.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.054	0.054	0.054	0.054	0.054
568445.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.046	0.046	0.046
568465.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568485.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568505.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568525.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.034	0.035	0.035	0.035	0.035
568585.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568605.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568625.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568645.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568665.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568685.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568705.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568725.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567325.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148810.16	0.000 0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148810.16		0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16 567625.16	4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.005	0.005 0.005	0.005 0.005	0.005	0.005
	4148810.16	0.000	0.000	0.000	0.000	0.000 0.000	0.005 0.006	0.005	0.005	0.005 0.006	0.005
567645.16 567665.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006 0.007
567685.16 567685.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567705.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.010	0.010
567725.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567745.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567765.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.019	0.013	0.019	0.019	0.019
567785.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.026	0.019
567805.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.035	0.035
567825.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.048
567845.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.070	0.070	0.070	0.070	0.070
567865.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.089	0.090	0.090	0.090	0.090
567885.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.118	0.118	0.118	0.118	0.118
568145.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.303	0.303	0.303	0.303	0.303
568165.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.233	0.234	0.233	0.233	0.233
568185.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.197	0.197	0.197	0.197	0.197
568205.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.169	0.169	0.169	0.169	0.169
568225.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.146	0.146	0.146	0.146	0.146
568265.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.110	0.111	0.111	0.111	0.111
568285.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.097	0.097	0.097	0.097	0.097
568305.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.086	0.086	0.086	0.086	0.086
568325.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.077	0.077	0.077	0.077	0.077
568345.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.070	0.070	0.070	0.070	0.070
568365.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.064	0.064	0.064	0.064	0.064
568385.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.059	0.059	0.059	0.059	0.059
568405.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.053	0.053	0.053	0.053	0.053
568465.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568485.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568545.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568565.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568585.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568605.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568625.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568645.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568665.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568685.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568705.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.020

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		НІ
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
7.25E-07	1.77E-05	3.48E-06	21.94	0.011
6.16E-07	1.51E-05	2.96E-06	18.63	0.009
5.68E-07	1.39E-05	2.73E-06	17.18	0.008
5.31E-07	1.30E-05	2.55E-06	16.06	0.008
4.98E-07	1.22E-05	2.39E-06	15.08	0.007
4.67E-07	1.14E-05	2.24E-06	14.13	0.007
3.88E-07 3.67E-07	9.48E-06 8.96E-06	1.86E-06 1.76E-06	11.73 11.08	0.006 0.005
3.46E-07	8.46E-06	1.66E-06	10.47	0.005
3.27E-07	7.99E-06	1.57E-06	9.89	0.005
3.11E-07	7.59E-06	1.49E-06	9.39	0.005
2.94E-07	7.20E-06	1.41E-06	8.90	0.004
2.80E-07	6.84E-06	1.34E-06	8.47	0.004
2.66E-07 2.08E-08	6.50E-06 5.09E-07	1.28E-06 1.00E-07	8.05 0.63	0.004 0.000
2.22E-08	5.42E-07	1.00E-07 1.07E-07	0.63	0.000
2.36E-08	5.76E-07	1.13E-07	0.71	0.000
2.52E-08	6.16E-07	1.21E-07	0.76	0.000
2.70E-08	6.61E-07	1.30E-07	0.82	0.000
2.90E-08	7.09E-07	1.39E-07	0.88	0.000
3.11E-08	7.61E-07	1.49E-07	0.94	0.000
3.36E-08	8.20E-07	1.61E-07	1.01	0.001
3.63E-08 3.95E-08	8.88E-07 9.66E-07	1.74E-07 1.90E-07	1.10 1.20	0.001 0.001
4.30E-08	1.05E-06	2.07E-07	1.30	0.001
4.74E-08	1.16E-06	2.28E-07	1.43	0.001
5.23E-08	1.28E-06	2.51E-07	1.58	0.001
5.77E-08	1.41E-06	2.77E-07	1.75	0.001
6.48E-08	1.58E-06	3.11E-07	1.96	0.001
7.36E-08	1.80E-06	3.53E-07	2.22	0.001
8.42E-08 9.68E-08	2.06E-06 2.36E-06	4.04E-07 4.65E-07	2.55 2.93	0.001 0.001
1.13E-07	2.76E-06	5.42E-07	3.41	0.001
1.35E-07	3.30E-06	6.48E-07	4.08	0.002
1.64E-07	4.01E-06	7.87E-07	4.96	0.002
2.02E-07	4.93E-06	9.68E-07	6.10	0.003
2.58E-07	6.30E-06	1.24E-06	7.80	0.004
3.42E-07 4.67E-07	8.37E-06 1.14E-05	1.64E-06 2.24E-06	10.36 14.12	0.005 0.007
6.48E-07	1.58E-05	3.11E-06	19.60	0.007
9.42E-07	2.30E-05	4.52E-06	28.48	0.014
1.20E-06	2.93E-05	5.76E-06	36.30	0.018
1.58E-06	3.86E-05	7.58E-06	47.75	0.024
4.07E-06	9.94E-05	1.95E-05	123.05	0.061
3.13E-06	7.66E-05	1.50E-05	94.73	0.047
2.65E-06 2.27E-06	6.48E-05 5.54E-05	1.27E-05 1.09E-05	80.13 68.51	0.040 0.034
1.96E-06	4.79E-05	9.42E-06	59.32	0.034
1.48E-06	3.63E-05	7.13E-06	44.90	0.022
1.30E-06	3.19E-05	6.26E-06	39.44	0.019
1.15E-06	2.82E-05	5.54E-06	34.86	0.017
1.04E-06	2.53E-05	4.97E-06	31.31	0.015
9.36E-07	2.29E-05	4.50E-06	28.31	0.014
8.67E-07 7.90E-07	2.12E-05 1.93E-05	4.16E-06 3.79E-06	26.21	0.013 0.012
7.90E-07 7.18E-07	1.75E-05	3.45E-06	23.89 21.70	0.012
5.65E-07	1.38E-05	2.71E-06	17.08	0.008
5.24E-07	1.28E-05	2.52E-06	15.86	0.008
4.33E-07	1.06E-05	2.08E-06	13.09	0.006
4.06E-07	9.92E-06	1.95E-06	12.28	0.006
3.82E-07	9.33E-06	1.83E-06	11.54	0.006
3.61E-07	8.81E-06	1.73E-06	10.90	0.005
3.41E-07 3.23E-07	8.34E-06 7.89E-06	1.64E-06 1.55E-06	10.32 9.76	0.005 0.005
3.06E-07	7.47E-06	1.47E-06	9.25	0.005
2.90E-07	7.09E-06	1.39E-06	8.78	0.004
2.76E-07	6.74E-06	1.33E-06	8.34	0.004

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568725.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567325.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16 567445.16	4148830.16 4148830.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567465.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567505.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567565.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567745.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567785.16 567805.16	4148830.16 4148830.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.025 0.035	0.025 0.035	0.025 0.035	0.025 0.035	0.025 0.035
567825.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.055	0.053	0.053	0.051	0.051
567845.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.031	0.074	0.074	0.074	0.074
567865.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.103	0.103	0.103	0.103	0.103
568165.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.298	0.298	0.298	0.298	0.298
568185.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.201	0.201	0.201	0.201	0.201
568205.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.169	0.169	0.169	0.169	0.169
568245.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.124	0.125	0.124	0.124	0.124
568265.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.108	0.108	0.108	0.108	0.108
568285.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.094	0.094	0.094	0.094	0.094
568305.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.084	0.084	0.084	0.084	0.084
568325.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.075	0.075	0.075	0.075	0.075
568345.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.069	0.069	0.069	0.069	0.069
568365.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.063	0.063	0.063	0.063	0.063
568385.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.057	0.057	0.057	0.057	0.057
568405.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568425.16 568445.16	4148830.16 4148830.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.048 0.044	0.048 0.044	0.048 0.044	0.048 0.044	0.048 0.044
568465.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.041
568505.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568525.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568545.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568565.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568585.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568605.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568625.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568645.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568665.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568685.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568705.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568725.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567325.16 567345.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16 567365.16	4148850.16 4148850.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567365.16 567385.16	4148850.16 4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003

	HI			
3rd Trimester	Cancer Risk = 2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.63E-07	6.42E-06	1.26E-06	7.95	0.004
2.05E-08	5.02E-07	9.86E-08	0.62	0.000
2.19E-08 2.33E-08	5.36E-07 5.70E-07	1.05E-07 1.12E-07	0.66 0.71	0.000 0.000
2.49E-08	6.10E-07	1.12E-07 1.20E-07	0.71	0.000
2.67E-08	6.54E-07	1.28E-07	0.81	0.000
2.86E-08	6.99E-07	1.37E-07	0.87	0.000
3.07E-08	7.49E-07	1.47E-07	0.93	0.000
3.32E-08	8.11E-07	1.59E-07	1.00	0.000
3.60E-08	8.79E-07	1.73E-07	1.09	0.001
3.90E-08	9.54E-07	1.88E-07	1.18	0.001
4.26E-08	1.04E-06	2.04E-07	1.29	0.001
4.67E-08	1.14E-06	2.24E-07	1.41	0.001
5.17E-08	1.26E-06	2.48E-07	1.56	0.001
5.78E-08 6.51E-08	1.41E-06 1.59E-06	2.77E-07 3.13E-07	1.75	0.001
7.35E-08	1.80E-06	3.13E-07 3.53E-07	1.97 2.22	0.001 0.001
8.35E-08	2.04E-06	4.01E-07	2.52	0.001
9.59E-08	2.34E-06	4.60E-07	2.90	0.001
1.12E-07	2.73E-06	5.36E-07	3.38	0.002
1.32E-07	3.22E-06	6.33E-07	3.98	0.002
1.61E-07	3.92E-06	7.71E-07	4.86	0.002
2.00E-07	4.88E-06	9.59E-07	6.04	0.003
2.54E-07	6.22E-06	1.22E-06	7.69	0.004
3.39E-07	8.28E-06	1.63E-06	10.24	0.005
4.74E-07	1.16E-05	2.28E-06	14.33	0.007
6.81E-07	1.66E-05	3.27E-06	20.60	0.010
9.93E-07	2.43E-05	4.77E-06	30.04	0.015
1.38E-06 4.00E-06	3.38E-05 9.78E-05	6.64E-06 1.92E-05	41.84 120.99	0.021 0.060
2.70E-06	6.59E-05	1.30E-05	81.57	0.040
2.27E-06	5.55E-05	1.09E-05	68.67	0.034
1.67E-06	4.09E-05	8.03E-06	50.56	0.025
1.45E-06	3.54E-05	6.96E-06	43.81	0.022
1.27E-06	3.09E-05	6.08E-06	38.29	0.019
1.13E-06	2.76E-05	5.41E-06	34.09	0.017
1.01E-06	2.48E-05	4.87E-06	30.66	0.015
9.26E-07	2.26E-05	4.45E-06	28.01	0.014
8.43E-07	2.06E-05	4.05E-06	25.49	0.013
7.70E-07	1.88E-05	3.70E-06	23.28	0.011
7.03E-07	1.72E-05	3.38E-06	21.26	0.010
6.47E-07 5.95E-07	1.58E-05 1.45E-05	3.11E-06 2.86E-06	19.55 17.99	0.010 0.009
5.56E-07	1.45E-05 1.36E-05	2.67E-06	16.82	0.009
4.83E-07	1.18E-05	2.32E-06	14.62	0.007
4.52E-07	1.10E-05	2.17E-06	13.66	0.007
4.25E-07	1.04E-05	2.04E-06	12.84	0.006
3.98E-07	9.72E-06	1.91E-06	12.02	0.006
3.75E-07	9.16E-06	1.80E-06	11.34	0.006
3.53E-07	8.64E-06	1.70E-06	10.69	0.005
3.34E-07	8.17E-06	1.61E-06	10.11	0.005
3.17E-07	7.74E-06	1.52E-06	9.58	0.005
3.00E-07	7.34E-06	1.44E-06	9.08	0.004
2.85E-07	6.96E-06	1.37E-06	8.61	0.004
2.71E-07 2.58E-07	6.61E-06 6.30E-06	1.30E-06 1.24E-06	8.19 7.80	0.004 0.004
2.02E-07	4.94E-07	9.71E-08	0.61	0.004
2.16E-08	5.27E-07	1.04E-07	0.65	0.000
2.30E-08	5.63E-07	1.11E-07	0.70	0.000
2.46E-08	6.02E-07	1.18E-07	0.74	0.000
2.63E-08	6.43E-07	1.26E-07	0.80	0.000
2.80E-08	6.85E-07	1.35E-07	0.85	0.000
3.02E-08	7.38E-07	1.45E-07	0.91	0.000
3.29E-08	8.03E-07	1.58E-07	0.99	0.000
3.56E-08	8.71E-07	1.71E-07	1.08	0.001
3.86E-08	9.44E-07	1.86E-07	1.17	0.001
4.21E-08	1.03E-06	2.02E-07	1.27	0.001

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567545.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567565.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16 567735 16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16 567745.16	4148850.16 4148850.16	0.000 0.000	0.000	0.000 0.000	0.000	0.000	0.012	0.012	0.012	0.012 0.015	0.012 0.015
567765.16	4148850.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.015 0.019	0.015 0.019	0.015 0.019	0.015	0.015
567785.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.015	0.019	0.015	0.019	0.015
567805.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.035
567825.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.053	0.053	0.053	0.053	0.053
568225.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.138	0.138	0.138	0.138	0.138
568245.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.138	0.138	0.119	0.119	0.119
568265.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.113	0.113	0.103	0.103	0.103
568285.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.090	0.091	0.090	0.090	0.090
568305.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.080	0.080	0.080	0.080	0.080
568325.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.072	0.072	0.072	0.072	0.072
568345.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.066	0.066	0.066	0.066	0.066
568365.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.060	0.060	0.060	0.060	0.060
568385.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.055	0.055	0.055	0.055	0.055
568405.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.050	0.050	0.050	0.050	0.050
568425.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.046	0.047	0.046	0.046	0.046
568485.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568505.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
568525.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568545.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.030	0.031	0.031	0.031	0.031
568565.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568585.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568605.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.025	0.026	0.026	0.026	0.026
568625.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568645.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568665.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568685.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568705.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568725.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567325.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567345.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16 567405.16	4148870.16 4148870.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567405.16 567425.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16 567445.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.003
567505.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567565.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567745.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567765.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567785.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567805.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568205.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.167	0.167	0.167	0.167	0.167
568225.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.125	0.126	0.125	0.125	0.125
568245.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.109	0.109	0.109	0.109	0.109

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
4.62E-08	1.13E-06	2.22E-07	1.40	0.001
4.62E-08 5.11E-08	1.13E-06 1.25E-06	2.22E-07 2.46E-07	1.40	0.001
5.73E-08	1.40E-06	2.75E-07	1.73	0.001
6.47E-08	1.58E-06	3.11E-07	1.96	0.001
7.28E-08	1.78E-06	3.50E-07	2.20	0.001
8.26E-08	2.02E-06	3.97E-07	2.50	0.001
9.49E-08	2.32E-06	4.56E-07	2.87	0.001
1.10E-07	2.69E-06	5.29E-07	3.33	0.002
1.30E-07	3.18E-06	6.24E-07	3.93	0.002
1.56E-07 1.96E-07	3.82E-06 4.78E-06	7.51E-07 9.40E-07	4.73 5.92	0.002 0.003
2.49E-07	6.08E-06	1.19E-06	7.52	0.003
3.30E-07	8.07E-06	1.59E-06	9.98	0.005
4.69E-07	1.15E-05	2.25E-06	14.19	0.007
7.10E-07	1.74E-05	3.41E-06	21.47	0.011
1.85E-06	4.52E-05	8.89E-06	55.96	0.028
1.60E-06	3.92E-05	7.71E-06	48.52	0.024
1.39E-06	3.39E-05	6.67E-06	41.99	0.021
1.22E-06	2.97E-05	5.84E-06	36.79	0.018
1.08E-06 9.76E-07	2.64E-05 2.38E-05	5.20E-06 4.69E-06	32.72 29.50	0.016 0.015
8.90E-07	2.38E-05 2.18E-05	4.09E-06 4.27E-06	26.92	0.013
8.11E-07	1.98E-05	3.89E-06	24.51	0.012
7.41E-07	1.81E-05	3.56E-06	22.41	0.011
6.80E-07	1.66E-05	3.27E-06	20.58	0.010
6.28E-07	1.54E-05	3.02E-06	19.00	0.009
5.02E-07	1.23E-05	2.41E-06	15.18	0.007
4.67E-07	1.14E-05	2.24E-06	14.13	0.007
4.37E-07	1.07E-05	2.10E-06	13.23	0.007
4.12E-07	1.01E-05 9.48E-06	1.98E-06 1.86E-06	12.46 11.74	0.006
3.88E-07 3.65E-07	9.48E-06 8.91E-06	1.75E-06	11.74	0.006 0.005
3.44E-07	8.41E-06	1.65E-06	10.41	0.005
3.26E-07	7.97E-06	1.57E-06	9.87	0.005
3.09E-07	7.56E-06	1.49E-06	9.35	0.005
2.93E-07	7.16E-06	1.41E-06	8.87	0.004
2.78E-07	6.80E-06	1.34E-06	8.42	0.004
2.64E-07	6.46E-06	1.27E-06	8.00	0.004
2.52E-07	6.16E-06	1.21E-06	7.62	0.004
1.99E-08	4.86E-07	9.55E-08	0.60	0.000
2.12E-08 2.26E-08	5.18E-07 5.53E-07	1.02E-07 1.09E-07	0.64 0.68	0.000 0.000
2.42E-08	5.90E-07	1.16E-07	0.73	0.000
2.58E-08	6.30E-07	1.24E-07	0.78	0.000
2.76E-08	6.74E-07	1.33E-07	0.83	0.000
2.98E-08	7.27E-07	1.43E-07	0.90	0.000
3.24E-08	7.91E-07	1.55E-07	0.98	0.000
3.51E-08	8.59E-07	1.69E-07	1.06	0.001
3.81E-08	9.32E-07	1.83E-07	1.15	0.001
4.17E-08 4.58E-08	1.02E-06 1.12E-06	2.00E-07 2.20E-07	1.26 1.39	0.001 0.001
5.06E-08	1.12E-06 1.24E-06	2.43E-07	1.53	0.001
5.71E-08	1.39E-06	2.74E-07	1.73	0.001
6.41E-08	1.57E-06	3.08E-07	1.94	0.001
7.21E-08	1.76E-06	3.46E-07	2.18	0.001
8.18E-08	2.00E-06	3.93E-07	2.47	0.001
9.38E-08	2.29E-06	4.51E-07	2.84	0.001
1.09E-07	2.66E-06	5.24E-07	3.30	0.002
1.28E-07	3.13E-06	6.16E-07	3.88	0.002
1.54E-07	3.76E-06	7.39E-07	4.65 5.70	0.002
1.89E-07 2.41E-07	4.61E-06 5.89E-06	9.06E-07 1.16E-06	5.70 7.28	0.003 0.004
3.20E-07	7.82E-06	1.54E-06	9.68	0.005
4.54E-07	1.11E-05	2.18E-06	13.72	0.007
2.24E-06	5.47E-05	1.07E-05	67.67	0.033
1.68E-06	4.12E-05	8.09E-06	50.96	0.025
1.46E-06	3.58E-05	7.03E-06	44.27	0.022

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568265.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.096	0.096	0.096	0.096	0.096
568285.16 568305.16	4148870.16 4148870.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.085 0.076	0.085 0.076	0.085 0.076	0.085 0.076	0.085 0.076
568345.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.076	0.076	0.076	0.062	0.076
568365.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.057	0.057
568385.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568405.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568425.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.044	0.045	0.044	0.044	0.044
568445.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.041	0.041	0.041	0.041	0.041
568465.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568485.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568505.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568525.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568545.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.029	0.030	0.029	0.029	0.029
568565.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568585.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568605.16 568625.16	4148870.16 4148870.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.025 0.023	0.025 0.023	0.025 0.023	0.025 0.023	0.025 0.023
568645.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568665.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.021	0.022
568685.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.021	0.020	0.020	0.020	0.020
568705.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568725.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567325.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567345.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16 567485.16	4148890.16 4148890.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003
567505.16	4148890.16	0.000 0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567565.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567725.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567745.16 567765.16	4148890.16 4148890.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.014 0.017	0.014 0.017	0.014 0.017	0.014 0.017	0.014 0.017
567785.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.017	0.023	0.023	0.023	0.023
568165.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.169	0.169	0.169	0.169	0.169
568225.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.123	0.123	0.123	0.123	0.123
568245.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.097	0.097	0.097	0.097	0.097
568265.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.087	0.087	0.087	0.087	0.087
568285.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.078	0.078	0.078	0.078	0.078
568325.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.063	0.064	0.064	0.064	0.064
568345.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.058	0.058	0.058	0.058	0.058
568365.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.051	0.051	0.051	0.051	0.051
568385.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568405.16 568425.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.045	0.045	0.045
568425.16 568445.16	4148890.16 4148890.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.042 0.039	0.042 0.039	0.042 0.039	0.042 0.039	0.042 0.039
568445.16 568465.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568485.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.030	0.034	0.034	0.034	0.034
568505.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.034	0.032	0.032	0.032	0.032
568525.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568545.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568565.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568585.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568605.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024

	Cancer Risk = 2	R1*Com		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.29E-06	3.16E-05	6.21E-06	39.09	0.019
1.14E-06 1.03E-06	2.79E-05 2.51E-05	5.49E-06 4.93E-06	34.56 31.03	0.017 0.015
8.40E-07	2.05E-05	4.93E-06 4.04E-06	25.41	0.013
7.68E-07	1.88E-05	3.69E-06	23.21	0.013
7.05E-07	1.72E-05	3.39E-06	21.32	0.011
6.50E-07	1.59E-05	3.12E-06	19.65	0.010
6.00E-07	1.47E-05	2.88E-06	18.15	0.009
5.55E-07	1.36E-05	2.66E-06	16.77	0.008
5.16E-07	1.26E-05	2.48E-06	15.60	0.008
4.83E-07	1.18E-05	2.32E-06	14.62	0.007
4.52E-07	1.10E-05	2.17E-06	13.65	0.007
4.23E-07	1.03E-05	2.03E-06	12.79	0.006
3.98E-07 3.75E-07	9.72E-06 9.16E-06	1.91E-06 1.80E-06	12.03 11.34	0.006 0.006
3.53E-07	8.63E-06	1.70E-06	10.68	0.005
3.33E-07	8.15E-06	1.60E-06	10.08	0.005
3.16E-07	7.73E-06	1.52E-06	9.57	0.005
3.00E-07	7.33E-06	1.44E-06	9.07	0.004
2.84E-07	6.95E-06	1.37E-06	8.60	0.004
2.71E-07	6.61E-06	1.30E-06	8.18	0.004
2.57E-07	6.28E-06	1.23E-06	7.77	0.004
2.45E-07	5.99E-06	1.18E-06	7.41	0.004
1.96E-08	4.79E-07	9.42E-08	0.59	0.000
2.08E-08	5.09E-07	1.00E-07	0.63	0.000
2.22E-08 2.37E-08	5.43E-07 5.80E-07	1.07E-07 1.14E-07	0.67 0.72	0.000
2.54E-08	6.20E-07	1.14E-07 1.22E-07	0.72	0.000 0.000
2.71E-08	6.62E-07	1.30E-07	0.82	0.000
2.91E-08	7.11E-07	1.40E-07	0.88	0.000
3.19E-08	7.79E-07	1.53E-07	0.96	0.000
3.47E-08	8.48E-07	1.67E-07	1.05	0.001
3.78E-08	9.25E-07	1.82E-07	1.14	0.001
4.16E-08	1.02E-06	2.00E-07	1.26	0.001
4.59E-08	1.12E-06	2.20E-07	1.39	0.001
5.06E-08	1.24E-06	2.43E-07	1.53	0.001
5.65E-08 6.35E-08	1.38E-06 1.55E-06	2.72E-07 3.05E-07	1.71 1.92	0.001 0.001
7.16E-08	1.75E-06	3.44E-07	2.17	0.001
8.12E-08	1.98E-06	3.90E-07	2.46	0.001
9.29E-08	2.27E-06	4.46E-07	2.81	0.001
1.08E-07	2.63E-06	5.17E-07	3.26	0.002
1.27E-07	3.10E-06	6.09E-07	3.83	0.002
1.52E-07	3.70E-06	7.28E-07	4.58	0.002
1.85E-07	4.52E-06	8.87E-07	5.59	0.003
2.32E-07	5.68E-06	1.12E-06	7.03	0.003
3.07E-07	7.51E-06	1.48E-06	9.29	0.005
2.27E-06 1.65E-06	5.55E-05 4.04E-05	1.09E-05	68.68	0.034 0.025
1.83E-06 1.30E-06	3.19E-05	7.94E-06 6.27E-06	49.99 39.46	0.025
1.17E-06	2.86E-05	5.62E-06	35.36	0.017
1.05E-06	2.56E-05	5.04E-06	31.71	0.016
8.55E-07	2.09E-05	4.11E-06	25.86	0.013
7.75E-07	1.89E-05	3.72E-06	23.43	0.012
6.89E-07	1.68E-05	3.31E-06	20.84	0.010
6.45E-07	1.58E-05	3.10E-06	19.50	0.010
6.12E-07	1.50E-05	2.94E-06	18.50	0.009
5.67E-07	1.39E-05	2.72E-06	17.14	0.008
5.25E-07	1.28E-05	2.52E-06	15.89	0.008
4.89E-07	1.20E-05	2.35E-06	14.79	0.007
4.60E-07 4.31E-07	1.12E-05 1.05E-05	2.21E-06 2.07E-06	13.91 13.05	0.007 0.006
4.04E-07	9.86E-06	1.94E-06	12.20	0.006
3.82E-07	9.32E-06	1.83E-06	11.54	0.006
3.60E-07	8.81E-06	1.73E-06	10.90	0.005
3.40E-07	8.31E-06	1.63E-06	10.28	0.005
3.22E-07	7.86E-06	1.55E-06	9.73	0.005

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568625.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568645.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568665.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568685.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568705.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568725.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567325.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567345.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567565.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567725.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567745.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567765.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568145.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.158	0.158	0.158	0.158	0.158
568165.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.136	0.136	0.136	0.136	0.136
568185.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.118	0.118	0.118	0.118	0.118
568245.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.085	0.085	0.085	0.085	0.085
568285.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.069	0.069	0.069	0.069	0.069
568305.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.063	0.063	0.063	0.063	0.063
568325.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.058	0.058	0.058	0.058	0.058
568345.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.052	0.053	0.053	0.053	0.053
568365.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
568385.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
568405.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568425.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568445.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568465.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568485.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568505.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568525.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568545.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568565.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568585.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568605.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568625.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568645.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568665.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568685.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568705.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568725.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567325.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567345.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003

	Cancer Risk = ∑	R1*CnpM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.05E-07 2.89E-07	7.45E-06	1.46E-06	9.22	0.005
2.89E-07 2.75E-07	7.06E-06 6.72E-06	1.39E-06 1.32E-06	8.74 8.32	0.004 0.004
2.62E-07	6.40E-06	1.26E-06	7.92	0.004
2.50E-07	6.10E-06	1.20E-06	7.55	0.004
2.38E-07	5.82E-06	1.14E-06	7.20	0.004
1.94E-08	4.75E-07	9.33E-08	0.59	0.000
2.07E-08	5.05E-07	9.93E-08	0.63	0.000
2.21E-08	5.40E-07	1.06E-07	0.67	0.000
2.36E-08	5.76E-07	1.13E-07	0.71	0.000
2.53E-08	6.17E-07	1.21E-07	0.76	0.000
2.69E-08	6.58E-07	1.29E-07	0.81	0.000
2.90E-08 3.17E-08	7.09E-07 7.74E-07	1.39E-07 1.52E-07	0.88 0.96	0.000
3.45E-08	8.43E-07	1.66E-07	1.04	0.000
3.78E-08	9.24E-07	1.82E-07	1.14	0.001
4.15E-08	1.01E-06	1.99E-07	1.25	0.001
4.57E-08	1.12E-06	2.19E-07	1.38	0.001
5.05E-08	1.23E-06	2.43E-07	1.53	0.001
5.63E-08	1.38E-06	2.70E-07	1.70	0.001
6.30E-08	1.54E-06	3.03E-07	1.90	0.001
7.10E-08	1.74E-06	3.41E-07	2.15	0.001
8.07E-08	1.97E-06	3.88E-07	2.44	0.001
9.24E-08	2.26E-06	4.44E-07	2.79	0.001
1.07E-07	2.61E-06	5.14E-07	3.23	0.002
1.26E-07 1.50E-07	3.07E-06 3.66E-06	6.03E-07 7.20E-07	3.80 4.53	0.002 0.002
1.83E-07	4.47E-06	7.20E-07 8.79E-07	4.53 5.53	0.002
2.30E-07	5.63E-06	1.11E-06	6.97	0.003
2.12E-06	5.18E-05	1.02E-05	64.04	0.032
1.82E-06	4.45E-05	8.74E-06	55.04	0.027
1.58E-06	3.86E-05	7.58E-06	47.74	0.024
1.15E-06	2.81E-05	5.52E-06	34.73	0.017
9.29E-07	2.27E-05	4.46E-06	28.10	0.014
8.45E-07	2.06E-05	4.06E-06	25.55	0.013
7.77E-07	1.90E-05	3.73E-06	23.49	0.012
7.06E-07	1.73E-05	3.39E-06	21.36	0.011
6.34E-07	1.55E-05	3.04E-06	19.16	0.009
5.96E-07 5.70E-07	1.46E-05 1.39E-05	2.86E-06 2.74E-06	18.02 17.24	0.009 0.009
5.70E-07 5.31E-07	1.39E-05	2.74L-00 2.55E-06	16.07	0.003
4.93E-07	1.21E-05	2.37E-06	14.92	0.007
4.62E-07	1.13E-05	2.22E-06	13.97	0.007
4.33E-07	1.06E-05	2.08E-06	13.10	0.006
4.09E-07	9.98E-06	1.96E-06	12.35	0.006
3.85E-07	9.40E-06	1.85E-06	11.63	0.006
3.63E-07	8.86E-06	1.74E-06	10.97	0.005
3.43E-07	8.38E-06	1.65E-06	10.37	0.005
3.25E-07	7.95E-06	1.56E-06	9.83	0.005
3.08E-07	7.53E-06	1.48E-06	9.32	0.005
2.92E-07	7.13E-06	1.40E-06 1.33E-06	8.82	0.004 0.004
2.77E-07 2.64E-07	6.78E-06 6.46E-06	1.33E-06 1.27E-06	8.39 8.00	0.004
2.54E-07 2.53E-07	6.40E-06	1.21E-06	7.64	0.004
2.41E-07	5.88E-06	1.16E-06	7.28	0.004
2.30E-07	5.61E-06	1.10E-06	6.95	0.003
1.94E-08	4.73E-07	9.30E-08	0.59	0.000
2.07E-08	5.05E-07	9.93E-08	0.63	0.000
2.20E-08	5.39E-07	1.06E-07	0.67	0.000
2.35E-08	5.75E-07	1.13E-07	0.71	0.000
2.52E-08	6.16E-07	1.21E-07	0.76	0.000
2.70E-08	6.61E-07	1.30E-07	0.82	0.000
2.91E-08	7.10E-07	1.40E-07	0.88	0.000
3.15E-08 3.45E-08	7.71E-07 8.44E-07	1.51E-07 1.66E-07	0.95 1.04	0.000 0.001
3.45E-08 3.78E-08	9.25E-07	1.82E-07	1.04	0.001
4.15E-08	1.01E-06	1.99E-07	1.25	0.001
		· - · <del>-</del> ·	-	

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567545.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567565.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567725.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567745.16 567805.16	4148930.16 4148930.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.014 0.031	0.014 0.031	0.014 0.031	0.014 0.031	0.014 0.031
567825.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.046	0.046
568125.16	4148930.16	0.000	0.000	0.000	0.000				0.046		0.143
568125.16 568145.16	4148930.16	0.000	0.000	0.000	0.000	0.000 0.000	0.143 0.123	0.143 0.123	0.143	0.143 0.123	0.143
568165.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.123	0.123	0.123	0.123	0.108
568165.16 568185.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.108	0.108	0.108	0.108	0.108
568205.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.096	0.090	0.090	0.096	0.096
568265.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.066	0.066	0.066	0.066	0.066
568285.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.060	0.060	0.060	0.060	0.060
568305.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.055	0.056	0.056	0.056	0.056
568325.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568345.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
568365.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568385.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.041	0.041	0.041	0.041	0.041
568405.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568425.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568445.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568465.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568485.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568505.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568525.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568545.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568565.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568585.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568605.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568625.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568645.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568665.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568685.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568705.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568725.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567325.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567345.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16 567565.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567565.16 567585.16	4148950.16 4148950.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004	0.004 0.004	0.004 0.004	0.004	0.004 0.004
567585.16 567605.16	4148950.16 4148950.16	0.000 0.000	0.000	0.000	0.000	0.000	0.004 0.005	0.004	0.004	0.004 0.005	0.004
	4148950.16										
567625.16 567645.16	4148950.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.006	0.005 0.006	0.005 0.006	0.005 0.006	0.005 0.006
567645.16 567665.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567685.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567705.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567725.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567785.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.023
567805.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567825.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.043	0.043
567845.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.061	0.043	0.043
30.0.3.20	0555.10	5.550	0.000	0.000	5.550	0.000	5.001	3.001	3.001	0.001	0.002

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
4.58E-08	1.12E-06	2.20E-07	1.38	0.001
4.58E-08 5.05E-08	1.12E-06 1.24E-06	2.43E-07	1.58	0.001
5.60E-08	1.37E-06	2.69E-07	1.69	0.001
6.28E-08	1.53E-06	3.02E-07	1.90	0.001
7.10E-08	1.74E-06	3.41E-07	2.15	0.001
8.06E-08	1.97E-06	3.87E-07	2.44	0.001
9.25E-08	2.26E-06	4.44E-07	2.80	0.001
1.07E-07	2.61E-06	5.14E-07	3.23	0.002
1.25E-07	3.07E-06	6.03E-07	3.79	0.002
1.50E-07	3.66E-06	7.19E-07	4.53	0.002
1.84E-07 4.12E-07	4.50E-06 1.01E-05	8.83E-07 1.98E-06	5.56 12.45	0.003 0.006
6.22E-07	1.52E-05	2.99E-06	18.81	0.000
1.92E-06	4.69E-05	9.22E-06	58.07	0.029
1.66E-06	4.05E-05	7.95E-06	50.06	0.025
1.45E-06	3.55E-05	6.98E-06	43.93	0.022
1.29E-06	3.16E-05	6.21E-06	39.11	0.019
1.16E-06	2.84E-05	5.58E-06	35.10	0.017
8.81E-07	2.15E-05	4.23E-06	26.66	0.013
8.08E-07	1.97E-05	3.88E-06	24.43	0.012
7.46E-07	1.82E-05	3.58E-06	22.57	0.011
6.95E-07 6.35E-07	1.70E-05 1.55E-05	3.34E-06 3.05E-06	21.01 19.22	0.010 0.009
5.74E-07	1.40E-05	2.76E-06	17.36	0.009
5.50E-07	1.34E-05	2.64E-06	16.62	0.008
5.23E-07	1.28E-05	2.51E-06	15.81	0.008
4.89E-07	1.20E-05	2.35E-06	14.80	0.007
4.58E-07	1.12E-05	2.20E-06	13.86	0.007
4.31E-07	1.05E-05	2.07E-06	13.04	0.006
4.05E-07	9.90E-06	1.95E-06	12.25	0.006
3.83E-07	9.36E-06	1.84E-06	11.58	0.006
3.63E-07	8.86E-06	1.74E-06	10.96	0.005
3.43E-07 3.24E-07	8.37E-06 7.92E-06	1.65E-06 1.56E-06	10.36 9.81	0.005 0.005
3.08E-07	7.53E-06	1.48E-06	9.31	0.005
2.93E-07	7.16E-06	1.41E-06	8.86	0.004
2.79E-07	6.81E-06	1.34E-06	8.43	0.004
2.65E-07	6.47E-06	1.27E-06	8.01	0.004
2.53E-07	6.19E-06	1.22E-06	7.66	0.004
2.42E-07	5.91E-06	1.16E-06	7.32	0.004
2.31E-07	5.65E-06	1.11E-06	7.00	0.003
2.21E-07	5.41E-06	1.06E-06	6.69	0.003
1.94E-08 2.08E-08	4.75E-07 5.08E-07	9.34E-08 9.98E-08	0.59 0.63	0.000 0.000
2.21E-08	5.40E-07	1.06E-07	0.67	0.000
2.35E-08	5.75E-07	1.13E-07	0.71	0.000
2.53E-08	6.18E-07	1.21E-07	0.76	0.000
2.72E-08	6.65E-07	1.31E-07	0.82	0.000
2.94E-08	7.18E-07	1.41E-07	0.89	0.000
3.19E-08	7.79E-07	1.53E-07	0.96	0.000
3.46E-08	8.47E-07	1.66E-07	1.05	0.001
3.80E-08	9.29E-07	1.83E-07	1.15	0.001
4.17E-08 4.60E-08	1.02E-06 1.12E-06	2.00E-07 2.21E-07	1.26 1.39	0.001 0.001
5.09E-08	1.12E-06 1.24E-06	2.21E-07 2.44E-07	1.54	0.001
5.64E-08	1.38E-06	2.71E-07	1.71	0.001
6.31E-08	1.54E-06	3.03E-07	1.91	0.001
7.13E-08	1.74E-06	3.43E-07	2.16	0.001
8.14E-08	1.99E-06	3.91E-07	2.46	0.001
9.30E-08	2.27E-06	4.47E-07	2.81	0.001
1.08E-07	2.64E-06	5.18E-07	3.26	0.002
1.27E-07	3.10E-06	6.09E-07	3.83	0.002
1.52E-07	3.70E-06	7.28E-07	4.58	0.002
3.03E-07 4.16E-07	7.42E-06 1.02E-05	1.46E-06 2.00E-06	9.18 12.58	0.005 0.006
4.10E-07 5.79E-07	1.42E-05	2.78E-06	17.51	0.000
8.16E-07	1.99E-05	3.92E-06	24.67	0.012

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568085.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.147	0.147	0.147	0.147	0.147
568105.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.126	0.126	0.126	0.126	0.126
568125.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.110	0.111	0.111	0.111	0.111
568145.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.098	0.098	0.098	0.098	0.098
568165.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.088	0.088	0.088	0.088	0.088
568185.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.079	0.079	0.079	0.079	0.079
568205.16 568225.16	4148950.16 4148950.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.072 0.066	0.072 0.066	0.072 0.066	0.072 0.066	0.072 0.066
568245.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.061	0.061	0.061	0.061	0.061
568265.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.056	0.056	0.056	0.056	0.056
568285.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568305.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568325.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.046	0.046	0.046
568345.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568365.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568385.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568405.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
568425.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568445.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568465.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568485.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568505.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568545.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568565.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568585.16 568605.16	4148950.16 4148950.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.022 0.021	0.022 0.021	0.022 0.021	0.022 0.021	0.022 0.021
568625.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568645.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.019
568665.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568685.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568705.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568725.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567345.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16 567545.16	4148970.16 4148970.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
567565.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567585.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567765.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567785.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567805.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
567825.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
567845.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.050	0.050	0.050	0.050	0.050
567865.16 568065.16	4148970.16 4148970.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.069 0.124	0.069	0.069 0.124	0.069	0.069 0.124
568065.16 568085.16	4148970.16 4148970.16	0.000	0.000	0.000	0.000	0.000	0.124	0.124 0.108	0.124	0.124 0.108	0.124
568105.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.108	0.108	0.108	0.108	0.108
568125.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.090	0.096	0.096	0.086	0.086
568145.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.077	0.077	0.077	0.077	0.077
568165.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.071	0.071	0.071	0.071	0.071
568205.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.059	0.059	0.059	0.059	0.059
568225.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.055	0.055	0.055	0.055	0.055
568245.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.051	0.051	0.051	0.051	0.051

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.97E-06	4.82E-05	9.47E-06	59.61	0.029
1.69E-06 1.48E-06	4.13E-05	8.13E-06 7.12E-06	51.17	0.025
1.48E-06 1.31E-06	3.62E-05 3.20E-05	6.30E-06	44.82 39.64	0.022 0.020
1.18E-06	2.87E-05	5.65E-06	35.56	0.020
1.06E-06	2.60E-05	5.10E-06	32.14	0.016
9.67E-07	2.36E-05	4.65E-06	29.25	0.014
8.81E-07	2.15E-05	4.23E-06	26.66	0.013
8.16E-07	1.99E-05	3.92E-06	24.66	0.012
7.51E-07	1.84E-05	3.61E-06	22.71	0.011
7.00E-07	1.71E-05	3.36E-06	21.18	0.010
6.53E-07	1.60E-05	3.14E-06	19.74	0.010
6.15E-07	1.50E-05	2.95E-06	18.59	0.009
5.66E-07	1.38E-05	2.72E-06	17.12	0.008
5.14E-07	1.26E-05	2.47E-06	15.56	0.008
4.92E-07 4.76E-07	1.20E-05	2.36E-06	14.87	0.007 0.007
4.76E-07 4.47E-07	1.16E-05 1.09E-05	2.28E-06 2.15E-06	14.39 13.51	0.007
4.47E-07 4.21E-07	1.03E-05	2.13E-06 2.02E-06	12.74	0.007
4.21E-07 3.98E-07	9.72E-06	1.91E-06	12.74	0.006
3.76E-07	9.20E-06	1.81E-06	11.38	0.006
3.56E-07	8.69E-06	1.71E-06	10.76	0.005
3.21E-07	7.84E-06	1.54E-06	9.70	0.005
3.05E-07	7.45E-06	1.46E-06	9.21	0.005
2.91E-07	7.10E-06	1.40E-06	8.79	0.004
2.77E-07	6.77E-06	1.33E-06	8.38	0.004
2.64E-07	6.46E-06	1.27E-06	8.00	0.004
2.52E-07	6.17E-06	1.21E-06	7.63	0.004
2.41E-07	5.89E-06	1.16E-06	7.29	0.004
2.31E-07	5.64E-06	1.11E-06	6.98	0.003
2.21E-07	5.41E-06	1.06E-06	6.69	0.003
2.12E-07	5.18E-06	1.02E-06	6.40	0.003
2.10E-08	5.13E-07	1.01E-07	0.63	0.000
2.24E-08 2.39E-08	5.47E-07 5.85E-07	1.08E-07 1.15E-07	0.68 0.72	0.000 0.000
2.56E-08	6.26E-07	1.13E-07 1.23E-07	0.72	0.000
2.75E-08	6.72E-07	1.32E-07	0.83	0.000
2.98E-08	7.28E-07	1.43E-07	0.90	0.000
3.23E-08	7.90E-07	1.55E-07	0.98	0.000
3.50E-08	8.55E-07	1.68E-07	1.06	0.001
3.85E-08	9.40E-07	1.85E-07	1.16	0.001
4.23E-08	1.03E-06	2.03E-07	1.28	0.001
4.65E-08	1.14E-06	2.24E-07	1.41	0.001
5.14E-08	1.26E-06	2.47E-07	1.56	0.001
5.73E-08	1.40E-06	2.75E-07	1.73	0.001
6.42E-08	1.57E-06	3.08E-07	1.94	0.001
7.23E-08	1.77E-06	3.47E-07	2.19	0.001
8.26E-08	2.02E-06	3.97E-07	2.50	0.001
9.48E-08	2.32E-06 2.69E-06	4.55E-07	2.87	0.001
1.10E-07 1.30E-07	2.69E-06 3.17E-06	5.30E-07 6.23E-07	3.33 3.92	0.002 0.002
1.57E-07	3.17E-06 3.84E-06	7.54E-07	3.92 4.75	0.002
2.40E-07	5.86E-06	1.15E-06	7.25	0.002
3.07E-07	7.51E-06	1.48E-06	9.29	0.005
4.05E-07	9.89E-06	1.94E-06	12.24	0.006
5.13E-07	1.25E-05	2.46E-06	15.52	0.008
6.65E-07	1.62E-05	3.19E-06	20.11	0.010
9.28E-07	2.27E-05	4.46E-06	28.07	0.014
1.66E-06	4.07E-05	7.99E-06	50.33	0.025
1.45E-06	3.55E-05	6.97E-06	43.91	0.022
1.28E-06	3.14E-05	6.17E-06	38.82	0.019
1.15E-06	2.81E-05	5.52E-06	34.78	0.017
1.04E-06	2.54E-05	4.99E-06	31.42	0.016
9.47E-07	2.31E-05	4.55E-06	28.63	0.014
7.94E-07	1.94E-05	3.81E-06	24.00	0.012
7.34E-07 6.87E-07	1.79E-05 1.68E-05	3.53E-06	22.20	0.011
6.87E-07	1.68E-05	3.30E-06	20.77	0.010

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568265.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
568285.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.045	0.045	0.045
568305.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568325.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
568345.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568365.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568385.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568425.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568445.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568465.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568485.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568505.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568525.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568545.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568565.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568585.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568605.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568625.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568645.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568665.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568685.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568705.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568725.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567365.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567745.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567785.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567805.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
567825.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
567845.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
567865.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.055	0.055	0.055	0.055	0.055
567885.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.070	0.070	0.070	0.070	0.070
567905.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.097	0.098	0.098	0.098	0.098
568045.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.100	0.100	0.100	0.100	0.100
568065.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.090	0.090	0.090	0.090	0.090
568085.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.081	0.081	0.081	0.081	0.081
568105.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.074	0.074	0.074	0.074	0.074
568125.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.068	0.068	0.068	0.068	0.068
568145.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.062	0.062	0.062	0.062	0.062
568185.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568205.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568225.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.046	0.046	0.046
568245.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568265.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.041	0.041	0.041	0.041	0.041
568285.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568305.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568325.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
568345.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568365.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568385.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
6.45E-07	1.58E-05	3.10E-06	19.49	0.010
6.07E-07	1.48E-05	2.91E-06	18.34	0.010
5.69E-07	1.39E-05	2.73E-06	17.22	0.008
5.38E-07	1.31E-05	2.58E-06	16.26	0.008
4.99E-07	1.22E-05	2.40E-06	15.09	0.007
4.62E-07	1.13E-05	2.22E-06	13.97	0.007
4.43E-07	1.08E-05	2.13E-06	13.39	0.007
4.05E-07	9.89E-06	1.94E-06	12.24	0.006
3.83E-07 3.64E-07	9.37E-06 8.90E-06	1.84E-06 1.75E-06	11.59 11.01	0.006 0.005
3.46E-07	8.46E-06	1.66E-06	10.46	0.005
3.29E-07	8.03E-06	1.58E-06	9.94	0.005
3.12E-07	7.63E-06	1.50E-06	9.44	0.005
2.99E-07	7.30E-06	1.44E-06	9.04	0.004
2.85E-07	6.96E-06	1.37E-06	8.62	0.004
2.72E-07	6.66E-06	1.31E-06	8.24	0.004
2.60E-07	6.36E-06	1.25E-06	7.87	0.004
2.49E-07	6.09E-06	1.20E-06	7.54	0.004
2.39E-07	5.83E-06	1.15E-06	7.22	0.004
2.29E-07 2.19E-07	5.59E-06 5.35E-06	1.10E-06 1.05E-06	6.92 6.62	0.003 0.003
2.10E-07	5.13E-06	1.01E-06	6.34	0.003
2.02E-07	4.93E-06	9.69E-07	6.10	0.003
2.28E-08	5.57E-07	1.09E-07	0.69	0.000
2.44E-08	5.96E-07	1.17E-07	0.74	0.000
2.61E-08	6.38E-07	1.25E-07	0.79	0.000
2.80E-08	6.85E-07	1.35E-07	0.85	0.000
3.04E-08	7.44E-07	1.46E-07	0.92	0.000
3.30E-08	8.07E-07	1.59E-07	1.00	0.000
3.61E-08 3.92E-08	8.82E-07 9.59E-07	1.73E-07 1.89E-07	1.09 1.19	0.001 0.001
4.31E-08	1.05E-06	2.07E-07	1.30	0.001
4.75E-08	1.16E-06	2.28E-07	1.44	0.001
5.26E-08	1.29E-06	2.53E-07	1.59	0.001
5.86E-08	1.43E-06	2.82E-07	1.77	0.001
6.58E-08	1.61E-06	3.16E-07	1.99	0.001
7.43E-08	1.82E-06	3.57E-07	2.25	0.001
8.48E-08	2.07E-06	4.07E-07	2.56	0.001
9.81E-08 1.15E-07	2.40E-06 2.80E-06	4.71E-07 5.51E-07	2.97 3.47	0.001 0.002
1.15E-07 1.35E-07	3.31E-06	6.50E-07	4.09	0.002
1.98E-07	4.83E-06	9.50E-07	5.98	0.003
2.45E-07	5.99E-06	1.18E-06	7.41	0.004
3.07E-07	7.51E-06	1.48E-06	9.29	0.005
3.87E-07	9.47E-06	1.86E-06	11.72	0.006
4.77E-07	1.16E-05	2.29E-06	14.41	0.007
5.95E-07	1.45E-05	2.86E-06	18.00	0.009
7.36E-07	1.80E-05	3.54E-06	22.26	0.011
9.45E-07 1.31E-06	2.31E-05 3.20E-05	4.54E-06 6.28E-06	28.57 39.55	0.014 0.020
1.34E-06	3.28E-05	6.45E-06	40.62	0.020
1.21E-06	2.95E-05	5.79E-06	36.45	0.018
1.09E-06	2.67E-05	5.25E-06	33.03	0.016
9.94E-07	2.43E-05	4.77E-06	30.05	0.015
9.06E-07	2.21E-05	4.35E-06	27.40	0.014
8.31E-07	2.03E-05	3.99E-06	25.12	0.012
7.03E-07	1.72E-05	3.38E-06	21.27	0.010
6.54E-07	1.60E-05	3.14E-06	19.79	0.010
6.12E-07 5.77E-07	1.50E-05 1.41E-05	2.94E-06 2.77E-06	18.52 17.45	0.009 0.009
5.77E-07 5.44E-07	1.33E-05	2.61E-06	16.45	0.009
5.22E-07	1.28E-05	2.51E-06	15.78	0.008
4.91E-07	1.20E-05	2.36E-06	14.83	0.007
4.66E-07	1.14E-05	2.24E-06	14.08	0.007
4.43E-07	1.08E-05	2.13E-06	13.39	0.007
4.20E-07	1.03E-05	2.02E-06	12.70	0.006
4.00E-07	9.78E-06	1.92E-06	12.10	0.006

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568425.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568445.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568465.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568485.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568505.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568525.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568565.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568585.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568605.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568625.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568645.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568665.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568685.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568705.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568725.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567325.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567605.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567665.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567685.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567725.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567745.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567785.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
567805.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
567825.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
567845.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
567865.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.048
567885.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.058	0.058	0.058	0.058	0.058
567905.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.070	0.070	0.070	0.070	0.070
568005.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.082	0.083	0.082	0.082	0.082
568125.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.053	0.053	0.053	0.053	0.053
568145.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
568165.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.046	0.046	0.046
568185.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
568205.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
568225.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
568245.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568265.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568285.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568305.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568325.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568345.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568365.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568385.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568425.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568445.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568465.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568485.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568505.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568525.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568545.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568565.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568585.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568605.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.64E-07	8.89E-06	1.75E-06	11.00	0.005
3.47E-07	8.47E-06 8.08E-06	1.66E-06	10.48	0.005
3.31E-07 3.16E-07	7.73E-06	1.59E-06 1.52E-06	10.00 9.56	0.005 0.005
3.10E-07 3.01E-07	7.73E-06 7.37E-06	1.45E-06	9.12	0.003
2.87E-07	7.01E-06	1.38E-06	8.68	0.004
2.64E-07	6.46E-06	1.27E-06	8.00	0.004
2.54E-07	6.20E-06	1.22E-06	7.67	0.004
2.43E-07	5.94E-06	1.17E-06	7.35	0.004
2.33E-07	5.70E-06	1.12E-06	7.06	0.003
2.24E-07	5.48E-06	1.08E-06	6.78	0.003
2.15E-07	5.25E-06	1.03E-06	6.49	0.003
2.06E-07	5.04E-06	9.90E-07	6.23	0.003
1.98E-07	4.84E-06	9.52E-07	5.99	0.003
1.91E-07 2.04E-08	4.68E-06 4.99E-07	9.19E-07 9.80E-08	5.79 0.62	0.003
2.50E-08	4.99E-07 6.10E-07	1.20E-07	0.02	0.000
2.67E-08	6.53E-07	1.28E-07	0.81	0.000
2.88E-08	7.04E-07	1.38E-07	0.87	0.000
3.12E-08	7.63E-07	1.50E-07	0.94	0.000
3.39E-08	8.29E-07	1.63E-07	1.03	0.001
3.70E-08	9.05E-07	1.78E-07	1.12	0.001
4.04E-08	9.87E-07	1.94E-07	1.22	0.001
4.43E-08	1.08E-06	2.13E-07	1.34	0.001
4.87E-08	1.19E-06	2.34E-07	1.47	0.001
5.41E-08	1.32E-06	2.60E-07	1.63	0.001
6.03E-08	1.47E-06	2.89E-07	1.82	0.001
6.79E-08 7.70E-08	1.66E-06 1.88E-06	3.26E-07 3.70E-07	2.05 2.33	0.001 0.001
8.81E-08	2.15E-06	4.23E-07	2.55	0.001
1.02E-07	2.49E-06	4.90E-07	3.09	0.002
1.19E-07	2.91E-06	5.72E-07	3.60	0.002
1.69E-07	4.14E-06	8.14E-07	5.12	0.003
2.05E-07	5.01E-06	9.86E-07	6.21	0.003
2.50E-07	6.10E-06	1.20E-06	7.55	0.004
3.04E-07	7.43E-06	1.46E-06	9.19	0.005
3.68E-07	8.99E-06	1.77E-06	11.13	0.005
4.43E-07	1.08E-05	2.13E-06	13.41	0.007
5.34E-07	1.30E-05	2.56E-06	16.14	0.008
6.40E-07	1.56E-05 1.91E-05	3.07E-06	19.35 23.65	0.010
7.82E-07 9.35E-07	2.28E-05	3.76E-06 4.49E-06	28.26	0.012 0.014
1.11E-06	2.70E-05	5.31E-06	33.45	0.017
7.08E-07	1.73E-05	3.40E-06	21.41	0.011
6.62E-07	1.62E-05	3.18E-06	20.03	0.010
6.15E-07	1.50E-05	2.95E-06	18.60	0.009
5.76E-07	1.41E-05	2.76E-06	17.41	0.009
5.41E-07	1.32E-05	2.60E-06	16.36	0.008
5.11E-07	1.25E-05	2.45E-06	15.45	0.008
4.84E-07	1.18E-05	2.33E-06	14.65	0.007
4.60E-07	1.12E-05	2.21E-06	13.91	0.007
4.42E-07 4.18E-07	1.08E-05 1.02E-05	2.12E-06 2.01E-06	13.36 12.65	0.007
4.18E-07 4.01E-07	9.80E-06	2.01E-06 1.93E-06	12.65	0.006 0.006
3.84E-07	9.38E-06	1.84E-06	11.60	0.006
3.67E-07	8.98E-06	1.76E-06	11.11	0.005
3.52E-07	8.61E-06	1.69E-06	10.65	0.005
3.24E-07	7.92E-06	1.56E-06	9.80	0.005
3.11E-07	7.61E-06	1.49E-06	9.41	0.005
2.99E-07	7.30E-06	1.44E-06	9.04	0.004
2.87E-07	7.02E-06	1.38E-06	8.69	0.004
2.75E-07	6.72E-06	1.32E-06	8.32	0.004
2.62E-07	6.41E-06	1.26E-06	7.94	0.004
2.53E-07	6.18E-06	1.21E-06	7.64	0.004
2.44E-07	5.97E-06	1.17E-06	7.39	0.004
2.35E-07 2.36E-07	5.74E-06 5.51E-06	1.13E-06 1.08E-06	7.10 6.82	0.004
2.26E-07	5.51E-06	1.08E-06	6.82	0.003

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568625.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568645.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568665.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568685.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568705.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568725.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567325.16 567345.16	4149030.16 4149030.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567405.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567545.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567605.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567645.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567665.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4149030.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.011	0.011 0.013	0.011 0.013	0.011 0.013	0.011 0.013
567725.16 567745.16	4149030.16 4149030.16	0.000 0.000	0.000	0.000	0.000	0.000 0.000	0.013 0.015	0.013	0.013	0.013	0.013
567765.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.019
567785.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.022	0.022	0.022
567805.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
567825.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
567845.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
567865.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.043	0.043	0.043	0.043	0.043
567885.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.049	0.049	0.049	0.049	0.049
567985.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.060	0.060	0.060	0.060	0.060
568025.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.055	0.055	0.055	0.055	0.055
568045.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.052	0.052	0.052	0.052	0.052
568065.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.050	0.050	0.050	0.050	0.050
568085.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
568105.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.044	0.044	0.044	0.044	0.044
568125.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.042	0.042	0.042	0.042	0.042
568145.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
568165.16 568185.16	4149030.16 4149030.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.037 0.035	0.037 0.035	0.037 0.035	0.037 0.035	0.037 0.035
568205.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568225.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.032	0.032	0.032
568245.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568265.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568285.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568305.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568325.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568345.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
568365.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568385.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568425.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568445.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568465.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568485.16 568505.16	4149030.16 4149030.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.019 0.019	0.019 0.019	0.019 0.019	0.019 0.019	0.019 0.019
568525.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568545.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.017	0.017
568585.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.016	0.016
568605.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568625.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568645.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568665.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568685.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568705.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568725.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013

	Cancer Risk = 2	R1*CnpM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.17E-07	5.31E-06 5.12E-06	1.04E-06	6.57	0.003
2.10E-07 2.02E-07	4.93E-06	1.01E-06 9.69E-07	6.34 6.10	0.003 0.003
1.94E-07	4.74E-06	9.31E-07	5.86	0.003
1.87E-07	4.57E-06	8.98E-07	5.66	0.003
1.80E-07	4.41E-06	8.67E-07	5.46	0.003
2.08E-08	5.09E-07	1.00E-07	0.63	0.000
2.23E-08	5.44E-07	1.07E-07	0.67	0.000
2.75E-08	6.72E-07	1.32E-07	0.83	0.000
2.96E-08	7.24E-07	1.42E-07	0.90	0.000
3.20E-08	7.82E-07	1.54E-07	0.97	0.000
3.49E-08	8.52E-07	1.68E-07	1.05	0.001
3.80E-08 4.17E-08	9.29E-07 1.02E-06	1.83E-07 2.00E-07	1.15 1.26	0.001 0.001
4.17E-08 4.57E-08	1.02E-06 1.12E-06	2.00E-07 2.20E-07	1.38	0.001
5.04E-08	1.23E-06	2.42E-07	1.53	0.001
5.57E-08	1.36E-06	2.68E-07	1.68	0.001
6.26E-08	1.53E-06	3.01E-07	1.89	0.001
7.04E-08	1.72E-06	3.38E-07	2.13	0.001
8.01E-08	1.96E-06	3.85E-07	2.42	0.001
9.18E-08	2.24E-06	4.41E-07	2.78	0.001
1.07E-07	2.61E-06	5.13E-07	3.23	0.002
1.46E-07	3.57E-06	7.02E-07	4.42	0.002
1.73E-07	4.23E-06	8.31E-07	5.23	0.003
2.07E-07	5.05E-06	9.93E-07	6.25	0.003
2.49E-07 2.95E-07	6.08E-06 7.21E-06	1.19E-06 1.42E-06	7.52 8.92	0.004 0.004
3.52E-07	8.60E-06	1.42E-06 1.69E-06	10.64	0.005
4.13E-07	1.01E-05	1.98E-06	12.49	0.006
4.87E-07	1.19E-05	2.34E-06	14.71	0.007
5.73E-07	1.40E-05	2.75E-06	17.34	0.009
6.62E-07	1.62E-05	3.18E-06	20.02	0.010
8.06E-07	1.97E-05	3.87E-06	24.37	0.012
7.32E-07	1.79E-05	3.51E-06	22.12	0.011
7.00E-07	1.71E-05	3.36E-06	21.18	0.010
6.66E-07	1.63E-05	3.20E-06	20.15	0.010
6.28E-07	1.53E-05	3.02E-06	18.99	0.009
5.93E-07 5.59E-07	1.45E-05 1.37E-05	2.85E-06 2.68E-06	17.93 16.89	0.009 0.008
5.33E-07	1.37E-05	2.56E-06	16.12	0.008
4.99E-07	1.22E-05	2.40E-06	15.09	0.007
4.72E-07	1.15E-05	2.27E-06	14.29	0.007
4.48E-07	1.09E-05	2.15E-06	13.55	0.007
4.27E-07	1.04E-05	2.05E-06	12.90	0.006
4.07E-07	9.94E-06	1.95E-06	12.30	0.006
3.88E-07	9.48E-06	1.86E-06	11.73	0.006
3.73E-07	9.12E-06	1.79E-06	11.29	0.006
3.57E-07	8.71E-06	1.71E-06	10.78	0.005
3.45E-07 3.32E-07	8.42E-06 8.11E-06	1.66E-06 1.59E-06	10.42 10.03	0.005 0.005
3.32E-07 3.19E-07	7.80E-06	1.59E-06 1.53E-06	9.66	0.005
3.08E-07	7.53E-06	1.48E-06	9.31	0.005
2.88E-07	7.03E-06	1.38E-06	8.70	0.004
2.78E-07	6.79E-06	1.33E-06	8.40	0.004
2.68E-07	6.55E-06	1.29E-06	8.10	0.004
2.59E-07	6.33E-06	1.24E-06	7.83	0.004
2.49E-07	6.09E-06	1.20E-06	7.53	0.004
2.40E-07	5.87E-06	1.15E-06	7.26	0.004
2.32E-07	5.68E-06	1.12E-06	7.03	0.003
2.16E-07	5.29E-06	1.04E-06	6.54	0.003
2.09E-07	5.10E-06 4.92E-06	1.00E-06 9.67E-07	6.31	0.003
2.01E-07 1.95E-07	4.92E-06 4.76E-06	9.67E-07 9.35E-07	6.09 5.89	0.003 0.003
1.89E-07	4.76E-06 4.61E-06	9.06E-07	5.70	0.003
1.82E-07	4.45E-06	8.74E-07	5.50	0.003
1.76E-07	4.30E-06	8.45E-07	5.32	0.003
1.69E-07	4.14E-06	8.14E-07	5.13	0.003

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567325.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16 567365.16	4149050.16 4149050.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567425.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567445.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567545.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567605.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16 567645.16	4149050.16 4149050.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.007	0.006 0.007	0.006 0.007	0.006 0.007	0.006 0.007
567705.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567725.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.013	0.011
567745.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567765.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567785.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567805.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
567825.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
567845.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
567865.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038
567965.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.047	0.047	0.047
568005.16 568025.16	4149050.16	0.000	0.000	0.000 0.000	0.000	0.000	0.044	0.044 0.042	0.044	0.044 0.042	0.044 0.042
568045.16 568045.16	4149050.16 4149050.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.042 0.041	0.042	0.042 0.041	0.042	0.042
568065.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568085.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.037	0.037	0.037	0.037	0.037
568105.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
568125.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
568145.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568165.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568185.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568205.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568225.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568245.16 568265.16	4149050.16 4149050.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.025 0.024	0.026 0.024	0.025 0.024	0.025 0.024	0.025 0.024
568285.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568305.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568325.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568345.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568365.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568385.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568425.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568445.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568465.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568485.16 568505.16	4149050.16 4149050.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.017 0.017	0.017 0.017	0.017 0.017	0.017 0.017	0.017 0.017
568525.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.016	0.017
568545.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568565.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568585.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568605.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568625.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568645.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568665.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568685.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568705.16 568725.16	4149050.16 4149050.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.012 0.012	0.012 0.012	0.012 0.012	0.012 0.012	0.012 0.012
567485.16 567485.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567505.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567545.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005

	Cancer Risk = 2	R1*CDM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.13E-08	5.21E-07	1.02E-07	0.65	0.000
2.29E-08 2.44E-08	5.59E-07 5.97E-07	1.10E-07 1.17E-07	0.69 0.74	0.000
3.05E-08	7.44E-07	1.17E-07 1.46E-07	0.74	0.000
3.30E-08	8.06E-07	1.58E-07	1.00	0.000
3.58E-08	8.75E-07	1.72E-07	1.08	0.001
3.92E-08	9.59E-07	1.88E-07	1.19	0.001
4.29E-08	1.05E-06	2.06E-07	1.30	0.001
4.72E-08	1.15E-06	2.27E-07	1.43	0.001
5.22E-08	1.28E-06	2.51E-07	1.58	0.001
5.80E-08	1.42E-06	2.79E-07	1.75	0.001
6.45E-08 7.27E-08	1.58E-06 1.78E-06	3.10E-07 3.49E-07	1.95 2.20	0.001 0.001
8.32E-08	2.03E-06	4.00E-07	2.52	0.001
9.60E-08	2.35E-06	4.61E-07	2.90	0.001
1.51E-07	3.70E-06	7.27E-07	4.58	0.002
1.78E-07	4.35E-06	8.55E-07	5.39	0.003
2.09E-07	5.11E-06	1.00E-06	6.33	0.003
2.45E-07	5.99E-06	1.18E-06	7.41	0.004
2.87E-07	7.01E-06	1.38E-06	8.67	0.004
3.34E-07	8.17E-06	1.61E-06	10.11	0.005
3.86E-07 4.43E-07	9.44E-06	1.85E-06	11.68	0.006
4.43E-07 5.07E-07	1.08E-05 1.24E-05	2.13E-06 2.43E-06	13.41 15.33	0.007 0.008
6.32E-07	1.54E-05	3.04E-06	19.11	0.009
5.92E-07	1.45E-05	2.84E-06	17.89	0.009
5.69E-07	1.39E-05	2.74E-06	17.22	0.008
5.51E-07	1.35E-05	2.64E-06	16.65	0.008
5.21E-07	1.27E-05	2.50E-06	15.76	0.008
4.96E-07	1.21E-05	2.38E-06	15.02	0.007
4.73E-07	1.16E-05	2.27E-06	14.30	0.007
4.51E-07 4.33E-07	1.10E-05 1.06E-05	2.17E-06 2.08E-06	13.65 13.10	0.007 0.006
4.33E-07 4.10E-07	1.00E-05	1.97E-06	12.40	0.006
3.91E-07	9.55E-06	1.88E-06	11.81	0.006
3.73E-07	9.11E-06	1.79E-06	11.27	0.006
3.57E-07	8.72E-06	1.71E-06	10.79	0.005
3.42E-07	8.37E-06	1.64E-06	10.35	0.005
3.28E-07	8.01E-06	1.57E-06	9.91	0.005
3.17E-07	7.76E-06	1.52E-06	9.60	0.005
3.05E-07	7.45E-06	1.46E-06	9.22	0.005
2.96E-07 2.87E-07	7.23E-06 7.01E-06	1.42E-06 1.38E-06	8.95 8.67	0.004 0.004
2.87E-07 2.77E-07	6.77E-06	1.33E-06	8.38	0.004
2.69E-07	6.57E-06	1.29E-06	8.13	0.004
2.55E-07	6.23E-06	1.22E-06	7.71	0.004
2.48E-07	6.06E-06	1.19E-06	7.50	0.004
2.40E-07	5.87E-06	1.15E-06	7.26	0.004
2.32E-07	5.68E-06	1.12E-06	7.03	0.003
2.25E-07	5.51E-06	1.08E-06	6.82	0.003
2.19E-07 2.12E-07	5.35E-06 5.17E-06	1.05E-06 1.02E-06	6.62 6.40	0.003 0.003
2.12E-07 2.04E-07	4.99E-06	9.80E-07	6.17	0.003
1.99E-07	4.85E-06	9.54E-07	6.00	0.003
1.93E-07	4.71E-06	9.25E-07	5.82	0.003
1.86E-07	4.55E-06	8.95E-07	5.63	0.003
1.80E-07	4.41E-06	8.67E-07	5.46	0.003
1.75E-07	4.28E-06	8.42E-07	5.30	0.003
1.70E-07	4.15E-06	8.15E-07	5.13	0.003
1.64E-07	4.01E-06	7.88E-07	4.96	0.002
1.59E-07 4.00E-08	3.89E-06 9.78E-07	7.64E-07 1.92E-07	4.81 1.21	0.002 0.001
4.40E-08	9.78E-07 1.07E-06	2.11E-07	1.21 1.33	0.001
4.83E-08	1.18E-06	2.32E-07	1.46	0.001
5.35E-08	1.31E-06	2.57E-07	1.62	0.001
5.98E-08	1.46E-06	2.87E-07	1.81	0.001
6.74E-08	1.65E-06	3.24E-07	2.04	0.001

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567605.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567625.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567705.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567725.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.013	0.014	0.013	0.013	0.013
567745.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567765.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567785.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
567805.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
567825.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
567845.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
567945.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	0.040	0.040
567965.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039
568005.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.036	0.036	0.036	0.036	0.036
568025.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.035	0.035	0.035	0.035	0.035
568045.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568065.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.032	0.032	0.032	0.032	0.032
568085.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030
568105.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568125.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568145.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568165.16 568185.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
	4149070.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568205.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568225.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568245.16	4149070.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.021	0.021 0.021	0.021 0.021	0.021	0.021
568265.16 568285.16	4149070.16 4149070.16	0.000 0.000	0.000	0.000	0.000	0.000 0.000	0.021 0.020	0.021	0.021	0.021 0.020	0.021 0.020
568305.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.019	0.019
568325.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568345.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568365.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568385.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.013	0.017	0.017	0.017	0.017
568425.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568445.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568465.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568485.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.015	0.016	0.015	0.015	0.015
568505.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568525.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568545.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568565.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568605.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568625.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568645.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568665.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568685.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568705.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568725.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567325.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567465.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567545.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567585.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567605.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567785.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567805.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
567825.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
567905.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
567925.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034
567945.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.034	0.034	0.034	0.034	0.034

	Cancer Risk = ∑	R1*CDDM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
				2.001
7.71E-08 8.78E-08	1.88E-06	3.70E-07	2.33	0.001
1.35E-07	2.14E-06 3.29E-06	4.21E-07 6.46E-07	2.65 4.07	0.001 0.002
1.56E-07	3.81E-06	7.49E-07	4.72	0.002
1.81E-07	4.42E-06	8.69E-07	5.47	0.003
2.10E-07	5.13E-06	1.01E-06	6.34	0.003
2.41E-07	5.89E-06	1.16E-06	7.29	0.004
2.77E-07	6.77E-06	1.33E-06	8.38	0.004
3.18E-07	7.76E-06	1.53E-06	9.60	0.005
3.59E-07	8.77E-06	1.72E-06	10.85	0.005
4.04E-07	9.87E-06	1.94E-06	12.22	0.006
5.41E-07	1.32E-05	2.60E-06	16.38	0.008
5.27E-07 4.85E-07	1.29E-05 1.19E-05	2.53E-06 2.33E-06	15.93 14.66	0.008 0.007
4.65E-07	1.19E-05 1.14E-05	2.33E-06 2.23E-06	14.00	0.007
4.46E-07	1.09E-05	2.14E-06	13.48	0.007
4.24E-07	1.04E-05	2.04E-06	12.83	0.006
4.07E-07	9.95E-06	1.96E-06	12.32	0.006
3.90E-07	9.52E-06	1.87E-06	11.78	0.006
3.72E-07	9.10E-06	1.79E-06	11.26	0.006
3.58E-07	8.75E-06	1.72E-06	10.83	0.005
3.41E-07	8.33E-06	1.64E-06	10.30	0.005
3.26E-07	7.98E-06	1.57E-06	9.87	0.005
3.13E-07	7.65E-06	1.50E-06	9.46	0.005
3.01E-07	7.35E-06	1.44E-06	9.09	0.004
2.89E-07 2.78E-07	7.05E-06 6.80E-06	1.39E-06 1.34E-06	8.73 8.41	0.004 0.004
2.70E-07 2.70E-07	6.59E-06	1.34E-06 1.30E-06	8.16	0.004
2.61E-07	6.38E-06	1.25E-06	7.89	0.004
2.54E-07	6.22E-06	1.22E-06	7.69	0.004
2.48E-07	6.06E-06	1.19E-06	7.50	0.004
2.41E-07	5.88E-06	1.16E-06	7.27	0.004
2.34E-07	5.73E-06	1.13E-06	7.09	0.003
2.27E-07	5.54E-06	1.09E-06	6.85	0.003
2.33E-07	5.70E-06	1.12E-06	7.06	0.003
2.28E-07	5.56E-06	1.09E-06	6.88	0.003
2.08E-07	5.09E-06	1.00E-06	6.30	0.003
2.03E-07 1.96E-07	4.95E-06 4.80E-06	9.74E-07 9.43E-07	6.13 5.94	0.003 0.003
1.91E-07	4.67E-06	9.43L-07 9.17E-07	5.77	0.003
1.85E-07	4.53E-06	8.90E-07	5.60	0.003
1.76E-07	4.31E-06	8.47E-07	5.33	0.003
1.71E-07	4.19E-06	8.23E-07	5.18	0.003
1.66E-07	4.06E-06	7.98E-07	5.03	0.002
1.62E-07	3.95E-06	7.77E-07	4.89	0.002
1.58E-07	3.86E-06	7.58E-07	4.77	0.002
1.53E-07	3.75E-06	7.36E-07	4.64	0.002
1.49E-07	3.64E-06	7.15E-07	4.50	0.002
2.25E-08 2.40E-08	5.50E-07 5.87E-07	1.08E-07 1.15E-07	0.68 0.73	0.000 0.000
2.40E-08 2.58E-08	6.30E-07	1.15E-07 1.24E-07	0.73	0.000
2.77E-08	6.77E-07	1.33E-07	0.78	0.000
2.97E-08	7.27E-07	1.43E-07	0.90	0.000
3.78E-08	9.24E-07	1.82E-07	1.14	0.001
4.12E-08	1.01E-06	1.98E-07	1.24	0.001
4.56E-08	1.12E-06	2.19E-07	1.38	0.001
5.01E-08	1.22E-06	2.41E-07	1.52	0.001
5.59E-08	1.37E-06	2.69E-07	1.69	0.001
6.25E-08	1.53E-06	3.00E-07	1.89	0.001
7.05E-08	1.72E-06	3.38E-07	2.13	0.001
8.00E-08 2.67E-07	1.95E-06 6.53E-06	3.84E-07 1.28E-06	2.42 8.08	0.001 0.004
2.99E-07	7.32E-06	1.44E-06	9.05	0.004
3.32E-07	8.11E-06	1.59E-06	10.03	0.005
4.42E-07	1.08E-05	2.13E-06	13.38	0.007
4.56E-07	1.11E-05	2.19E-06	13.79	0.007
4.58E-07	1.12E-05	2.20E-06	13.85	0.007

						Project	: Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567965.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.033	0.033	0.033	0.033	0.033
568005.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031
568025.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.029	0.029	0.029
568045.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.028	0.028	0.028	0.028	0.028
568065.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568085.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568105.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568125.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568145.16	4149090.16 4149090.16	0.000	0.000	0.000 0.000	0.000 0.000	0.000	0.023	0.023 0.021	0.023	0.023	0.023
568165.16 568185.16	4149090.16	0.000 0.000	0.000 0.000	0.000	0.000	0.000 0.000	0.021 0.021	0.021	0.021 0.021	0.021 0.021	0.021 0.021
568205.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568225.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568245.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568265.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568285.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568305.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568325.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568345.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568365.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568385.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568425.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568445.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568465.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568485.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568505.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568525.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568545.16 568565.16	4149090.16 4149090.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.013 0.013	0.013 0.013	0.013 0.013	0.013 0.013	0.013 0.013
568585.16 568585.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568605.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568625.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568645.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568665.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568685.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568705.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568725.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567325.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567485.16 567505.16	4149110.16 4149110.16	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.004	0.003 0.004	0.003 0.004	0.003	0.003 0.004
567505.16 567525.16	4149110.16 4149110.16	0.000	0.000 0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004 0.004	0.004
567525.16 567545.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.004	0.005	0.004	0.004	0.005
567585.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567645.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567665.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567685.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567705.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567725.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567745.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567765.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567785.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568065.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568085.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568105.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568125.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568145.16 568165.16	4149110.16 4149110.16	0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.019 0.019	0.019	0.019 0.019	0.019	0.019
568165.16 568185.16	4149110.16 4149110.16	0.000 0.000	0.000 0.000	0.000	0.000	0.000	0.019	0.019 0.018	0.019	0.019 0.018	0.019 0.018
568185.16 568205.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568225.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568245.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
		<del>-</del>	<del>-</del>		<del>-</del>		<del>-</del>	·			

	Cancer Risk = 2	R1*CnpM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
4.48E-07	1.10E-05	2.15E-06	13.56	0.007
4.48E-07 4.14E-07	1.10E-05 1.01E-05	1.99E-06	12.53	0.007
3.95E-07	9.66E-06	1.90E-06	11.96	0.006
3.78E-07	9.24E-06	1.82E-06	11.43	0.006
3.58E-07	8.76E-06	1.72E-06	10.84	0.005
3.42E-07	8.37E-06	1.64E-06	10.36	0.005
3.27E-07	8.00E-06	1.57E-06	9.90	0.005
3.13E-07	7.65E-06	1.50E-06	9.47	0.005
3.02E-07	7.39E-06	1.45E-06	9.14	0.005
2.88E-07	7.04E-06	1.38E-06	8.71	0.004
2.77E-07 2.66E-07	6.76E-06 6.50E-06	1.33E-06 1.28E-06	8.37 8.04	0.004 0.004
2.56E-07	6.26E-06	1.23E-06	7.74	0.004
2.47E-07	6.03E-06	1.18E-06	7.46	0.004
2.38E-07	5.82E-06	1.14E-06	7.20	0.004
2.30E-07	5.62E-06	1.11E-06	6.96	0.003
2.24E-07	5.47E-06	1.08E-06	6.77	0.003
2.19E-07	5.34E-06	1.05E-06	6.61	0.003
2.14E-07	5.23E-06	1.03E-06	6.47	0.003
2.09E-07	5.10E-06	1.00E-06	6.31	0.003
2.05E-07	5.00E-06	9.82E-07	6.19	0.003
2.11E-07 2.07E-07	5.14E-06 5.05E-06	1.01E-06 9.93E-07	6.37 6.25	0.003 0.003
2.02E-07	4.95E-06	9.72E-07	6.12	0.003
1.85E-07	4.53E-06	8.91E-07	5.61	0.003
1.81E-07	4.43E-06	8.70E-07	5.48	0.003
1.77E-07	4.31E-06	8.48E-07	5.34	0.003
1.72E-07	4.21E-06	8.28E-07	5.21	0.003
1.68E-07	4.11E-06	8.08E-07	5.09	0.003
1.65E-07	4.02E-06	7.91E-07	4.98	0.002
1.61E-07	3.94E-06	7.74E-07	4.87	0.002
1.57E-07	3.83E-06	7.54E-07	4.74	0.002
1.53E-07 1.50E-07	3.74E-06 3.66E-06	7.35E-07 7.18E-07	4.63 4.52	0.002 0.002
1.46E-07	3.57E-06	7.02E-07	4.42	0.002
1.42E-07	3.48E-06	6.83E-07	4.30	0.002
1.38E-07	3.38E-06	6.63E-07	4.18	0.002
2.31E-08	5.64E-07	1.11E-07	0.70	0.000
2.47E-08	6.03E-07	1.19E-07	0.75	0.000
2.65E-08	6.48E-07	1.27E-07	0.80	0.000
2.83E-08	6.92E-07	1.36E-07	0.86	0.000
3.06E-08	7.49E-07	1.47E-07	0.93	0.000
3.32E-08 4.30E-08	8.11E-07 1.05E-06	1.59E-07 2.07E-07	1.00 1.30	0.000 0.001
4.72E-08	1.15E-06	2.26E-07	1.43	0.001
5.17E-08	1.26E-06	2.48E-07	1.56	0.001
5.80E-08	1.42E-06	2.78E-07	1.75	0.001
6.50E-08	1.59E-06	3.12E-07	1.97	0.001
7.33E-08	1.79E-06	3.52E-07	2.22	0.001
1.07E-07	2.62E-06	5.15E-07	3.24	0.002
1.22E-07	2.99E-06	5.88E-07	3.70	0.002
1.40E-07	3.42E-06	6.73E-07	4.23	0.002
1.59E-07 1.80E-07	3.89E-06 4.41E-06	7.65E-07 8.67E-07	4.82 5.46	0.002 0.003
2.03E-07	4.41E-00 4.97E-06	9.76E-07	6.15	0.003
2.28E-07	5.57E-06	1.09E-06	6.89	0.003
2.54E-07	6.20E-06	1.22E-06	7.68	0.004
3.12E-07	7.63E-06	1.50E-06	9.44	0.005
2.98E-07	7.28E-06	1.43E-06	9.01	0.004
2.84E-07	6.95E-06	1.37E-06	8.60	0.004
2.72E-07	6.64E-06	1.31E-06	8.22	0.004
2.60E-07	6.35E-06	1.25E-06	7.85	0.004
2.49E-07 2.39E-07	6.08E-06 5.84E-06	1.19E-06 1.15E-06	7.52 7.22	0.004 0.004
2.39E-07 2.29E-07	5.60E-06	1.13E-06 1.10E-06	6.93	0.004
2.21E-07	5.39E-06	1.06E-06	6.67	0.003
2.13E-07	5.20E-06	1.02E-06	6.44	0.003

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568265.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568285.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568305.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568325.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568345.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568365.16 568385.16	4149110.16 4149110.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.014 0.013	0.014 0.013	0.014 0.013	0.014 0.013	0.014 0.013
568425.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568445.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.013	0.014	0.014	0.014	0.014
568465.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568485.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568505.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568525.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568545.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568565.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568585.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568605.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568625.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568645.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568665.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568685.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568705.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568725.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567325.16 567345.16	4149130.16 4149130.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567365.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567445.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567505.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567525.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567545.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567565.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567625.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567645.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567665.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567685.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567705.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567725.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567745.16 567765.16	4149130.16 4149130.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.015 0.016	0.015 0.016	0.015 0.016	0.015 0.016	0.015 0.016
567885.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.024	0.024
567905.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.025	0.025	0.025
567925.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
567945.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
567965.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.025	0.025	0.025	0.025	0.025
567985.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.024	0.024	0.024	0.024	0.024
568005.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.023	0.023	0.023	0.023	0.023
568025.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568045.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568065.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568085.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568105.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568345.16 568365.16	4149130.16 4149130.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.012 0.012	0.012 0.012	0.012 0.012	0.012 0.012	0.012 0.012
568385.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568405.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568425.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568445.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568465.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568485.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568505.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568525.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568545.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568565.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568585.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010

	Cancer Risk = 2	R1*CnpM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.06E-07 2.00E-07	5.04E-06 4.88E-06	9.91E-07 9.60E-07	6.24	0.003
1.94E-07	4.88E-06 4.73E-06	9.80E-07 9.30E-07	6.04 5.85	0.003 0.003
1.89E-07	4.63E-06	9.10E-07	5.73	0.003
1.86E-07	4.54E-06	8.92E-07	5.61	0.003
1.82E-07	4.45E-06	8.75E-07	5.51	0.003
1.79E-07	4.37E-06	8.58E-07	5.40	0.003
1.75E-07	4.27E-06	8.40E-07	5.29	0.003
1.82E-07	4.45E-06	8.75E-07	5.51	0.003
1.78E-07	4.36E-06	8.57E-07	5.40	0.003
1.65E-07	4.03E-06	7.93E-07	4.99	0.002
1.62E-07	3.96E-06	7.78E-07	4.90	0.002
1.59E-07 1.56E-07	3.88E-06 3.80E-06	7.62E-07 7.47E-07	4.80 4.71	0.002 0.002
1.52E-07	3.73E-06	7.47E-07 7.32E-07	4.71	0.002
1.49E-07	3.65E-06	7.18E-07	4.52	0.002
1.47E-07	3.59E-06	7.05E-07	4.44	0.002
1.44E-07	3.52E-06	6.91E-07	4.35	0.002
1.41E-07	3.44E-06	6.75E-07	4.25	0.002
1.38E-07	3.36E-06	6.61E-07	4.16	0.002
1.35E-07	3.29E-06	6.47E-07	4.07	0.002
1.32E-07	3.22E-06	6.33E-07	3.98	0.002
1.29E-07	3.14E-06	6.18E-07	3.89	0.002
2.37E-08	5.79E-07	1.14E-07	0.72	0.000
2.54E-08 2.72E-08	6.20E-07 6.64E-07	1.22E-07 1.31E-07	0.77 0.82	0.000 0.000
2.72E-08 2.91E-08	7.11E-07	1.40E-07	0.82	0.000
3.15E-08	7.71E-07	1.51E-07	0.95	0.000
3.42E-08	8.35E-07	1.64E-07	1.03	0.001
3.72E-08	9.09E-07	1.79E-07	1.13	0.001
4.91E-08	1.20E-06	2.36E-07	1.48	0.001
5.41E-08	1.32E-06	2.60E-07	1.64	0.001
6.05E-08	1.48E-06	2.91E-07	1.83	0.001
6.78E-08	1.66E-06	3.25E-07	2.05	0.001
9.71E-08	2.37E-06	4.66E-07	2.94	0.001
1.10E-07 1.26E-07	2.69E-06 3.07E-06	5.29E-07 6.04E-07	3.33 3.80	0.002 0.002
1.42E-07	3.46E-06	6.80E-07	4.28	0.002
1.59E-07	3.89E-06	7.65E-07	4.82	0.002
1.78E-07	4.35E-06	8.55E-07	5.39	0.003
1.98E-07	4.85E-06	9.53E-07	6.00	0.003
2.19E-07	5.35E-06	1.05E-06	6.61	0.003
3.25E-07	7.93E-06	1.56E-06	9.82	0.005
3.33E-07	8.14E-06	1.60E-06	10.08	0.005
3.39E-07	8.27E-06	1.63E-06	10.24	0.005
3.38E-07	8.25E-06	1.62E-06	10.21	0.005
3.34E-07	8.15E-06	1.60E-06	10.09	0.005
3.27E-07 3.13E-07	7.99E-06 7.65E-06	1.57E-06 1.50E-06	9.89 9.47	0.005 0.005
3.13E-07 3.01E-07	7.36E-06	1.45E-06	9.10	0.003
2.90E-07	7.09E-06	1.39E-06	8.77	0.004
2.75E-07	6.73E-06	1.32E-06	8.33	0.004
2.59E-07	6.34E-06	1.25E-06	7.84	0.004
2.48E-07	6.06E-06	1.19E-06	7.50	0.004
1.62E-07	3.97E-06	7.80E-07	4.91	0.002
1.60E-07	3.90E-06	7.66E-07	4.83	0.002
1.57E-07	3.83E-06	7.53E-07	4.74	0.002
1.55E-07	3.78E-06	7.44E-07	4.68	0.002
1.53E-07 1.52E-07	3.75E-06 3.70E-06	7.37E-07 7.28E-07	4.64 4.58	0.002 0.002
1.52E-07 1.50E-07	3.70E-06 3.66E-06	7.28E-07 7.19E-07	4.58	0.002
1.47E-07	3.60E-06	7.13L-07 7.08E-07	4.46	0.002
1.45E-07	3.55E-06	6.97E-07	4.39	0.002
1.43E-07	3.49E-06	6.86E-07	4.32	0.002
1.41E-07	3.44E-06	6.76E-07	4.26	0.002
1.38E-07	3.38E-06	6.64E-07	4.18	0.002
1.36E-07	3.32E-06	6.52E-07	4.11	0.002

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568605.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568645.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568665.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568685.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568705.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009 0.009
568725.16 567325.16	4149130.16 4149150.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.009 0.002	0.009 0.002	0.009 0.002	0.009 0.002	0.009
567345.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567425.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567445.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567465.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567525.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567545.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567605.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567625.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567645.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567665.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567685.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567705.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567725.16 567825.16	4149150.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.013 0.019	0.013 0.019	0.013 0.019	0.013 0.019	0.013 0.019
567825.16	4149150.16 4149150.16	0.000 0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567865.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567905.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.022
567925.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
567945.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
567965.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
567985.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568005.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.021	0.021	0.021	0.021	0.021
568025.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568045.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568065.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568085.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568105.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568125.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568145.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568165.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568185.16 568205.16	4149150.16 4149150.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.014 0.013	0.014 0.013	0.014 0.013	0.014 0.013	0.014 0.013
568225.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568245.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568265.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568285.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568305.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568325.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568345.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568365.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568385.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568405.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568725.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567325.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16 567405.16	4149170.16 4149170.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003
567405.16 567425.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567425.16 567445.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567465.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567585.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567605.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567625.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567645.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567665.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.33E-07	3.25E-06	6.39E-07	4.02	0.002
1.29E-07 1.26E-07	3.14E-06 3.08E-06	6.18E-07 6.06E-07	3.89 3.82	0.002
1.26E-07 1.24E-07	3.03E-06	5.95E-07	3.75	0.002 0.002
1.24E-07 1.21E-07	2.97E-06	5.83E-07	3.67	0.002
1.19E-07	2.91E-06	5.73E-07	3.60	0.002
2.43E-08	5.93E-07	1.17E-07	0.73	0.000
2.60E-08	6.35E-07	1.25E-07	0.79	0.000
2.80E-08	6.85E-07	1.35E-07	0.85	0.000
3.01E-08	7.36E-07	1.45E-07	0.91	0.000
3.26E-08	7.98E-07	1.57E-07	0.99	0.000
3.54E-08	8.66E-07	1.70E-07	1.07	0.001
3.86E-08	9.44E-07	1.85E-07	1.17	0.001
4.20E-08	1.03E-06	2.02E-07	1.27	0.001
5.66E-08 6.29E-08	1.38E-06	2.72E-07 3.02E-07	1.71	0.001
8.85E-08	1.54E-06 2.16E-06	4.25E-07	1.90 2.68	0.001 0.001
1.00E-07	2.44E-06	4.80E-07	3.02	0.001
1.13E-07	2.77E-06	5.44E-07	3.42	0.002
1.26E-07	3.09E-06	6.07E-07	3.82	0.002
1.41E-07	3.45E-06	6.77E-07	4.27	0.002
1.57E-07	3.84E-06	7.54E-07	4.75	0.002
1.74E-07	4.25E-06	8.35E-07	5.26	0.003
2.57E-07	6.28E-06	1.23E-06	7.77	0.004
2.70E-07	6.60E-06	1.30E-06	8.17	0.004
2.79E-07	6.82E-06	1.34E-06	8.44	0.004
2.95E-07	7.21E-06	1.42E-06	8.92	0.004
2.98E-07	7.27E-06	1.43E-06	9.00	0.004
2.97E-07 2.95E-07	7.26E-06 7.21E-06	1.43E-06 1.42E-06	8.99 8.93	0.004 0.004
2.89E-07	7.21E 00 7.07E-06	1.39E-06	8.74	0.004
2.79E-07	6.83E-06	1.34E-06	8.45	0.004
2.71E-07	6.62E-06	1.30E-06	8.19	0.004
2.61E-07	6.38E-06	1.25E-06	7.89	0.004
2.48E-07	6.06E-06	1.19E-06	7.50	0.004
2.33E-07	5.70E-06	1.12E-06	7.05	0.003
2.21E-07	5.41E-06	1.06E-06	6.69	0.003
2.10E-07	5.14E-06	1.01E-06	6.36	0.003
2.04E-07	4.98E-06	9.78E-07	6.16	0.003
1.94E-07	4.74E-06	9.32E-07	5.87	0.003
1.86E-07 1.77E-07	4.54E-06 4.33E-06	8.93E-07 8.52E-07	5.62 5.36	0.003 0.003
1.77E-07 1.71E-07	4.33E-00 4.17E-06	8.19E-07	5.16	0.003
1.64E-07	4.00E-06	7.87E-07	4.96	0.002
1.58E-07	3.87E-06	7.60E-07	4.78	0.002
1.54E-07	3.75E-06	7.37E-07	4.64	0.002
1.48E-07	3.63E-06	7.13E-07	4.49	0.002
1.45E-07	3.54E-06	6.95E-07	4.38	0.002
1.42E-07	3.47E-06	6.82E-07	4.30	0.002
1.40E-07	3.41E-06	6.71E-07	4.23	0.002
1.38E-07	3.38E-06	6.63E-07	4.18	0.002
1.36E-07 1.10E-07	3.33E-06 2.69E-06	6.55E-07 5.28F-07	4.12 3.33	0.002
2.49E-08	6.09E-06	5.28E-07 1.20E-07	3.33 0.75	0.002 0.000
2.49E-08 2.67E-08	6.52E-07	1.20E-07 1.28E-07	0.73	0.000
2.90E-08	7.08E-07	1.39E-07	0.88	0.000
3.11E-08	7.60E-07	1.49E-07	0.94	0.000
3.37E-08	8.25E-07	1.62E-07	1.02	0.001
3.67E-08	8.96E-07	1.76E-07	1.11	0.001
3.99E-08	9.75E-07	1.92E-07	1.21	0.001
4.36E-08	1.07E-06	2.09E-07	1.32	0.001
4.79E-08	1.17E-06	2.30E-07	1.45	0.001
8.13E-08	1.99E-06	3.91E-07	2.46	0.001
9.08E-08	2.22E-06	4.36E-07	2.75	0.001
1.03E-07	2.51E-06	4.93E-07	3.10	0.002
1.14E-07 1.26E-07	2.78E-06 3.09E-06	5.46E-07 6.07E-07	3.44	0.002
1.20E-U/	3.09E-06	6.07E-07	3.82	0.002

						Project	: Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567685.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567705.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567805.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567825.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.017	0.018	0.018	0.018	0.018
567845.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567865.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567885.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
567925.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567945.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
567965.16 567985.16	4149170.16 4149170.16	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000	0.020	0.020	0.020	0.020 0.019	0.020 0.019
568005.16	4149170.16	0.000	0.000 0.000	0.000	0.000	0.000 0.000	0.019 0.019	0.019 0.019	0.019 0.019	0.019	0.019
568025.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568045.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
568065.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.013	0.018	0.017
568085.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.016
568105.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568125.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568145.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568165.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568185.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.012	0.012	0.012
568205.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568225.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568245.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568265.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568285.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568305.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568325.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568345.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568365.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568385.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568405.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568425.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568445.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568465.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568485.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568505.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568525.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568585.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568605.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568625.16 568665.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
	4149170.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568685.16 568705.16	4149170.16 4149170.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008
568705.16 568725.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567325.16 567325.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567345.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567405.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567425.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567445.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567465.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567505.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567565.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567585.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567605.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567625.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567645.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567665.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567685.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567785.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567805.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567825.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567845.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567865.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017

	Cancer Risk =	∑R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.40E-07	3.42E-06	6.72E-07 7.41E-07	4.23	0.002
1.54E-07 2.24E-07	3.77E-06 5.46E-06	1.07E-06	4.67 6.76	0.002 0.003
2.35E-07	5.74E-06	1.13E-06	7.10	0.003
2.43E-07	5.94E-06	1.17E-06	7.35	0.004
2.49E-07	6.08E-06	1.20E-06	7.53	0.004
2.55E-07	6.24E-06	1.23E-06	7.72	0.004
2.64E-07	6.46E-06	1.27E-06	7.99	0.004
2.64E-07	6.46E-06	1.27E-06	8.00	0.004
2.63E-07	6.42E-06	1.26E-06	7.95	0.004
2.58E-07	6.32E-06	1.24E-06	7.81	0.004
2.53E-07	6.17E-06	1.21E-06	7.64	0.004
2.45E-07 2.36E-07	5.99E-06 5.77E-06	1.18E-06 1.13E-06	7.42 7.14	0.004 0.004
2.26E-07	5.77E-00 5.51E-06	1.13E-00 1.08E-06	6.82	0.004
2.12E-07	5.19E-06	1.02E-06	6.42	0.003
2.02E-07	4.94E-06	9.70E-07	6.11	0.003
1.93E-07	4.71E-06	9.26E-07	5.83	0.003
1.85E-07	4.52E-06	8.89E-07	5.60	0.003
1.75E-07	4.28E-06	8.41E-07	5.30	0.003
1.67E-07	4.09E-06	8.04E-07	5.06	0.002
1.60E-07	3.92E-06	7.71E-07	4.85	0.002
1.53E-07 1.48E-07	3.74E-06 3.61E-06	7.36E-07 7.10E-07	4.63	0.002
1.48E-07 1.42E-07	3.47E-06	6.82E-07	4.47 4.30	0.002 0.002
1.36E-07	3.47E 00 3.32E-06	6.52E-07	4.11	0.002
1.31E-07	3.21E-06	6.31E-07	3.98	0.002
1.29E-07	3.14E-06	6.18E-07	3.89	0.002
1.26E-07	3.08E-06	6.05E-07	3.81	0.002
1.24E-07	3.03E-06	5.96E-07	3.76	0.002
1.23E-07	3.00E-06	5.89E-07	3.71	0.002
1.21E-07	2.96E-06	5.82E-07	3.66	0.002
1.20E-07	2.94E-06	5.78E-07	3.64	0.002
1.18E-07 1.18E-07	2.89E-06 2.87E-06	5.68E-07 5.65E-07	3.58 3.55	0.002 0.002
1.17E-07	2.86E-06	5.61E-07	3.53	0.002
1.16E-07	2.83E-06	5.56E-07	3.50	0.002
1.15E-07	2.80E-06	5.50E-07	3.47	0.002
1.11E-07	2.70E-06	5.31E-07	3.35	0.002
1.09E-07	2.67E-06	5.25E-07	3.30	0.002
1.08E-07	2.64E-06	5.19E-07	3.27	0.002
1.06E-07	2.59E-06 2.55E-06	5.08E-07 5.01E-07	3.20	0.002
1.04E-07 1.03E-07	2.53E-06 2.51E-06	4.94E-07	3.15 3.11	0.002 0.002
1.01E-07	2.48E-06	4.87E-07	3.06	0.002
2.56E-08	6.26E-07	1.23E-07	0.78	0.000
2.75E-08	6.71E-07	1.32E-07	0.83	0.000
3.02E-08	7.39E-07	1.45E-07	0.91	0.000
3.22E-08	7.86E-07	1.55E-07	0.97	0.000
3.49E-08	8.52E-07	1.68E-07	1.05	0.001
3.79E-08	9.26E-07	1.82E-07	1.15	0.001
4.13E-08 4.53E-08	1.01E-06 1.11E-06	1.98E-07 2.18E-07	1.25 1.37	0.001 0.001
4.96E-08	1.21E-06	2.38E-07	1.50	0.001
5.46E-08	1.33E-06	2.62E-07	1.65	0.001
7.51E-08	1.84E-06	3.61E-07	2.27	0.001
8.34E-08	2.04E-06	4.00E-07	2.52	0.001
9.36E-08	2.29E-06	4.50E-07	2.83	0.001
1.04E-07	2.53E-06	4.97E-07	3.13	0.002
1.14E-07	2.79E-06	5.48E-07	3.45	0.002
1.26E-07	3.07E-06	6.04E-07	3.80	0.002
1.38E-07 1.97E-07	3.38E-06 4.81E-06	6.64E-07 9.44E-07	4.18 5.95	0.002 0.003
2.07E-07	5.05E-06	9.44E-07 9.93E-07	6.25	0.003
2.15E-07	5.25E-06	1.03E-06	6.49	0.003
2.19E-07	5.36E-06	1.05E-06	6.64	0.003
2.25E-07	5.51E-06	1.08E-06	6.81	0.003

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567885.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
567905.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567945.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.018
567985.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568005.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568025.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568045.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
568065.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568085.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568105.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568125.16 568145.16	4149190.16 4149190.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.013 0.013	0.013 0.013	0.013 0.013	0.013 0.013	0.013 0.013
568165.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568185.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568205.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568225.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.010	0.011	0.011
568245.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568265.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568285.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.009	0.009	0.009
568305.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568325.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568345.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568365.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568385.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568405.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568425.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568445.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568465.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568485.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568505.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568525.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568545.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568565.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568585.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568605.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568625.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568645.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568665.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568685.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568705.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568725.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567325.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16 567365.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16 567385.16	4149210.16 4149210.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567385.16 567405.16	4149210.16 4149210.16	0.000	0.000	0.000	0.000	0.000 0.000	0.002	0.002	0.002	0.002	0.002
567425.16 567425.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567445.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567465.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567485.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.004	0.004	0.004
567505.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567585.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567605.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567625.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567645.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.008	0.009	0.008	0.008	0.008
567665.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567745.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567765.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567785.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567805.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567825.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567845.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567865.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
567885.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567905.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567925.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016
567985.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016

	Cancer Risk = 2	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.30E-07	5.62E-06	1.10E-06	6.96	0.003
2.35E-07 2.37E-07	5.75E-06 5.79E-06	1.13E-06 1.14E-06	7.11 7.16	0.004 0.004
2.32E-07	5.68E-06	1.14E-06	7.10	0.004
2.27E-07	5.55E-06	1.09E-06	6.87	0.003
2.22E-07	5.42E-06	1.06E-06	6.70	0.003
2.15E-07	5.25E-06	1.03E-06	6.49	0.003
2.06E-07	5.04E-06	9.90E-07	6.23	0.003
1.95E-07	4.76E-06	9.36E-07	5.89	0.003
1.85E-07	4.53E-06	8.91E-07	5.61	0.003
1.77E-07 1.70E-07	4.33E-06 4.15E-06	8.51E-07 8.16E-07	5.36 5.14	0.003 0.003
1.61E-07	3.94E-06	7.74E-07	4.88	0.002
1.53E-07	3.75E-06	7.37E-07	4.64	0.002
1.46E-07	3.58E-06	7.03E-07	4.43	0.002
1.39E-07	3.41E-06	6.70E-07	4.22	0.002
1.34E-07	3.28E-06	6.45E-07	4.06	0.002
1.28E-07	3.14E-06	6.17E-07	3.89	0.002
1.23E-07 1.19E-07	3.01E-06 2.91E-06	5.91E-07 5.71E-07	3.72 3.60	0.002 0.002
1.16E-07	2.82E-06	5.55E-07	3.49	0.002
1.13E-07	2.76E-06	5.43E-07	3.42	0.002
1.11E-07	2.71E-06	5.33E-07	3.36	0.002
1.10E-07	2.68E-06	5.27E-07	3.32	0.002
1.08E-07	2.65E-06	5.20E-07	3.27	0.002
1.07E-07	2.62E-06	5.14E-07	3.24	0.002
1.05E-07 1.05E-07	2.58E-06 2.57E-06	5.07E-07	3.19	0.002
1.05E-07 1.05E-07	2.56E-06	5.05E-07 5.03E-07	3.18 3.17	0.002 0.002
1.04E-07	2.54E-06	4.99E-07	3.14	0.002
1.03E-07	2.52E-06	4.94E-07	3.11	0.002
1.02E-07	2.50E-06	4.91E-07	3.09	0.002
1.01E-07	2.48E-06	4.87E-07	3.06	0.002
1.01E-07	2.46E-06	4.83E-07	3.04	0.002
9.97E-08 9.87E-08	2.44E-06 2.41E-06	4.79E-07 4.74E-07	3.02 2.99	0.001 0.001
9.79E-08	2.41L-00 2.39E-06	4.74E-07 4.70E-07	2.96	0.001
9.67E-08	2.36E-06	4.65E-07	2.93	0.001
9.54E-08	2.33E-06	4.58E-07	2.89	0.001
9.43E-08	2.30E-06	4.53E-07	2.85	0.001
9.32E-08	2.28E-06	4.47E-07	2.82	0.001
2.63E-08	6.44E-07	1.27E-07	0.80	0.000
2.84E-08 3.07E-08	6.93E-07 7.50E-07	1.36E-07 1.47E-07	0.86 0.93	0.000 0.000
3.32E-08	8.11E-07	1.59E-07	1.00	0.000
3.60E-08	8.80E-07	1.73E-07	1.09	0.001
3.92E-08	9.59E-07	1.88E-07	1.19	0.001
4.29E-08	1.05E-06	2.06E-07	1.30	0.001
4.68E-08	1.14E-06	2.25E-07	1.42	0.001
5.14E-08	1.26E-06	2.47E-07	1.56	0.001
5.68E-08 8.54E-08	1.39E-06 2.09E-06	2.73E-07 4.10E-07	1.72 2.58	0.001 0.001
9.44E-08	2.31E-06	4.54E-07	2.86	0.001
1.04E-07	2.54E-06	5.00E-07	3.15	0.002
1.14E-07	2.79E-06	5.48E-07	3.45	0.002
1.25E-07	3.05E-06	5.99E-07	3.77	0.002
1.66E-07	4.05E-06	7.96E-07	5.01	0.002
1.75E-07	4.27E-06	8.40E-07	5.29	0.003
1.83E-07 1.90E-07	4.46E-06 4.64E-06	8.77E-07 9.12E-07	5.52 5.74	0.003 0.003
1.97E-07	4.82E-06	9.47E-07	5.96	0.003
2.02E-07	4.93E-06	9.69E-07	6.10	0.003
2.06E-07	5.04E-06	9.90E-07	6.23	0.003
2.10E-07	5.13E-06	1.01E-06	6.35	0.003
2.12E-07	5.19E-06	1.02E-06	6.42	0.003
2.14E-07	5.23E-06 5.14E-06	1.03E-06	6.47	0.003
2.10E-07	5.14E-06	1.01E-06	6.36	0.003

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568005.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568025.16 568045.16	4149210.16 4149210.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.015 0.015	0.015 0.015	0.015 0.015	0.015 0.015	0.015 0.015
568045.16 568065.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.013	0.015	0.015	0.013	0.013
568085.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.013	0.014
568105.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568125.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568145.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568165.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568185.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568205.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568225.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568245.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568265.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568285.16 568305.16	4149210.16 4149210.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008
568325.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568345.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568365.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568385.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568405.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568425.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568445.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568465.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568505.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568525.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568545.16 568565.16	4149210.16 4149210.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.007 0.007	0.007 0.007	0.007 0.007	0.007 0.007	0.007 0.007
568585.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568605.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568625.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568645.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568685.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568705.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568725.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567325.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16 567385.16	4149230.16 4149230.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003
567405.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567425.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567445.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567465.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567485.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567525.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567545.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567605.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567625.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567725.16 567745.16	4149230.16 4149230.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.011 0.012	0.011 0.012	0.011 0.012	0.011 0.012	0.011 0.012
567765.16 567765.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567785.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.013	0.012
567805.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567825.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567845.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567865.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567885.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567905.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567925.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
567945.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568105.16 568125.16	4149230.16 4149230.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.012 0.011	0.012 0.011	0.012 0.011	0.012 0.011	0.012 0.011
568145.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568165.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.010	0.011
568185.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568205.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568225.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009

	HI			
3rd Trimester	Cancer Risk = 2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.07E-07	5.05E-06	9.93E-07	6.25	0.003
2.02E-07	4.93E-06	9.70E-07	6.11	0.003
1.96E-07	4.79E-06	9.41E-07	5.93	0.003
1.89E-07	4.61E-06	9.06E-07	5.71	0.003
1.80E-07	4.40E-06	8.66E-07	5.45	0.003
1.72E-07	4.20E-06	8.26E-07	5.20	0.003
1.64E-07	4.02E-06	7.90E-07	4.97	0.002
1.57E-07	3.84E-06	7.54E-07	4.75	0.002
1.49E-07	3.65E-06	7.17E-07 6.81E-07	4.52	0.002
1.42E-07 1.35E-07	3.46E-06 3.30E-06	6.49E-07	4.29 4.09	0.002 0.002
1.28E-07	3.14E-06	6.17E-07	3.89	0.002
1.23E-07	3.01E-06	5.91E-07	3.72	0.002
1.17E-07	2.87E-06	5.64E-07	3.55	0.002
1.13E-07	2.75E-06	5.41E-07	3.40	0.002
1.09E-07	2.65E-06	5.21E-07	3.28	0.002
1.05E-07	2.57E-06	5.05E-07	3.18	0.002
1.02E-07	2.50E-06	4.92E-07	3.10	0.002
1.00E-07	2.45E-06	4.81E-07	3.03	0.001
9.91E-08	2.42E-06	4.76E-07	3.00	0.001
9.74E-08 9.61E-08	2.38E-06 2.35E-06	4.68E-07 4.62E-07	2.94 2.91	0.001
9.53E-08	2.33E-06	4.58E-07	2.88	0.001 0.001
9.47E-08	2.31E-06	4.55E-07	2.86	0.001
9.31E-08	2.27E-06	4.47E-07	2.81	0.001
9.25E-08	2.26E-06	4.44E-07	2.80	0.001
9.21E-08	2.25E-06	4.43E-07	2.79	0.001
9.17E-08	2.24E-06	4.40E-07	2.77	0.001
9.10E-08	2.22E-06	4.37E-07	2.75	0.001
9.05E-08	2.21E-06	4.35E-07	2.74	0.001
8.99E-08	2.20E-06	4.32E-07	2.72	0.001
9.34E-08 8.74E-08	2.28E-06 2.14E-06	4.49E-07 4.20E-07	2.82 2.64	0.001 0.001
8.64E-08	2.14E-06 2.11E-06	4.20E-07 4.15E-07	2.61	0.001
8.57E-08	2.10E-06	4.12E-07	2.59	0.001
2.71E-08	6.62E-07	1.30E-07	0.82	0.000
2.93E-08	7.16E-07	1.41E-07	0.89	0.000
3.16E-08	7.73E-07	1.52E-07	0.96	0.000
3.41E-08	8.34E-07	1.64E-07	1.03	0.001
3.72E-08	9.10E-07	1.79E-07	1.13	0.001
4.06E-08	9.92E-07	1.95E-07	1.23	0.001
4.42E-08	1.08E-06	2.12E-07	1.34	0.001
4.85E-08 5.34E-08	1.18E-06 1.30E-06	2.33E-07 2.56E-07	1.47 1.61	0.001 0.001
6.44E-08	1.57E-06	3.09E-07	1.95	0.001
7.05E-08	1.72E-06	3.39E-07	2.13	0.001
9.50E-08	2.32E-06	4.56E-07	2.87	0.001
1.04E-07	2.55E-06	5.00E-07	3.15	0.002
1.49E-07	3.63E-06	7.14E-07	4.50	0.002
1.56E-07	3.82E-06	7.52E-07	4.73	0.002
1.63E-07	3.98E-06	7.82E-07	4.92	0.002
1.69E-07	4.13E-06	8.12E-07	5.11	0.003
1.74E-07	4.26E-06 4.40E-06	8.37E-07	5.27	0.003
1.80E-07 1.85E-07	4.40E-06 4.53E-06	8.64E-07 8.90E-07	5.44 5.61	0.003 0.003
1.89E-07	4.61E-06	9.06E-07	5.70	0.003
1.91E-07	4.67E-06	9.17E-07	5.78	0.003
1.93E-07	4.71E-06	9.25E-07	5.82	0.003
1.93E-07	4.72E-06	9.29E-07	5.85	0.003
1.94E-07	4.73E-06	9.30E-07	5.86	0.003
1.60E-07	3.90E-06	7.67E-07	4.83	0.002
1.52E-07	3.72E-06	7.32E-07	4.61	0.002
1.45E-07	3.54E-06	6.97E-07	4.39	0.002
1.38E-07 1.32E-07	3.38E-06 3.22E-06	6.64E-07 6.33E-07	4.18 3.98	0.002 0.002
1.32E-07 1.26E-07	3.22E-06 3.07E-06	6.33E-07 6.04E-07	3.98	0.002
1.19E-07	2.91E-06	5.73E-07	3.61	0.002

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568245.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568265.16 568285.16	4149230.16 4149230.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008
568305.16 568305.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568325.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568345.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568365.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568385.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568405.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568425.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568465.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568485.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568505.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568525.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568545.16 568565.16	4149230.16 4149230.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006
568585.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568605.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568625.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568645.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568665.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568685.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568705.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568725.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567325.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16 567385.16	4149250.16 4149250.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003
567405.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567425.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567445.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567465.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567505.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567525.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567545.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567565.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567705.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16 567745.16	4149250.16 4149250.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.011 0.011	0.011 0.011	0.011 0.011	0.011 0.011	0.011 0.011
567765.16 567765.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567785.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.012	0.012	0.012
567805.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567825.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567845.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567865.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567885.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567905.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567925.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
567945.16	4149250.16 4149250.16	0.000 0.000	0.000	0.000	0.000	0.000 0.000	0.013	0.013 0.013	0.013	0.013	0.013
567985.16 568005.16	4149250.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.013 0.013	0.013	0.013 0.013	0.013 0.013	0.013 0.013
568025.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568045.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568065.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568085.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568105.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568125.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568145.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568165.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568185.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568205.16 568225.16	4149250.16 4149250.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.009 0.008	0.009 0.008	0.009 0.008	0.009 0.008	0.009 0.008
568245.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568265.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568285.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568305.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568425.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006

	Cancer Risk = 2	R1*Com		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.14E-07	2.79E-06	5.48E-07	3.45	0.002
1.09E-07 1.04E-07	2.66E-06 2.55E-06	5.23E-07 5.01E-07	3.30 3.16	0.002 0.002
1.04E-07 1.00E-07	2.45E-06	4.82E-07	3.03	0.002
9.67E-08	2.36E-06	4.64E-07	2.92	0.001
9.37E-08	2.29E-06	4.50E-07	2.83	0.001
9.15E-08	2.24E-06	4.39E-07	2.77	0.001
8.97E-08	2.19E-06	4.31E-07	2.71	0.001
8.79E-08	2.15E-06	4.22E-07	2.66	0.001
8.69E-08	2.12E-06	4.17E-07	2.63	0.001
8.49E-08	2.07E-06	4.08E-07	2.57	0.001
8.48E-08	2.07E-06	4.07E-07	2.56	0.001
8.41E-08	2.06E-06	4.04E-07	2.54	0.001
8.36E-08	2.04E-06	4.02E-07	2.53	0.001
8.34E-08 8.31E-08	2.04E-06 2.03E-06	4.00E-07 3.99E-07	2.52 2.51	0.001 0.001
8.71E-08	2.13E-06	4.19E-07	2.64	0.001
8.66E-08	2.12E-06	4.16E-07	2.62	0.001
8.60E-08	2.10E-06	4.13E-07	2.60	0.001
8.53E-08	2.08E-06	4.10E-07	2.58	0.001
8.07E-08	1.97E-06	3.87E-07	2.44	0.001
8.01E-08	1.96E-06	3.85E-07	2.42	0.001
7.96E-08	1.94E-06	3.82E-07	2.41	0.001
8.22E-08	2.01E-06	3.95E-07	2.49	0.001
2.81E-08	6.87E-07	1.35E-07	0.85	0.000
3.02E-08	7.39E-07	1.45E-07	0.91	0.000
3.25E-08 3.53E-08	7.94E-07 8.63E-07	1.56E-07 1.70E-07	0.98	0.000 0.001
3.86E-08	9.43E-07	1.70E-07 1.85E-07	1.07 1.17	0.001
4.21E-08	1.03E-06	2.02E-07	1.27	0.001
4.58E-08	1.12E-06	2.20E-07	1.39	0.001
5.02E-08	1.23E-06	2.41E-07	1.52	0.001
6.01E-08	1.47E-06	2.89E-07	1.82	0.001
6.55E-08	1.60E-06	3.15E-07	1.98	0.001
7.22E-08	1.76E-06	3.47E-07	2.18	0.001
7.97E-08	1.95E-06	3.83E-07	2.41	0.001
1.34E-07	3.28E-06	6.44E-07	4.05	0.002
1.41E-07	3.45E-06	6.77E-07	4.27	0.002
1.47E-07 1.52E-07	3.60E-06 3.72E-06	7.08E-07 7.32E-07	4.46 4.61	0.002 0.002
1.57E-07	3.72E-00 3.84E-06	7.55E-07	4.75	0.002
1.62E-07	3.96E-06	7.78E-07	4.90	0.002
1.67E-07	4.07E-06	8.01E-07	5.04	0.002
1.71E-07	4.17E-06	8.19E-07	5.16	0.003
1.72E-07	4.21E-06	8.28E-07	5.21	0.003
1.75E-07	4.27E-06	8.39E-07	5.28	0.003
1.76E-07	4.29E-06	8.43E-07	5.31	0.003
1.76E-07	4.30E-06	8.46E-07	5.32	0.003
1.76E-07	4.31E-06	8.46E-07	5.33	0.003
1.74E-07 1.72E-07	4.26E-06 4.20E-06	8.38E-07 8.26E-07	5.28 5.20	0.003 0.003
1.72E-07 1.69E-07	4.20E-00 4.13E-06	8.11E-07	5.11	0.003
1.65E-07	4.03E-06	7.93E-07	4.99	0.002
1.60E-07	3.91E-06	7.68E-07	4.84	0.002
1.54E-07	3.76E-06	7.39E-07	4.66	0.002
1.48E-07	3.62E-06	7.12E-07	4.48	0.002
1.42E-07	3.48E-06	6.84E-07	4.30	0.002
1.36E-07	3.32E-06	6.53E-07	4.11	0.002
1.29E-07	3.16E-06	6.21E-07	3.91	0.002
1.23E-07	3.02E-06	5.93E-07	3.73	0.002
1.18E-07	2.88E-06	5.65E-07	3.56	0.002
1.12E-07 1.06E-07	2.73E-06 2.60E-06	5.37E-07 5.11E-07	3.38	0.002
1.06E-07 1.01E-07	2.60E-06 2.48E-06	5.11E-07 4.87E-07	3.22 3.07	0.002 0.002
9.71E-08	2.48E-06 2.37E-06	4.87E-07 4.66E-07	2.94	0.002
9.29E-08	2.27E-06	4.46E-07	2.81	0.001
7.90E-08	1.93E-06	3.79E-07	2.39	0.001

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568445.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568465.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568485.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568505.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568525.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568545.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568565.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568585.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568605.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568625.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567325.16 567345.16	4149270.16 4149270.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567365.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567385.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567405.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567425.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567445.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567485.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567505.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567525.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567545.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567565.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567585.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567605.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567725.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567745.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567765.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567785.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567805.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567825.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567845.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567865.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567885.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567905.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567925.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567945.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
567985.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568005.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568025.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568045.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568065.16 568085.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011 0.011
568085.16 568105.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	
568105.16 568125.16	4149270.16 4149270.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.010 0.010	0.010 0.010	0.010 0.010	0.010 0.010	0.010 0.010
568145.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.009
568165.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568185.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568205.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.008	0.008
568225.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568245.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568265.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568285.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568305.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568325.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568345.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568365.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568405.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568425.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568445.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568465.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568485.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568505.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568525.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568545.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568565.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005

	Cancer Risk = 2	5R1*Cpm		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
7.80E-08	1.91E-06	3.75E-07	2.36	0.001
7.73E-08	1.89E-06	3.71E-07	2.34	0.001
7.67E-08 7.63E-08	1.88E-06 1.86E-06	3.69E-07 3.66E-07	2.32 2.31	0.001 0.001
7.60E-08	1.86E-06	3.65E-07	2.31	0.001
8.02E-08	1.96E-06	3.85E-07	2.42	0.001
7.97E-08	1.95E-06	3.83E-07	2.41	0.001
7.93E-08	1.94E-06	3.81E-07	2.40	0.001
7.88E-08	1.93E-06	3.79E-07	2.38	0.001
7.83E-08	1.91E-06	3.76E-07	2.37	0.001
2.90E-08	7.08E-07	1.39E-07	0.88	0.000
3.11E-08	7.61E-07	1.49E-07	0.94	0.000
3.37E-08	8.22E-07	1.62E-07	1.02	0.001
3.66E-08 3.99E-08	8.95E-07 9.75E-07	1.76E-07 1.92E-07	1.11 1.21	0.001 0.001
4.35E-08	1.06E-06	2.09E-07	1.31	0.001
4.74E-08	1.16E-06	2.28E-07	1.43	0.001
5.64E-08	1.38E-06	2.71E-07	1.70	0.001
6.15E-08	1.50E-06	2.95E-07	1.86	0.001
6.73E-08	1.65E-06	3.23E-07	2.04	0.001
7.36E-08	1.80E-06	3.54E-07	2.23	0.001
8.03E-08	1.96E-06	3.86E-07	2.43	0.001
8.73E-08	2.13E-06	4.19E-07	2.64	0.001
9.44E-08	2.31E-06	4.53E-07	2.85	0.001
1.22E-07	2.97E-06	5.84E-07	3.68	0.002
1.28E-07 1.32E-07	3.12E-06 3.23E-06	6.14E-07 6.35E-07	3.86 4.00	0.002 0.002
1.38E-07	3.37E-06	6.62E-07	4.17	0.002
1.42E-07	3.48E-06	6.83E-07	4.30	0.002
1.47E-07	3.58E-06	7.04E-07	4.43	0.002
1.51E-07	3.68E-06	7.24E-07	4.56	0.002
1.55E-07	3.78E-06	7.43E-07	4.68	0.002
1.56E-07	3.82E-06	7.51E-07	4.73	0.002
1.58E-07	3.87E-06	7.60E-07	4.78	0.002
1.60E-07	3.91E-06	7.68E-07	4.83	0.002
1.61E-07	3.93E-06	7.73E-07	4.87	0.002
1.61E-07 1.61E-07	3.94E-06 3.93E-06	7.74E-07 7.73E-07	4.87 4.86	0.002 0.002
1.60E-07	3.91E-06	7.73L-07 7.69E-07	4.84	0.002
1.58E-07	3.86E-06	7.59E-07	4.78	0.002
1.55E-07	3.80E-06	7.47E-07	4.70	0.002
1.52E-07	3.72E-06	7.32E-07	4.61	0.002
1.48E-07	3.62E-06	7.11E-07	4.48	0.002
1.43E-07	3.50E-06	6.89E-07	4.34	0.002
1.38E-07	3.37E-06	6.62E-07	4.17	0.002
1.33E-07	3.25E-06	6.39E-07	4.03	0.002
1.27E-07	3.11E-06	6.11E-07	3.85	0.002
1.21E-07 1.16E-07	2.96E-06 2.83E-06	5.82E-07 5.57E-07	3.66 3.50	0.002 0.002
1.11E-07	2.71E-06	5.32E-07	3.35	0.002
1.05E-07	2.57E-06	5.06E-07	3.18	0.002
1.00E-07	2.44E-06	4.80E-07	3.02	0.001
9.52E-08	2.33E-06	4.57E-07	2.88	0.001
9.10E-08	2.22E-06	4.37E-07	2.75	0.001
8.68E-08	2.12E-06	4.17E-07	2.62	0.001
8.34E-08	2.04E-06	4.01E-07	2.52	0.001
8.05E-08	1.97E-06	3.87E-07	2.43	0.001
7.80E-08	1.91E-06	3.75E-07	2.36	0.001
7.41E-08 7.25E-08	1.81E-06 1.77E-06	3.56E-07 3.48E-07	2.24 2.19	0.001 0.001
7.25E-08 7.15E-08	1.77E-06 1.75E-06	3.43E-07	2.19	0.001
7.07E-08	1.73E-06	3.40E-07	2.14	0.001
7.00E-08	1.71E-06	3.36E-07	2.12	0.001
6.92E-08	1.69E-06	3.32E-07	2.09	0.001
6.87E-08	1.68E-06	3.30E-07	2.08	0.001
6.86E-08	1.68E-06	3.30E-07	2.08	0.001
6.83E-08	1.67E-06	3.28E-07	2.07	0.001

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568585.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568605.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568625.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568645.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568665.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568685.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568705.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568725.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567325.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567365.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567385.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003 0.003
567405.16	4149290.16 4149290.16	0.000 0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567425.16 567485.16	4149290.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.004	0.003 0.004	0.003 0.004	0.003 0.004	0.003
567505.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567525.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567525.16 567545.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.006	0.005
567565.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567585.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567605.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.007	0.007	0.007
567665.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.008	0.008
567685.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567705.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567725.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567745.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567765.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567785.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567805.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567825.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567845.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567865.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567885.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567905.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567925.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567945.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
567985.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568005.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568025.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568045.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568065.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568085.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568105.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568125.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568145.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568165.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568185.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568205.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568225.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568245.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568265.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568285.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568305.16 568325.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568325.16 568345.16	4149290.16 4149290.16	0.000 0.000	0.000	0.000 0.000	0.000	0.000 0.000	0.006 0.006	0.006 0.006	0.006	0.006	0.006 0.006
568345.16 568365.16	4149290.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000	0.005	0.006	0.006 0.005	0.006 0.005	0.005
568405.16 568405.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568405.16 568425.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568445.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568465.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568485.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568505.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568525.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568545.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568565.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568585.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568605.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005

	Cancer Risk =	∑R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
6.82E-08	1.67E-06	3.28E-07	2.06	0.001
6.81E-08	1.66E-06	3.27E-07	2.06	0.001
6.76E-08 6.75E-08	1.65E-06 1.65E-06	3.25E-07 3.24E-07	2.04 2.04	0.001 0.001
6.71E-08	1.64E-06	3.24E-07 3.23E-07	2.04	0.001
6.71E-08	1.64E-06	3.22E-07	2.03	0.001
7.01E-08	1.71E-06	3.37E-07	2.12	0.001
6.64E-08	1.62E-06	3.19E-07	2.01	0.001
2.98E-08	7.29E-07	1.43E-07	0.90	0.000
3.23E-08	7.88E-07	1.55E-07	0.98	0.000
3.49E-08	8.52E-07	1.67E-07	1.05	0.001
3.78E-08	9.24E-07	1.82E-07	1.14	0.001
4.12E-08	1.01E-06	1.98E-07	1.24	0.001
4.48E-08	1.10E-06	2.15E-07	1.36	0.001
5.75E-08 6.26E-08	1.41E-06 1.53E-06	2.76E-07 3.01E-07	1.74 1.89	0.001 0.001
6.83E-08	1.67E-06	3.28E-07	2.07	0.001
7.42E-08	1.81E-06	3.56E-07	2.24	0.001
8.03E-08	1.96E-06	3.86E-07	2.43	0.001
8.67E-08	2.12E-06	4.16E-07	2.62	0.001
9.31E-08	2.27E-06	4.47E-07	2.81	0.001
1.11E-07	2.71E-06	5.33E-07	3.35	0.002
1.16E-07	2.84E-06	5.58E-07	3.51	0.002
1.20E-07	2.94E-06	5.77E-07	3.64	0.002
1.24E-07	3.04E-06	5.98E-07	3.76	0.002
1.28E-07	3.12E-06	6.14E-07	3.86	0.002
1.32E-07 1.37E-07	3.24E-06 3.34E-06	6.36E-07 6.57E-07	4.01 4.14	0.002 0.002
1.40E-07	3.43E-06	6.75E-07	4.14	0.002
1.42E-07	3.48E-06	6.84E-07	4.30	0.002
1.45E-07	3.54E-06	6.95E-07	4.38	0.002
1.46E-07	3.58E-06	7.03E-07	4.43	0.002
1.47E-07	3.60E-06	7.07E-07	4.45	0.002
1.48E-07	3.63E-06	7.13E-07	4.49	0.002
1.49E-07	3.64E-06	7.16E-07	4.51	0.002
1.48E-07	3.63E-06	7.13E-07	4.49	0.002
1.47E-07	3.60E-06	7.08E-07	4.46	0.002
1.46E-07 1.44E-07	3.56E-06 3.51E-06	7.00E-07 6.90E-07	4.41 4.35	0.002 0.002
1.41E-07	3.45E-06	6.78E-07	4.33	0.002
1.37E-07	3.36E-06	6.60E-07	4.15	0.002
1.33E-07	3.26E-06	6.40E-07	4.03	0.002
1.29E-07	3.16E-06	6.21E-07	3.91	0.002
1.25E-07	3.04E-06	5.98E-07	3.77	0.002
1.20E-07	2.92E-06	5.75E-07	3.62	0.002
1.14E-07	2.79E-06	5.49E-07	3.45	0.002
1.09E-07	2.68E-06	5.26E-07	3.31	0.002
1.05E-07	2.56E-06	5.03E-07 4.79E-07	3.17	0.002 0.001
9.97E-08 9.48E-08	2.44E-06 2.32E-06	4.79E-07 4.55E-07	3.01 2.87	0.001
9.02E-08	2.20E-06	4.33E-07	2.73	0.001
8.60E-08	2.10E-06	4.13E-07	2.60	0.001
8.21E-08	2.01E-06	3.94E-07	2.48	0.001
7.86E-08	1.92E-06	3.78E-07	2.38	0.001
8.06E-08	1.97E-06	3.87E-07	2.44	0.001
7.34E-08	1.79E-06	3.53E-07	2.22	0.001
6.88E-08	1.68E-06	3.30E-07	2.08	0.001
6.71E-08	1.64E-06	3.22E-07	2.03	0.001
6.60E-08	1.61E-06	3.17E-07	2.00	0.001
6.52E-08 6.42E-08	1.59E-06 1.57E-06	3.13E-07 3.08E-07	1.97 1.94	0.001 0.001
6.42E-08 6.34E-08	1.57E-06 1.55E-06	3.08E-07 3.04E-07	1.94	0.001
6.29E-08	1.54E-06	3.02E-07	1.90	0.001
6.28E-08	1.53E-06	3.01E-07	1.90	0.001
6.24E-08	1.53E-06	3.00E-07	1.89	0.001
6.23E-08	1.52E-06	2.99E-07	1.88	0.001
6.23E-08	1.52E-06	2.99E-07	1.88	0.001

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568625.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568645.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568665.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568685.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568725.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567325.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16 567365.16	4149310.16 4149310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003
567385.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567405.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567465.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567485.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567505.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567525.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567545.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567565.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567585.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567625.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567645.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567685.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567705.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567725.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567745.16 567765.16	4149310.16 4149310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.009 0.009	0.009 0.009	0.009 0.009	0.009 0.009	0.009 0.009
567785.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567805.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.009	0.010	0.010	0.010	0.010
567825.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567845.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567865.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567885.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567905.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567925.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567945.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567985.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568005.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568025.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568045.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568065.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568085.16 568105.16	4149310.16 4149310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.009 0.009	0.009 0.009	0.009 0.009	0.009 0.009	0.009 0.009
568125.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568145.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.008	0.003	0.008
568165.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568185.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568205.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568225.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568245.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568265.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568285.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568305.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568325.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568345.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568365.16 568405.16	4149310.16 4149310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005
568425.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568445.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568465.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568505.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568525.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568545.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568565.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568585.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568605.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568625.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568645.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568665.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
6.19E-08	1.51E-06	2.97E-07	1.87	0.001
6.18E-08	1.51E-06	2.97E-07	1.87	0.001
6.16E-08	1.51E-06	2.96E-07	1.86	0.001
6.16E-08	1.51E-06	2.96E-07	1.86	0.001
6.12E-08	1.50E-06	2.94E-07	1.85	0.001
3.09E-08	7.54E-07	1.48E-07	0.93	0.000
3.33E-08	8.13E-07	1.60E-07	1.01	0.000
3.60E-08	8.79E-07	1.73E-07	1.09	0.001
3.89E-08	9.50E-07	1.87E-07 2.03E-07	1.18 1.28	0.001
4.24E-08 5.41E-08	1.04E-06 1.32E-06	2.60E-07	1.28	0.001 0.001
5.87E-08	1.43E-06	2.82E-07	1.78	0.001
6.36E-08	1.55E-06	3.05E-07	1.92	0.001
6.90E-08	1.69E-06	3.32E-07	2.09	0.001
7.43E-08	1.82E-06	3.57E-07	2.25	0.001
7.99E-08	1.95E-06	3.84E-07	2.42	0.001
8.58E-08	2.10E-06	4.12E-07	2.59	0.001
9.70E-08	2.37E-06	4.66E-07	2.93	0.001
1.02E-07	2.49E-06	4.89E-07	3.08	0.002
1.11E-07	2.71E-06 2.80E-06	5.33E-07	3.35	0.002
1.14E-07 1.17E-07	2.80E-06 2.86E-06	5.50E-07 5.63E-07	3.46 3.54	0.002 0.002
1.20E-07	2.94E-06	5.77E-07	3.64	0.002
1.23E-07	3.00E-06	5.89E-07	3.71	0.002
1.27E-07	3.09E-06	6.08E-07	3.83	0.002
1.30E-07	3.19E-06	6.27E-07	3.94	0.002
1.32E-07	3.23E-06	6.35E-07	4.00	0.002
1.33E-07	3.26E-06	6.41E-07	4.04	0.002
1.35E-07	3.29E-06	6.47E-07	4.08	0.002
1.37E-07	3.34E-06	6.56E-07	4.13	0.002
1.36E-07 1.38E-07	3.33E-06 3.37E-06	6.54E-07 6.63E-07	4.12 4.17	0.002 0.002
1.38E-07	3.36E-06	6.61E-07	4.17	0.002
1.36E-07	3.33E-06	6.54E-07	4.12	0.002
1.35E-07	3.29E-06	6.47E-07	4.07	0.002
1.33E-07	3.25E-06	6.40E-07	4.03	0.002
1.31E-07	3.20E-06	6.30E-07	3.96	0.002
1.28E-07	3.13E-06	6.15E-07	3.87	0.002
1.24E-07	3.04E-06	5.98E-07	3.76	0.002
1.21E-07	2.96E-06	5.81E-07	3.66	0.002
1.17E-07	2.86E-06	5.62E-07	3.54	0.002
1.13E-07 1.08E-07	2.75E-06 2.64E-06	5.41E-07 5.19E-07	3.41 3.27	0.002 0.002
1.04E-07	2.53E-06	4.98E-07	3.13	0.002
9.91E-08	2.42E-06	4.76E-07	3.00	0.001
9.45E-08	2.31E-06	4.54E-07	2.86	0.001
9.00E-08	2.20E-06	4.32E-07	2.72	0.001
8.60E-08	2.10E-06	4.13E-07	2.60	0.001
8.17E-08	2.00E-06	3.92E-07	2.47	0.001
7.79E-08	1.90E-06	3.74E-07	2.36	0.001
7.43E-08 7.15E-08	1.82E-06 1.75E-06	3.57E-07 3.43E-07	2.25 2.16	0.001 0.001
6.88E-08	1.73E-06 1.68E-06	3.43E-07 3.30E-07	2.10	0.001
6.43E-08	1.57E-06	3.09E-07	1.94	0.001
6.26E-08	1.53E-06	3.01E-07	1.89	0.001
6.14E-08	1.50E-06	2.95E-07	1.86	0.001
6.04E-08	1.48E-06	2.90E-07	1.83	0.001
5.94E-08	1.45E-06	2.85E-07	1.80	0.001
5.86E-08	1.43E-06	2.81E-07	1.77	0.001
5.81E-08	1.42E-06	2.79E-07	1.76	0.001
5.78E-08	1.41E-06	2.78E-07	1.75	0.001
5.74E-08 5.71E-08	1.40E-06 1.40E-06	2.75E-07 2.74E-07	1.73 1.73	0.001 0.001
5.71E-08 5.70E-08	1.40E-06 1.39E-06	2.74E-07 2.74E-07	1.73	0.001
5.68E-08	1.39E-06	2.73E-07	1.72	0.001
5.68E-08	1.39E-06	2.73E-07	1.72	0.001
5.66E-08	1.38E-06	2.72E-07	1.71	0.001

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568685.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568705.16 567345.16	4149310.16 4149330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.003	0.004 0.003	0.004 0.003	0.004 0.003	0.004 0.003
567365.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567385.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567445.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567465.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567485.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567505.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567525.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567545.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567605.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567625.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567645.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567665.16 567705.16	4149330.16 4149330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008
567725.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567745.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567765.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567785.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567805.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567825.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567845.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567865.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567885.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567905.16 567925.16	4149330.16	0.000	0.000	0.000 0.000	0.000	0.000	0.009	0.009	0.009 0.009	0.009 0.009	0.009 0.009
567925.16 567945.16	4149330.16 4149330.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.009 0.009	0.009 0.010	0.009	0.009	0.010
567985.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568005.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568025.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568045.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568065.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568085.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568105.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568125.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568145.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568165.16 568185.16	4149330.16 4149330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.008 0.007	0.008 0.007	0.008 0.007	0.008 0.007	0.008 0.007
568205.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568225.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568245.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568265.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568285.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568305.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.005	0.006	0.005	0.005	0.005
568325.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568345.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568365.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568405.16	4149330.16 4149330.16	0.000 0.000	0.000	0.000	0.000	0.000 0.000	0.004 0.004	0.005 0.004	0.005	0.005	0.005
568425.16 568445.16	4149330.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.004	0.004	0.004 0.004	0.004 0.004	0.004 0.004
568465.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568505.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568525.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568545.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568565.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568585.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568605.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568625.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568645.16 568665.16	4149330.16 4149330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568685.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568705.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568725.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567365.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567425.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004

	Cancer Risk = 2	FR1*C <sub>DPM</sub>		НІ
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
5.66E-08	1.38E-06	2.72E-07	1.71	0.001
5.94E-08	1.45E-06	2.85E-07	1.80	0.001
3.44E-08	8.42E-07	1.65E-07	1.04	0.001
3.71E-08	9.06E-07	1.78E-07	1.12	0.001
4.03E-08	9.85E-07	1.94E-07	1.22	0.001
5.09E-08	1.25E-06	2.45E-07	1.54	0.001
5.52E-08	1.35E-06	2.65E-07	1.67	0.001
5.96E-08	1.46E-06	2.86E-07	1.80	0.001
6.44E-08 6.95E-08	1.57E-06	3.09E-07	1.95 2.10	0.001
7.44E-08	1.70E-06 1.82E-06	3.34E-07 3.57E-07	2.10	0.001 0.001
8.93E-08	2.18E-06	4.29E-07	2.70	0.001
9.39E-08	2.30E-06	4.51E-07	2.84	0.001
9.82E-08	2.40E-06	4.72E-07	2.97	0.001
1.02E-07	2.50E-06	4.92E-07	3.10	0.002
1.09E-07	2.66E-06	5.23E-07	3.29	0.002
1.12E-07	2.73E-06	5.36E-07	3.37	0.002
1.14E-07	2.78E-06	5.47E-07	3.44	0.002
1.17E-07	2.85E-06	5.60E-07	3.53	0.002
1.19E-07	2.91E-06 2.96E-06	5.73E-07	3.61	0.002
1.21E-07 1.23E-07	3.01E-06	5.83E-07 5.91E-07	3.67 3.72	0.002 0.002
1.23E-07 1.24E-07	3.04E-06	5.97E-07	3.76	0.002
1.24E-07	3.04E-06	5.97E-07	3.76	0.002
1.25E-07	3.05E-06	5.99E-07	3.77	0.002
1.25E-07	3.07E-06	6.03E-07	3.79	0.002
1.27E-07	3.09E-06	6.08E-07	3.83	0.002
1.28E-07	3.12E-06	6.13E-07	3.86	0.002
1.27E-07	3.09E-06	6.08E-07	3.83	0.002
1.26E-07	3.07E-06	6.03E-07	3.80	0.002
1.24E-07 1.22E-07	3.03E-06 2.99E-06	5.96E-07 5.87E-07	3.75 3.70	0.002 0.002
1.22E-07 1.20E-07	2.93E-06	5.77E-07	3.63	0.002
1.17E-07	2.86E-06	5.62E-07	3.54	0.002
1.14E-07	2.78E-06	5.47E-07	3.44	0.002
1.10E-07	2.69E-06	5.29E-07	3.33	0.002
1.06E-07	2.60E-06	5.10E-07	3.21	0.002
1.02E-07	2.50E-06	4.92E-07	3.10	0.002
9.82E-08	2.40E-06	4.72E-07	2.97	0.001
9.40E-08	2.30E-06	4.52E-07	2.84	0.001
8.99E-08	2.20E-06	4.32E-07	2.72	0.001 0.001
8.57E-08 8.51E-08	2.10E-06 2.08E-06	4.12E-07 4.09E-07	2.59 2.57	0.001
7.75E-08	1.89E-06	3.72E-07	2.34	0.001
7.39E-08	1.81E-06	3.55E-07	2.23	0.001
7.05E-08	1.72E-06	3.39E-07	2.13	0.001
6.76E-08	1.65E-06	3.25E-07	2.04	0.001
6.50E-08	1.59E-06	3.12E-07	1.97	0.001
6.05E-08	1.48E-06	2.91E-07	1.83	0.001
5.88E-08	1.44E-06	2.82E-07	1.78	0.001
5.75E-08	1.41E-06 1.38E-06	2.76E-07	1.74	0.001
5.64E-08 5.54E-08	1.35E-06	2.71E-07 2.66E-07	1.71 1.67	0.001 0.001
5.44E-08	1.33E-06	2.61E-07	1.65	0.001
5.39E-08	1.32E-06	2.59E-07	1.63	0.001
5.34E-08	1.31E-06	2.57E-07	1.62	0.001
5.28E-08	1.29E-06	2.54E-07	1.60	0.001
5.26E-08	1.29E-06	2.53E-07	1.59	0.001
5.25E-08	1.28E-06	2.52E-07	1.59	0.001
5.23E-08	1.28E-06	2.51E-07	1.58	0.001
5.21E-08	1.27E-06	2.50E-07	1.58	0.001
5.51E-08 5.50E-08	1.35E-06 1.34E-06	2.65E-07 2.64E-07	1.67 1.66	0.001 0.001
5.50E-08 5.48E-08	1.34E-06 1.34E-06	2.64E-07 2.63E-07	1.66	0.001
5.47E-08	1.34E-06	2.63E-07	1.65	0.001
3.83E-08	9.35E-07	1.84E-07	1.16	0.001
4.81E-08	1.18E-06	2.31E-07	1.45	0.001

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567445.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567465.16 567485.16	4149350.16 4149350.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
567505.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567525.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567565.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567585.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567605.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567625.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567645.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567665.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567685.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567725.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567745.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567765.16 567785.16	4149350.16 4149350.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008	0.008 0.008
567805.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567825.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567845.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567865.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567885.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567905.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567925.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567945.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567985.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568005.16 568025.16	4149350.16	0.000	0.000	0.000 0.000	0.000	0.000	0.009	0.009	0.009 0.009	0.009 0.009	0.009 0.009
568045.16 568045.16	4149350.16 4149350.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.009 0.008	0.009 0.008	0.009	0.009	0.009
568065.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568085.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568105.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568125.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568145.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568165.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568185.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568205.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568225.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568245.16 568265.16	4149350.16 4149350.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006
568285.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568305.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568325.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568345.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568365.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568405.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568465.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16 568505.16	4149350.16 4149350.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568525.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568545.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568565.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568585.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568605.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568625.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568645.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568665.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568685.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568705.16 568725.16	4149350.16 4149350.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
567325.16 567325.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567405.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567425.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567445.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567465.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567485.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005

	Cancer Risk =	∑R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
5.19E-08	1.27E-06	2.49E-07	1.57	0.001
5.60E-08	1.37E-06	2.69E-07	1.69	0.001
5.99E-08	1.47E-06	2.88E-07	1.81	0.001
6.48E-08	1.58E-06	3.11E-07	1.96	0.001
6.95E-08	1.70E-06	3.34E-07	2.10	0.001
7.85E-08	1.92E-06	3.77E-07	2.37	0.001
8.28E-08	2.02E-06	3.98E-07	2.50	0.001
8.71E-08	2.13E-06	4.18E-07	2.63	0.001
9.06E-08	2.22E-06	4.35E-07	2.74	0.001
9.54E-08	2.33E-06	4.58E-07	2.89	0.001
9.89E-08	2.42E-06	4.75E-07	2.99	0.001
1.01E-07	2.46E-06	4.83E-07	3.04	0.002
1.05E-07	2.58E-06	5.07E-07	3.19	0.002
1.07E-07 1.10E-07	2.63E-06 2.68E-06	5.16E-07 5.27E-07	3.25 3.32	0.002 0.002
1.10E-07 1.12E-07	2.73E-06	5.27E-07 5.37E-07	3.38	0.002
1.12E-07 1.13E-07	2.77E-06	5.44E-07	3.42	0.002
1.15E-07	2.81E-06	5.52E-07	3.47	0.002
1.16E-07	2.84E-06	5.58E-07	3.51	0.002
1.17E-07	2.85E-06	5.61E-07	3.53	0.002
1.17E-07	2.85E-06	5.61E-07	3.53	0.002
1.17E-07	2.85E-06	5.61E-07	3.53	0.002
1.19E-07	2.90E-06	5.71E-07	3.59	0.002
1.19E-07	2.90E-06	5.70E-07	3.59	0.002
1.18E-07	2.87E-06	5.65E-07	3.55	0.002
1.17E-07	2.85E-06	5.60E-07	3.52	0.002
1.15E-07	2.82E-06	5.53E-07	3.48	0.002
1.14E-07	2.78E-06	5.47E-07	3.44	0.002
1.12E-07	2.73E-06	5.37E-07	3.38	0.002
1.09E-07	2.68E-06	5.26E-07	3.31	0.002
1.07E-07	2.61E-06	5.13E-07	3.23	0.002
1.04E-07	2.53E-06	4.98E-07	3.14	0.002
1.01E-07	2.46E-06	4.83E-07	3.04	0.001
9.70E-08	2.37E-06	4.66E-07	2.93	0.001
9.33E-08	2.28E-06	4.48E-07	2.82	0.001
8.95E-08 8.57E-08	2.19E-06 2.09E-06	4.30E-07 4.11E-07	2.71 2.59	0.001 0.001
8.18E-08	2.00E-06	3.93E-07	2.47	0.001
7.80E-08	1.91E-06	3.75E-07	2.36	0.001
7.43E-08	1.81E-06	3.57E-07	2.25	0.001
7.07E-08	1.73E-06	3.40E-07	2.14	0.001
6.74E-08	1.65E-06	3.24E-07	2.04	0.001
6.46E-08	1.58E-06	3.10E-07	1.95	0.001
6.21E-08	1.52E-06	2.98E-07	1.88	0.001
5.75E-08	1.41E-06	2.76E-07	1.74	0.001
5.58E-08	1.36E-06	2.68E-07	1.69	0.001
5.43E-08	1.33E-06	2.61E-07	1.64	0.001
5.62E-08	1.37E-06	2.70E-07	1.70	0.001
5.51E-08	1.35E-06	2.64E-07	1.66	0.001
5.08E-08	1.24E-06	2.44E-07	1.54	0.001
5.01E-08	1.22E-06	2.41E-07	1.52	0.001
4.96E-08	1.21E-06	2.38E-07	1.50	0.001
4.91E-08	1.20E-06	2.36E-07	1.49	0.001
4.89E-08 5.15E-08	1.19E-06 1.26E-06	2.35E-07 2.47E-07	1.48 1.56	0.001 0.001
5.15E-08	1.26E-06 1.26E-06	2.47E-07 2.47E-07	1.56	0.001
5.13E-08	1.25E-06	2.47E-07 2.47E-07	1.55	0.001
5.11E-08	1.25E-06	2.47E-07 2.46E-07	1.55	0.001
5.08E-08	1.24E-06	2.44E-07	1.54	0.001
4.76E-08	1.16E-06	2.29E-07	1.44	0.001
4.77E-08	1.17E-06	2.29E-07	1.44	0.001
3.38E-08	8.25E-07	1.62E-07	1.02	0.001
4.54E-08	1.11E-06	2.18E-07	1.37	0.001
4.89E-08	1.20E-06	2.35E-07	1.48	0.001
5.25E-08	1.28E-06	2.52E-07	1.59	0.001
5.67E-08	1.38E-06	2.72E-07	1.71	0.001
6.07E-08	1.48E-06	2.92E-07	1.84	0.001

		Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10	
567505.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567545.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567565.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567585.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567605.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567625.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567645.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567665.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567685.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567705.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567745.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567765.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567785.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567805.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567825.16 567845.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008 0.008	
	4149370.16 4149370.16	0.000 0.000	0.000	0.000	0.000	0.000	0.008	0.008 0.008	0.008	0.008		
567865.16 567885.16	4149370.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.008 0.008	0.008	0.008 0.008	0.008 0.008	0.008 0.008	
567885.16 567905.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567905.16 567925.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567925.16 567945.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567985.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
568005.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
568025.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
568045.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
568065.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
568085.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
568105.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568125.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568145.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568165.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568185.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568205.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568225.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568245.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568265.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568285.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568305.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568325.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568345.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568365.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568405.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568425.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568445.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568465.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568485.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568505.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568525.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568545.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568565.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568585.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568605.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568625.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568645.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568665.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568685.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568705.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568725.16 567325.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567325.16 567405.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567405.16 567425.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567425.16 567445.16	4149390.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000	0.004	0.004	0.004 0.004	0.004	0.004 0.004	
567445.16 567465.16	4149390.16 4149390.16	0.000		0.000	0.000	0.000	0.004	0.004		0.004		
567465.16 567485.16		0.000	0.000	0.000		0.000	0.004	0.004	0.004	0.004	0.004	
567485.16 567525.16	4149390.16 4149390.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005	
567545.16 567545.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567545.16 567565.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
307303.10	7173330.10	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

	Cancer Risk =	∑R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
6.50E-08	1.59E-06	3.12E-07	1.97	0.001
7.29E-08	1.78E-06 1.88E-06	3.50E-07 3.70E-07	2.20	0.001
7.70E-08 8.08E-08	1.98E-06	3.70E-07 3.88E-07	2.33 2.44	0.001 0.001
8.40E-08	2.05E-06	4.04E-07	2.54	0.001
8.75E-08	2.14E-06	4.20E-07	2.65	0.001
9.10E-08	2.22E-06	4.37E-07	2.75	0.001
9.39E-08	2.29E-06	4.51E-07	2.84	0.001
9.53E-08	2.33E-06	4.58E-07	2.88	0.001
9.76E-08	2.39E-06	4.69E-07	2.95	0.001
1.01E-07	2.47E-06	4.85E-07	3.06	0.002
1.03E-07	2.52E-06	4.94E-07	3.11	0.002
1.04E-07	2.55E-06	5.01E-07	3.15	0.002
1.06E-07	2.59E-06	5.09E-07	3.20	0.002
1.08E-07 1.09E-07	2.63E-06 2.65E-06	5.17E-07 5.22E-07	3.25 3.29	0.002 0.002
1.10E-07	2.68E-06	5.27E-07	3.32	0.002
1.10E-07	2.70E-06	5.30E-07	3.34	0.002
1.11E-07	2.71E-06	5.33E-07	3.35	0.002
1.11E-07	2.71E-06	5.33E-07	3.36	0.002
1.11E-07	2.71E-06	5.32E-07	3.35	0.002
1.09E-07	2.67E-06	5.25E-07	3.30	0.002
1.09E-07	2.65E-06	5.21E-07	3.28	0.002
1.08E-07	2.63E-06	5.17E-07	3.25	0.002
1.06E-07	2.60E-06	5.11E-07	3.21	0.002
1.04E-07	2.54E-06	4.99E-07	3.14	0.002
1.02E-07 1.00E-07	2.49E-06 2.45E-06	4.90E-07 4.81E-07	3.08 3.03	0.002 0.001
9.78E-08	2.43E-06	4.70E-07	2.96	0.001
9.48E-08	2.32E-06	4.55E-07	2.87	0.001
9.17E-08	2.24E-06	4.41E-07	2.77	0.001
8.85E-08	2.16E-06	4.25E-07	2.68	0.001
8.53E-08	2.08E-06	4.10E-07	2.58	0.001
8.17E-08	2.00E-06	3.92E-07	2.47	0.001
7.77E-08	1.90E-06	3.73E-07	2.35	0.001
7.44E-08	1.82E-06	3.57E-07	2.25	0.001
7.12E-08	1.74E-06	3.42E-07	2.15	0.001
6.78E-08 6.47E-08	1.66E-06 1.58E-06	3.26E-07 3.11E-07	2.05 1.96	0.001 0.001
6.19E-08	1.51E-06	2.97E-07	1.87	0.001
5.94E-08	1.45E-06	2.85E-07	1.80	0.001
5.49E-08	1.34E-06	2.64E-07	1.66	0.001
5.31E-08	1.30E-06	2.55E-07	1.60	0.001
5.44E-08	1.33E-06	2.61E-07	1.64	0.001
5.30E-08	1.29E-06	2.54E-07	1.60	0.001
5.18E-08	1.27E-06	2.49E-07	1.57	0.001
4.76E-08	1.16E-06	2.29E-07	1.44	0.001
4.68E-08 4.62E-08	1.14E-06	2.25E-07	1.42 1.40	0.001
4.62E-08 4.58E-08	1.13E-06 1.12E-06	2.22E-07 2.20E-07	1.40	0.001 0.001
4.53E-08	1.11E-06	2.20L-07 2.18E-07	1.37	0.001
4.50E-08	1.10E-06	2.16E-07	1.36	0.001
4.78E-08	1.17E-06	2.29E-07	1.44	0.001
4.74E-08	1.16E-06	2.28E-07	1.43	0.001
4.46E-08	1.09E-06	2.14E-07	1.35	0.001
4.38E-08	1.07E-06	2.10E-07	1.32	0.001
4.39E-08	1.07E-06	2.11E-07	1.33	0.001
4.41E-08	1.08E-06	2.12E-07	1.33	0.001
3.48E-08	8.52E-07	1.67E-07	1.05	0.001
4.63E-08	1.13E-06	2.22E-07	1.40	0.001
4.94E-08 5.31E-08	1.21E-06 1.30E-06	2.38E-07 2.55E-07	1.50 1.60	0.001 0.001
5.70E-08	1.39E-06	2.74E-07	1.72	0.001
6.07E-08	1.48E-06	2.92E-07	1.84	0.001
6.82E-08	1.67E-06	3.28E-07	2.06	0.001
7.17E-08	1.75E-06	3.45E-07	2.17	0.001
7.54E-08	1.84E-06	3.62E-07	2.28	0.001

		Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	
567585.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567605.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567625.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567645.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567665.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567685.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567705.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567725.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567765.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567785.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567805.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567825.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567845.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567865.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567885.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567905.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567925.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567945.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
567985.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
568005.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008	
568025.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.008	0.008	0.008	0.008	
568045.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568065.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568085.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568105.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568125.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568145.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568165.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568185.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568205.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568225.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568245.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568265.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568285.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568305.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568325.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568345.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568365.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568385.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568405.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568425.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568445.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568465.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568485.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568505.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568525.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568545.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568565.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568585.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568605.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568625.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568645.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568665.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568685.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568705.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568725.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567365.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567425.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567445.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567465.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567505.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567525.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567545.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567565.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567585.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567605.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567625.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	

	Cancer Risk = ∑	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
7.83E-08	1.91E-06	3.76E-07	2.37	0.001
8.12E-08	1.99E-06 2.06E-06	3.90E-07	2.46	0.001
8.42E-08 8.66E-08	2.00E-06 2.12E-06	4.04E-07 4.16E-07	2.55 2.62	0.001 0.001
8.86E-08	2.12E-06 2.16E-06	4.10L-07 4.25E-07	2.68	0.001
9.08E-08	2.22E-06	4.36E-07	2.74	0.001
9.24E-08	2.26E-06	4.44E-07	2.80	0.001
9.41E-08	2.30E-06	4.52E-07	2.85	0.001
9.68E-08	2.36E-06	4.65E-07	2.93	0.001
9.82E-08	2.40E-06	4.72E-07	2.97	0.001
9.94E-08	2.43E-06	4.78E-07	3.01	0.001
1.01E-07	2.46E-06	4.84E-07	3.05	0.002
1.02E-07	2.49E-06	4.89E-07	3.08	0.002
1.03E-07	2.51E-06	4.93E-07	3.11	0.002
1.03E-07 1.04E-07	2.53E-06 2.54E-06	4.97E-07 4.98E-07	3.13 3.14	0.002 0.002
1.04E-07	2.54E-06 2.54E-06	4.98E-07 4.99E-07	3.14	0.002
1.04E-07	2.53E-06	4.98E-07	3.13	0.002
1.02E-07	2.50E-06	4.91E-07	3.09	0.002
1.01E-07	2.48E-06	4.87E-07	3.07	0.002
1.01E-07	2.46E-06	4.84E-07	3.05	0.002
9.94E-08	2.43E-06	4.78E-07	3.01	0.001
9.76E-08	2.39E-06	4.69E-07	2.95	0.001
9.59E-08	2.34E-06	4.61E-07	2.90	0.001
9.43E-08	2.30E-06	4.53E-07	2.85	0.001
9.24E-08	2.26E-06	4.44E-07	2.80	0.001
8.98E-08	2.19E-06	4.31E-07	2.72	0.001
8.71E-08 8.42E-08	2.13E-06 2.06E-06	4.18E-07 4.04E-07	2.63 2.55	0.001 0.001
8.13E-08	1.99E-06	3.90E-07	2.33	0.001
7.80E-08	1.91E-06	3.75E-07	2.36	0.001
7.40E-08	1.81E-06	3.55E-07	2.24	0.001
7.10E-08	1.74E-06	3.41E-07	2.15	0.001
6.80E-08	1.66E-06	3.26E-07	2.06	0.001
6.50E-08	1.59E-06	3.12E-07	1.96	0.001
6.53E-08	1.60E-06	3.14E-07	1.97	0.001
5.93E-08	1.45E-06	2.85E-07	1.79	0.001
5.67E-08	1.39E-06	2.72E-07	1.71	0.001
5.45E-08	1.33E-06	2.62E-07	1.65	0.001
5.24E-08	1.28E-06	2.52E-07	1.59	0.001
5.06E-08 4.90E-08	1.24E-06 1.20E-06	2.43E-07 2.35E-07	1.53 1.48	0.001 0.001
4.75E-08	1.16E-06	2.28E-07	1.44	0.001
4.62E-08	1.13E-06	2.22E-07	1.40	0.001
4.51E-08	1.10E-06	2.17E-07	1.36	0.001
4.43E-08	1.08E-06	2.13E-07	1.34	0.001
4.35E-08	1.06E-06	2.09E-07	1.32	0.001
4.28E-08	1.05E-06	2.06E-07	1.30	0.001
4.23E-08	1.03E-06	2.03E-07	1.28	0.001
4.20E-08	1.03E-06	2.02E-07	1.27	0.001
4.44E-08	1.08E-06	2.13E-07	1.34	0.001
4.13E-08	1.01E-06 1.00E-06	1.98E-07	1.25 1.24	0.001 0.001
4.11E-08 4.13E-08	1.00E-06 1.01E-06	1.97E-07 1.98E-07	1.24	0.001
4.13E-08 4.08E-08	9.97E-07	1.96E-07	1.23	0.001
4.08E-08	9.96E-07	1.96E-07	1.23	0.001
4.08E-08	9.98E-07	1.96E-07	1.24	0.001
5.01E-08	1.23E-06	2.41E-07	1.52	0.001
5.36E-08	1.31E-06	2.57E-07	1.62	0.001
5.70E-08	1.39E-06	2.74E-07	1.72	0.001
6.38E-08	1.56E-06	3.07E-07	1.93	0.001
6.70E-08	1.64E-06	3.22E-07	2.03	0.001
7.04E-08	1.72E-06	3.38E-07	2.13	0.001
7.31E-08	1.79E-06	3.51E-07	2.21	0.001
7.59E-08	1.86E-06	3.65E-07	2.30	0.001
7.83E-08 8.06E-08	1.91E-06 1.97E-06	3.76E-07	2.37	0.001
O.UUE-UÖ	1.97E-06	3.87E-07	2.44	0.001

	V (1.175.4)	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	
567645.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567665.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567685.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567705.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567725.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567745.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567785.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567805.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567825.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567845.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567865.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567885.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567905.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567925.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567945.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567985.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568005.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568025.16 568045.16	4149410.16 4149410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.007 0.007	0.007 0.007	0.007 0.007	0.007 0.007	0.007 0.007	
568065.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568085.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568105.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568125.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568145.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568165.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568185.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568205.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568225.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568245.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568265.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568285.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568305.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568325.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568345.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568365.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568385.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568405.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568425.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568445.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568465.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568485.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568505.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568525.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568545.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568565.16 568585.16	4149410.16	0.000	0.000	0.000 0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003 0.003	
568605.16	4149410.16 4149410.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003	
568625.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568645.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568665.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568685.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568705.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568725.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567345.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567365.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567385.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567405.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567425.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567465.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567485.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567505.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567525.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567545.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567565.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567585.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567605.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567625.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	

	Cancer Risk = ∑	R1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
8.27E-08	2.02E-06	3.97E-07	2.50	0.001
8.45E-08 8.59E-08	2.06E-06 2.10E-06	4.06E-07 4.13E-07	2.55	0.001
8.75E-08	2.10E-06 2.14E-06	4.13E-07 4.20E-07	2.60 2.65	0.001 0.001
8.89E-08	2.14E-06 2.17E-06	4.20E-07 4.27E-07	2.69	0.001
9.02E-08	2.20E-06	4.33E-07	2.73	0.001
9.25E-08	2.26E-06	4.44E-07	2.80	0.001
9.39E-08	2.30E-06	4.51E-07	2.84	0.001
9.48E-08	2.32E-06	4.55E-07	2.87	0.001
9.58E-08	2.34E-06	4.60E-07	2.90	0.001
9.67E-08	2.36E-06	4.64E-07	2.92	0.001
9.72E-08	2.37E-06	4.67E-07	2.94	0.001
9.74E-08	2.38E-06	4.68E-07	2.95	0.001
9.76E-08 9.72E-08	2.38E-06 2.38E-06	4.69E-07 4.67E-07	2.95 2.94	0.001 0.001
9.72E-08 9.62E-08	2.35E-06	4.67E-07 4.62E-07	2.94	0.001
9.54E-08	2.33E-06	4.52E-07 4.58E-07	2.89	0.001
9.46E-08	2.31E-06	4.55E-07	2.86	0.001
9.35E-08	2.28E-06	4.49E-07	2.83	0.001
9.19E-08	2.25E-06	4.41E-07	2.78	0.001
9.04E-08	2.21E-06	4.34E-07	2.73	0.001
8.88E-08	2.17E-06	4.27E-07	2.69	0.001
8.74E-08	2.14E-06	4.20E-07	2.64	0.001
8.51E-08	2.08E-06	4.09E-07	2.57	0.001
8.27E-08	2.02E-06	3.97E-07	2.50	0.001
8.02E-08	1.96E-06	3.85E-07	2.43	0.001
7.76E-08 7.47E-08	1.90E-06 1.82E-06	3.73E-07 3.59E-07	2.35 2.26	0.001 0.001
7.47E-08 7.14E-08	1.74E-06	3.43E-07	2.26	0.001
6.82E-08	1.67E-06	3.28E-07	2.06	0.001
6.51E-08	1.59E-06	3.13E-07	1.97	0.001
6.22E-08	1.52E-06	2.99E-07	1.88	0.001
6.27E-08	1.53E-06	3.01E-07	1.90	0.001
5.69E-08	1.39E-06	2.73E-07	1.72	0.001
5.43E-08	1.33E-06	2.61E-07	1.64	0.001
5.20E-08	1.27E-06	2.50E-07	1.57	0.001
5.02E-08	1.23E-06	2.41E-07	1.52	0.001
4.84E-08	1.18E-06 1.14E-06	2.32E-07 2.24E-07	1.46	0.001
4.67E-08 4.52E-08	1.14E-06 1.10E-06	2.24E-07 2.17E-07	1.41 1.37	0.001 0.001
4.32E-08 4.39E-08	1.07E-06	2.17E-07 2.11E-07	1.33	0.001
4.28E-08	1.05E-06	2.06E-07	1.29	0.001
4.17E-08	1.02E-06	2.00E-07	1.26	0.001
4.10E-08	1.00E-06	1.97E-07	1.24	0.001
4.04E-08	9.86E-07	1.94E-07	1.22	0.001
3.98E-08	9.73E-07	1.91E-07	1.20	0.001
3.94E-08	9.62E-07	1.89E-07	1.19	0.001
3.89E-08	9.50E-07	1.87E-07	1.18	0.001
3.79E-08	9.26E-07	1.82E-07	1.15	0.001
3.79E-08 3.81E-08	9.25E-07	1.82E-07	1.14	0.001
3.81E-08 3.81E-08	9.32E-07 9.30E-07	1.83E-07 1.83E-07	1.15 1.15	0.001 0.001
3.80E-08	9.28E-07	1.83E-07 1.82E-07	1.15	0.001
3.87E-08	9.45E-07	1.86E-07	1.17	0.001
4.14E-08	1.01E-06	1.99E-07	1.25	0.001
4.44E-08	1.09E-06	2.13E-07	1.34	0.001
4.75E-08	1.16E-06	2.28E-07	1.44	0.001
5.04E-08	1.23E-06	2.42E-07	1.52	0.001
5.70E-08	1.39E-06	2.74E-07	1.72	0.001
6.02E-08	1.47E-06	2.89E-07	1.82	0.001
6.31E-08	1.54E-06	3.03E-07	1.91	0.001
6.60E-08	1.61E-06	3.17E-07	1.99	0.001 0.001
6.84E-08 7.11E-08	1.67E-06 1.74E-06	3.29E-07 3.42E-07	2.07 2.15	0.001
7.11E-08 7.32E-08	1.74E-06 1.79E-06	3.42E-07 3.52E-07	2.13	0.001
7.51E-08	1.84E-06	3.61E-07	2.27	0.001
7.73E-08	1.89E-06	3.71E-07	2.34	0.001

	V (1.175.4)	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	
567645.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567665.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567685.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567705.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567725.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567745.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567765.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
567825.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567845.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567865.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567885.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567905.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567925.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567945.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
567985.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568005.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568025.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568045.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568065.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	
568085.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568105.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568125.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568145.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568165.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568185.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568205.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	
568225.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568245.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568265.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568285.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
568305.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568325.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568345.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568365.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568385.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568405.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
568425.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568445.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568465.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568485.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568505.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568525.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568545.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568565.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568585.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568605.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568625.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568645.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568665.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568685.16 568705.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
568705.16 568725.16	4149430.16	0.000	0.000	0.000 0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003 0.003	
	4149430.16	0.000	0.000		0.000	0.000	0.003	0.003	0.003	0.003		
567325.16 567345.16	4149450.16 4149450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	
567365.16								0.003			0.003	
	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003		0.003	0.003		
567385.16 567405.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	
567405.16 567445.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004 0.004	
567445.16 567465.16	4149450.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004	
	4149450.16 4149450.16											
567485.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	
567505.16 567525.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567525.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567545.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567565.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567585.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567605.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
567625.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006	

2.17: .	Cancer Risk = 2		T	HI						
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL unitless						
				unitiess						
7.91E-08	1.93E-06	3.80E-07	2.39	0.001						
8.05E-08	1.97E-06	3.87E-07	2.43	0.001						
8.17E-08	2.00E-06	3.92E-07	2.47	0.001						
8.30E-08	2.03E-06	3.98E-07	2.51	0.001						
8.40E-08	2.05E-06	4.04E-07	2.54	0.001						
8.51E-08	2.08E-06	4.09E-07	2.57	0.001						
8.62E-08	2.11E-06	4.14E-07	2.61	0.001						
8.96E-08	2.19E-06	4.31E-07	2.71	0.001						
9.05E-08	2.21E-06	4.35E-07	2.74	0.001						
9.11E-08	2.23E-06	4.38E-07	2.75	0.001						
9.13E-08	2.23E-06	4.38E-07	2.76	0.001						
9.15E-08 9.17E-08	2.24E-06 2.24E-06	4.40E-07 4.41E-07	2.77 2.77	0.001 0.001						
9.15E-08	2.24E-06	4.41L-07 4.39E-07	2.77	0.001						
9.07E-08	2.22E-06	4.36E-07	2.74	0.001						
9.00E-08	2.20E-06	4.32E-07	2.72	0.001						
8.91E-08	2.18E-06	4.28E-07	2.69	0.001						
8.82E-08	2.16E-06	4.24E-07	2.67	0.001						
8.77E-08	2.14E-06	4.21E-07	2.65	0.001						
8.62E-08	2.11E-06	4.14E-07	2.61	0.001						
8.42E-08	2.06E-06	4.05E-07	2.55	0.001						
8.28E-08	2.02E-06	3.98E-07	2.50	0.001						
8.07E-08	1.97E-06	3.88E-07	2.44	0.001						
7.87E-08	1.92E-06	3.78E-07	2.38	0.001						
7.65E-08	1.87E-06	3.68E-07	2.31	0.001						
7.42E-08	1.81E-06	3.56E-07	2.24	0.001						
7.14E-08	1.75E-06	3.43E-07	2.16	0.001						
6.85E-08	1.67E-06	3.29E-07	2.07	0.001						
6.57E-08	1.61E-06	3.16E-07	1.99	0.001						
6.25E-08	1.53E-06	3.00E-07	1.89	0.001						
5.97E-08	1.46E-06	2.87E-07	1.81	0.001						
5.99E-08	1.46E-06	2.88E-07	1.81	0.001						
5.76E-08	1.41E-06 1.29E-06	2.76E-07	1.74	0.001						
5.28E-08 5.04E-08	1.23E-06	2.54E-07 2.42E-07	1.60 1.52	0.001 0.001						
4.84E-08	1.18E-06	2.32E-07	1.46	0.001						
4.65E-08	1.14E-06	2.23E-07	1.41	0.001						
4.47E-08	1.09E-06	2.15E-07	1.35	0.001						
4.32E-08	1.06E-06	2.08E-07	1.31	0.001						
4.18E-08	1.02E-06	2.01E-07	1.27	0.001						
4.07E-08	9.94E-07	1.95E-07	1.23	0.001						
3.96E-08	9.68E-07	1.90E-07	1.20	0.001						
3.88E-08	9.48E-07	1.86E-07	1.17	0.001						
3.81E-08	9.32E-07	1.83E-07	1.15	0.001						
3.76E-08	9.18E-07	1.81E-07	1.14	0.001						
3.72E-08	9.08E-07	1.78E-07	1.12	0.001						
3.66E-08	8.94E-07	1.76E-07	1.11	0.001						
3.63E-08	8.86E-07	1.74E-07	1.10	0.001						
3.61E-08	8.83E-07	1.74E-07	1.09	0.001						
3.59E-08	8.77E-07	1.72E-07	1.09	0.001						
3.58E-08	8.76E-07	1.72E-07	1.08	0.001						
3.56E-08 3.69E-08	8.69E-07	1.71E-07 1.77E-07	1.08	0.001						
3.69E-08 3.94E-08	9.01E-07 9.62E-07	1.77E-07 1.89E-07	1.11 1.19	0.001 0.001						
4.18E-08	1.02E-06	2.01E-07	1.19	0.001						
4.47E-08	1.02E-06	2.01E-07 2.15E-07	1.35	0.001						
4.77E-08	1.17E-06	2.29E-07	1.44	0.001						
5.36E-08	1.31E-06	2.57E-07	1.62	0.001						
5.66E-08	1.38E-06	2.72E-07	1.71	0.001						
5.94E-08	1.45E-06	2.85E-07	1.80	0.001						
6.21E-08	1.52E-06	2.98E-07	1.88	0.001						
6.43E-08	1.57E-06	3.09E-07	1.94	0.001						
6.66E-08	1.63E-06	3.20E-07	2.01	0.001						
6.88E-08	1.68E-06	3.31E-07	2.08	0.001						
7.08E-08	1.73E-06	3.40E-07	2.14	0.001						
7.23E-08	1.77E-06	3.47E-07	2.19	0.001						
7.40E-08	1.81E-06	3.55E-07	2.24	0.001						

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567645.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567665.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567685.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567705.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567725.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567745.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567765.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567785.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567845.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567865.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567885.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567905.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567925.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567985.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568005.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568025.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568045.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568065.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568085.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568105.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568125.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568145.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568165.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568185.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568205.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568225.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568245.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568265.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568285.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568305.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568325.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568345.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568365.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568385.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568405.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568585.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568605.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568625.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568645.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568665.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568685.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568705.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568725.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.003	0.003	0.003

	Cancer Risk = 2	HI		
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
7.53E-08	1.84E-06	3.62E-07	2.28	0.001
7.65E-08	1.87E-06	3.67E-07	2.31	0.001
7.77E-08	1.90E-06	3.73E-07	2.35	0.001
7.87E-08	1.92E-06	3.78E-07	2.38	0.001
7.98E-08	1.95E-06	3.83E-07	2.41	0.001
8.07E-08	1.97E-06	3.88E-07	2.44	0.001
8.16E-08	1.99E-06	3.92E-07	2.47	0.001
8.29E-08	2.03E-06	3.98E-07	2.51	0.001
8.55E-08	2.09E-06	4.11E-07	2.58	0.001
8.57E-08	2.09E-06	4.12E-07	2.59	0.001
8.61E-08	2.11E-06	4.14E-07	2.61	0.001
8.64E-08	2.11E-06	4.15E-07	2.61	0.001
8.64E-08	2.11E-06	4.15E-07	2.61	0.001
8.55E-08	2.09E-06	4.11E-07	2.59	0.001
8.50E-08	2.08E-06	4.08E-07	2.57	0.001
8.42E-08	2.06E-06	4.04E-07	2.55	0.001
8.62E-08	2.11E-06	4.14E-07	2.61	0.001
8.51E-08	2.08E-06	4.09E-07	2.57	0.001
8.36E-08	2.04E-06	4.02E-07	2.53	0.001
8.21E-08	2.01E-06	3.94E-07	2.48	0.001
7.86E-08	1.92E-06	3.77E-07	2.38	0.001
7.68E-08	1.88E-06	3.69E-07	2.32	0.001
7.51E-08	1.83E-06	3.61E-07	2.27	0.001
7.30E-08	1.79E-06	3.51E-07	2.21	0.001
7.08E-08	1.73E-06	3.40E-07	2.14	0.001
6.84E-08	1.67E-06	3.40E-07 3.29E-07	2.14	0.001
6.59E-08 6.32E-08	1.61E-06	3.16E-07	1.99	0.001 0.001
	1.54E-06	3.04E-07	1.91	
6.02E-08	1.47E-06	2.89E-07	1.82	0.001
5.71E-08	1.40E-06	2.74E-07	1.73	0.001
5.49E-08	1.34E-06	2.64E-07	1.66	0.001
5.35E-08	1.31E-06	2.57E-07	1.62	0.001
5.32E-08	1.30E-06	2.55E-07	1.61	0.001
5.13E-08	1.25E-06	2.46E-07	1.55	0.001
4.92E-08	1.20E-06	2.36E-07	1.49	0.001
4.72E-08	1.15E-06	2.27E-07	1.43	0.001
4.31E-08	1.05E-06	2.07E-07	1.30	0.001
4.15E-08	1.01E-06	1.99E-07	1.25	0.001
4.01E-08	9.80E-07	1.93E-07	1.21	0.001
3.89E-08	9.50E-07	1.87E-07	1.17	0.001
3.78E-08	9.24E-07	1.82E-07	1.14	0.001
3.69E-08	9.03E-07	1.77E-07	1.12	0.001
3.62E-08	8.85E-07	1.74E-07	1.10	0.001
3.56E-08	8.71E-07	1.71E-07	1.08	0.001
3.51E-08	8.57E-07	1.69E-07	1.06	0.001
3.47E-08	8.49E-07	1.67E-07	1.05	0.001
3.45E-08	8.42E-07	1.65E-07	1.04	0.001
3.42E-08	8.35E-07	1.64E-07	1.03	0.001
3.39E-08	8.29E-07	1.63E-07	1.03	0.001
3.37E-08	8.25E-07	1.62E-07	1.02	0.001
3.36E-08	8.21E-07	1.61E-07	1.02	0.001

## Sequoia Station - Construction Health Risk Assessment Modeled for receptor height of 7.5 m

Cancer Risk, Hazard Index and  $PM_{2.5}$  Concentration Calculations - Offsite Residential - Mitigated

						Exp	osure Duration	(Days)					
					Start Date	7/3/2023	10/2/2023	10/2/2025	1	I	OPM	Exha	ust PM <sub>2.5</sub>
					Stop Date	10/1/2023	10/1/2025			Emisions (tons)	Emission Rate (g/s)	Emisions (tons)	Emission Rate (g/s)
Source Description	Source ID	Year	Start Date	End Date	Calendar Days	3rd Trimester	0<2	2<9	Exposure Duration	Mitigated	Mitigated	Mitigated	Mitigated
Truck route 1 (and 3) - primary route	ARLN1	2023	7/3/2023	12/31/2023	182	90	90	1	181	0.00	0.000	0.00	0.000
Truck route 1 (and 3) - primary route	ARLN1	2024	1/1/2024	12/31/2024	366	0	365	1	366	0.00	0.000	0.00	0.000
Truck route 1 (and 3) - primary route	ARLN1	2025	1/1/2025	12/31/2025	365	0	273	92	365	0.00	0.000	0.00	0.000
Truck route 1 (and 3) - primary route	ARLN1	2026	1/1/2026	12/31/2026	365	0	0	365	365	0.00	0.000	0.00	0.000
Truck route 1 (and 3) - primary route	ARLN1	2027	1/1/2027	12/31/2027	365	0	0	365	365	0.00	0.000	0.00	0.000
Onsite construction	PAREA1	2023	7/3/2023	12/31/2023	182	90	90	1	181	0.01	0.001	0.01	0.001
Onsite construction	PAREA1	2024	1/1/2024	12/31/2024	366	0	365	1	366	0.02	0.001	0.02	0.001
Onsite construction	PAREA1	2025	1/1/2025	12/31/2025	365	0	273	92	365	0.02	0.001	0.02	0.001
Onsite construction	PAREA1	2026	1/1/2026	12/31/2026	365	0	0	365	365	0.02	0.001	0.02	0.001
Onsite construction	PAREA1	2027	1/1/2027	12/31/2027	365	0	0	365	365	0.02	0.001	0.02	0.001
Truck route 1 (and 3) - primary route	ARLN3	2023	7/3/2023	12/31/2023	182	90	90	1	181			0.00	0.000
Truck route 1 (and 3) - primary route	ARLN3	2024	1/1/2024	12/31/2024	366	0	365	1	366			0.01	0.000
Truck route 1 (and 3) - primary route	ARLN3	2025	1/1/2025	12/31/2025	365	0	273	92	365			0.01	0.000
Truck route 1 (and 3) - primary route	ARLN3	2026	1/1/2026	12/31/2026	365	0	0	365	365			0.01	0.000
Truck route 1 (and 3) - primary route	ARLN3	2027	1/1/2027	12/31/2027	365	0	0	365	365			0.01	0.000

Fug PM2.5

Number of receptors exceeding threshold

## **Cancer Risk Factors**

	Abbreviation	UOM	3rd Trimester	0<2	2<9
Daily Breathing Rate	DBR	L/kg-day	361	1090	631
Fraction Of Time At Home	FAH	unitless	0.85	0.85	0.72
Exposure Frequency	EF	days/year	0.96	0.96	0.96
Age Sensitivity Factor	ASF	unitless	10	10	3
Inhalation Absorption Factor	Α	unitless	1	1	1
Conversion Factor	CF <sub>1</sub>	m³/L	0.001	0.001	0.001
Conversion Factor	CF <sub>2</sub>	$\mu g/m^3$	0.001	0.001	0.001
Cancer Potency Factor (diesel exhaust)	CPF	mg/kg-day <sup>-1</sup>	1.1	1.1	1.1
Averaging Time (for residential exposure)	AT	years	70.00	70.00	70.00

SOURCE: Office of Environmental Health Hazard Assessment, 2015. Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments . February.

Daily breathing rate for residential receptor is based on the OEHHA 95th percentile moderate intensity breathing rates (OEHHA Table 5.7).

Fraction of time at home is set to values per OEHHA Table 8.4 for residential since the nearest school has an unmitigated cancer risk of <1 per million. Inhalation cancer potency factor from OEHHA Table 7.1

## **Hazard Index**

Chronic Inhalation	REL	μg/m³	5

Intake Factor for Inhalation, IF (m³/kg-day) = DBR\*FAH\*EF\*ED\*ASF\*A\*CF/AT

Source ID	3rd Trimester	0<2	2<9
ARLN1	0.010	0.031	0.000
ARLN1	0.000	0.127	0.000
ARLN1	0.000	0.095	0.005
ARLN1	0.000	0.000	0.019
ARLN1	0.000	0.000	0.019
PAREA1	0.010	0.031	0.000
PAREA1	0.000	0.127	0.000
PAREA1	0.000	0.095	0.005
PAREA1	0.000	0.000	0.019
PAREA1	0.000	0.000	0.019

0.00E+00	1.40E-04	5.63E-08
0.00E+00	1.04E-04	5.18E-06
0.00E+00	0.00E+00	2.05E-05
0.00E+00	0.00E+00	2.05E-05
1.14E-05	3.44E-05	5.63E-08
0.00E+00	1.40E-04	5.63E-08
0.00E+00	1.04E-04	5.18E-06
0.00E+00	0.00E+00	2.05E-05
0.00E+00	0.00E+00	2.05E-05

Risk Calculation Part 1, R1 = IF\*CPF\*CF

0<2

3.44E-05

2<9

5.63E-08

3rd Trimester

1.14E-05

 Cancer Risk
 UTM X
 UTM Y

 MAX MITIGATED
 9.16
 568125.16
 4148790.16

	н	UTM X	UTM Y
	0.005	568125.16	4148790.16
١.			

PM <sub>2.5</sub> Conc.	UTM X	UTM Y	
0.030	568125.16	4148790.16	

Dicrete receptor 1655 southeast of project site across Jefferson at Cardinal Apartments

MAX MITIGATED (spatial averaging) 568169.16 4148794.16 0.000 0.000 0.000 0.000 0.000 0.019 0.019 0.019 0.019 0.019 2.20E-07 5.37E-06 8.94E-07 6.49 0.004  $PM_{2.5}$  concentration,  $C_{PM2.5}$  (µg/m $^3$ ) - at max. HI receptor - Mitigated

1112.5 concerns attent) cp <sub>M2.5</sub> (pg/) at maximize	epto: mitigatea												_			
									Project Co	nstruction						
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	ARLN3	ARLN3	ARLN3	ARLN3	ARLN3
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
568125.16	4148790.160	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027	0.002	0.002	0.002	0.002	0.002

PM<sub>2.5</sub> Conc. μg/m<sup>3</sup> Max. Annual

0.030

		<sup>3</sup> ) - Mitigated  Project Construction										
(UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	
7325.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7345.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7365.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7385.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7405.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57425.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57445.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57465.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57485.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57505.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57525.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57545.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
67565.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57585.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57605.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7625.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7645.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57645.16 57685.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
57705.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
57725.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
7745.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
7765.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
785.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
7805.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
7825.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
7845.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
7865.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
7885.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
905.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
7925.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
45.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
965.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
985.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
3005.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8025.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8045.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8065.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8085.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8105.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8125.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8145.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8165.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8185.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8205.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
3225.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
3245.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
265.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
285.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
305.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
325.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8345.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
365.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8385.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
105.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8425.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
8445.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
3465.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
25.16	4148290.16			0.000	0.000	0.000	0.001	0.001	0.001			

Risk Calculation Part 2										
	Cancer Risk = ∑R:	1*C <sub>DPM</sub>		HI						
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL						
				unitless						
1.56E-09	3.81E-08	6.34E-09	0.05	0.000						
1.65E-09	4.04E-08	6.73E-09	0.05	0.000						
1.76E-09	4.30E-08	7.17E-09	0.05	0.000						
1.88E-09	4.59E-08	7.64E-09	0.06	0.000						
2.00E-09 2.15E-09	4.90E-08 5.25E-08	8.16E-09 8.75E-09	0.06 0.06	0.000						
2.31E-09	5.64E-08	9.39E-09	0.00	0.000						
2.48E-09	6.07E-08	1.01E-08	0.07	0.000						
2.67E-09	6.53E-08	1.01E 08	0.08	0.000						
2.89E-09	7.06E-08	1.18E-08	0.09	0.000						
3.13E-09	7.65E-08	1.27E-08	0.09	0.000						
3.40E-09	8.30E-08	1.38E-08	0.10	0.000						
3.69E-09	9.03E-08	1.50E-08	0.11	0.000						
4.02E-09	9.82E-08	1.63E-08	0.12	0.000						
4.44E-09	1.08E-07	1.81E-08	0.13	0.000						
4.79E-09	1.17E-07	1.95E-08	0.14	0.000						
5.23E-09	1.28E-07	2.13E-08	0.15	0.000						
6.23E-09	1.52E-07	2.54E-08	0.18	0.000						
6.76E-09	1.65E-07	2.75E-08	0.20	0.000						
7.36E-09	1.80E-07	2.99E-08	0.22	0.000						
7.97E-09	1.95E-07	3.24E-08	0.24	0.000						
8.62E-09	2.11E-07	3.51E-08	0.25	0.000						
9.29E-09	2.27E-07	3.78E-08	0.27	0.000						
1.00E-08	2.45E-07	4.08E-08	0.30	0.000						
1.07E-08	2.62E-07	4.36E-08	0.32	0.000						
1.14E-08	2.78E-07	4.63E-08	0.34	0.000						
1.21E-08	2.95E-07	4.91E-08	0.36	0.000						
1.27E-08	3.11E-07	5.18E-08	0.38	0.000						
1.33E-08	3.25E-07	5.41E-08	0.39	0.000						
1.38E-08	3.38E-07	5.62E-08	0.41	0.000						
1.43E-08	3.50E-07	5.82E-08	0.42	0.000						
1.47E-08 1.50E-08	3.59E-07 3.66E-07	5.97E-08 6.09E-08	0.43 0.44	0.000						
1.52E-08	3.71E-07	6.18E-08	0.45	0.000						
1.54E-08	3.71E 07	6.26E-08	0.45	0.000						
1.55E-08	3.78E-07	6.29E-08	0.46	0.000						
1.55E-08	3.79E-07	6.30E-08	0.46	0.000						
1.55E-08	3.79E-07	6.30E-08	0.46	0.000						
1.55E-08	3.78E-07	6.30E-08	0.46	0.000						
1.55E-08	3.78E-07	6.29E-08	0.46	0.000						
1.54E-08	3.77E-07	6.27E-08	0.45	0.000						
1.54E-08	3.75E-07	6.25E-08	0.45	0.000						
1.53E-08	3.74E-07	6.22E-08	0.45	0.000						
1.53E-08	3.73E-07	6.21E-08	0.45	0.000						
1.53E-08	3.73E-07	6.21E-08	0.45	0.000						
1.53E-08	3.74E-07	6.22E-08	0.45	0.000						
1.54E-08	3.76E-07	6.26E-08	0.45	0.000						
1.55E-08	3.78E-07	6.30E-08	0.46	0.000						
1.56E-08	3.81E-07	6.34E-08	0.46	0.000						
1.57E-08	3.85E-07	6.40E-08	0.46	0.000						
1.59E-08	3.88E-07	6.47E-08	0.47	0.000						
1.61E-08	3.93E-07	6.55E-08	0.47	0.000						
1.63E-08 1.65E-08	3.97E-07 4.03E-07	6.62E-08 6.71E-08	0.48 0.49	0.000						
1.66E-08	4.03E-07 4.07E-07	6.71E-08 6.77E-08	0.49	0.000						
1.68E-08	4.07E-07 4.11E-07	6.77E-08 6.84E-08	0.49	0.000						
1.69E-08	4.11E-07 4.14E-07	6.89E-08	0.50	0.000						
1.09E-08	4.146-07	5.55E-00	0.50	0.000						

4.15E-07 6.90E-08

0.50

0.000

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
,	,	2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568545.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568565.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568585.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568605.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4148290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16 568725.16	4148290.16 4148290.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567325.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000
567345.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16 567645.16	4148310.16 4148310.16	0.000 0.000									
567665.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
567705.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567965.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16 568005.16	4148310.16 4148310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568025.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568045.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568065.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568085.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568245.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568265.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568285.16 568205.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568305.16 568325.16	4148310.16 4148310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568325.16 568345.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568385.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.002
568405.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568425.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568445.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Califer Kisk = 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.69E-08	4.14E-07	6.90E-08	0.50	0.000
1.69E-08	4.12E-07	6.87E-08	0.50	0.000
1.67E-08	4.08E-07	6.79E-08	0.49	0.000
			0.49	0.000
1.65E-08	4.02E-07	6.70E-08		
1.62E-08	3.96E-07	6.60E-08	0.48	0.000
1.60E-08	3.91E-07	6.51E-08	0.47	0.000
1.57E-08	3.85E-07	6.41E-08	0.46	0.000
1.54E-08	3.77E-07	6.27E-08	0.45	0.000
1.51E-08	3.70E-07	6.15E-08	0.45	0.000
1.48E-08	3.61E-07	6.02E-08	0.44	0.000
1.56E-09	3.80E-08	6.33E-09	0.05	0.000
1.66E-09	4.05E-08	6.74E-09	0.05	0.000
1.76E-09	4.31E-08	7.17E-09	0.05	0.000
1.88E-09	4.59E-08	7.65E-09	0.06	0.000
2.01E-09	4.92E-08	8.19E-09	0.06	0.000
2.16E-09	5.27E-08	8.77E-09	0.06	0.000
2.31E-09	5.65E-08	9.41E-09	0.07	0.000
2.49E-09	6.10E-08	1.01E-08	0.07	0.000
2.69E-09	6.58E-08	1.10E-08	0.08	0.000
2.90E-09	7.09E-08	1.18E-08	0.09	0.000
3.15E-09	7.69E-08	1.28E-08	0.09	0.000
3.42E-09	8.36E-08	1.39E-08	0.10	0.000
3.73E-09	9.11E-08	1.52E-08	0.11	0.000
4.09E-09	9.99E-08	1.66E-08	0.12	0.000
4.49E-09	1.10E-07	1.83E-08	0.13	0.000
4.90E-09	1.20E-07	1.99E-08	0.14	0.000
5.36E-09	1.31E-07	2.18E-08	0.16	0.000
5.84E-09	1.43E-07	2.38E-08	0.17	0.000
6.96E-09	1.70E-07	2.83E-08	0.21	0.000
7.58E-09	1.85E-07	3.08E-08	0.22	0.000
8.24E-09	2.01E-07	3.35E-08	0.24	0.000
8.94E-09	2.18E-07	3.64E-08	0.26	0.000
9.67E-09	2.36E-07	3.93E-08	0.29	0.000
1.05E-08	2.55E-07	4.25E-08	0.31	0.000
1.12E-08	2.75E-07	4.23E-08 4.57E-08	0.33	0.000
1.20E-08	2.93E-07	4.88E-08	0.35	0.000
1.27E-08	3.10E-07	5.17E-08	0.37	0.000
1.34E-08	3.28E-07	5.46E-08	0.40	0.000
1.41E-08	3.44E-07	5.73E-08	0.42	0.000
1.47E-08	3.58E-07	5.97E-08	0.43	0.000
1.52E-08	3.72E-07	6.19E-08	0.45	0.000
1.56E-08	3.82E-07	6.36E-08	0.46	0.000
1.60E-08	3.90E-07	6.49E-08	0.47	0.000
1.62E-08	3.95E-07	6.58E-08	0.48	0.000
1.64E-08	4.02E-07	6.68E-08	0.48	0.000
1.65E-08	4.04E-07	6.73E-08	0.49	0.000
1.65E-08	4.04E-07	6.73E-08	0.49	0.000
1.66E-08	4.05E-07	6.73E-08	0.49	0.000
1.65E-08	4.04E-07	6.72E-08	0.49	0.000
1.65E-08	4.03E-07	6.71E-08	0.49	0.000
1.64E-08	4.02E-07	6.69E-08	0.49	0.000
1.64E-08	4.00E-07	6.66E-08	0.48	0.000
1.63E-08	3.99E-07	6.65E-08	0.48	0.000
1.63E-08	3.99E-07	6.65E-08	0.48	0.000
1.63E-08	3.99E-07	6.64E-08	0.48	0.000
1.64E-08	4.00E-07	6.67E-08	0.48	0.000
1.64E-08	4.01E-07	6.68E-08	0.48	0.000
1.66E-08	4.05E-07	6.74E-08	0.49	0.000
1.67E-08	4.09E-07	6.81E-08	0.49	0.000
1.69E-08	4.12E-07	6.86E-08	0.50	0.000
1.71E-08	4.17E-07	6.95E-08	0.50	0.000
1.73E-08	4.22E-07	7.02E-08	0.51	0.000
1.74E-08	4.26E-07	7.10E-08	0.51	0.000
1.76E-08	4.30E-07	7.17E-08	0.52	0.000
1.78E-08	4.36E-07	7.26E-08	0.53	0.000
1.79E-08	4.38E-07	7.30E-08	0.53	0.000
1.79E-08	4.39E-07	7.30E-08	0.53	0.000

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568525.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.001	0.001	0.001
568605.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4148310.16	0.000 0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16 568705.16	4148310.16 4148310.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568705.16	4148310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000
567345.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16 567625.16	4148330.16 4148330.16	0.000 0.000									
567645.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567665.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
567725.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567965.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16 568005.16	4148330.16 4148330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.002	0.001 0.002	0.001 0.002	0.001 0.002	0.001 0.002
568025.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568045.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568065.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568105.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568125.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568145.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568185.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568225.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568245.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568305.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568325.16 568345.16	4148330.16 4148330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568345.16 568365.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568385.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568405.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568425.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Calicel Kisk = 2K1	. C <sub>DPM</sub>		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
			'	
1.79E-08	4.38E-07	7.29E-08	0.53	0.000
1.78E-08	4.36E-07	7.26E-08	0.53	0.000
1.75E-08	4.28E-07	7.12E-08	0.52	0.000
1.74E-08	4.26E-07	7.10E-08	0.51	0.000
1.72E-08	4.21E-07	7.01E-08	0.51	0.000
1.69E-08	4.14E-07	6.89E-08	0.50	0.000
1.63E-08	3.98E-07	6.63E-08	0.48	0.000
1.59E-08	3.90E-07	6.49E-08	0.47	0.000
1.56E-08	3.81E-07	6.34E-08	0.46	0.000
1.52E-08	3.72E-07	6.19E-08	0.45	0.000
1.56E-09	3.80E-08	6.33E-09	0.05	0.000
1.66E-09	4.05E-08	6.74E-09	0.05	0.000
1.76E-09	4.31E-08	7.17E-09	0.05	0.000
1.88E-09	4.61E-08	7.67E-09	0.06	0.000
2.02E-09	4.93E-08	8.20E-09	0.06	0.000
2.16E-09	5.28E-08	8.79E-09	0.06	0.000
2.32E-09	5.67E-08	9.44E-09	0.07	0.000
2.50E-09	6.12E-08	1.02E-08	0.07	0.000
2.70E-09	6.61E-08	1.10E-08	0.08	0.000
2.93E-09	7.15E-08	1.19E-08	0.09	0.000
3.16E-09	7.73E-08	1.29E-08	0.09	0.000
	8.43E-08			
3.45E-09		1.40E-08	0.10	0.000
3.77E-09	9.23E-08	1.54E-08	0.11	0.000
4.15E-09	1.02E-07	1.69E-08	0.12	0.000
4.56E-09	1.12E-07	1.86E-08	0.13	0.000
5.00E-09	1.22E-07	2.04E-08	0.15	0.000
5.46E-09	1.33E-07	2.22E-08	0.16	0.000
5.95E-09	1.45E-07	2.42E-08	0.18	0.000
7.81E-09	1.91E-07	3.18E-08	0.23	0.000
8.54E-09	2.09E-07	3.47E-08	0.25	0.000
9.28E-09	2.27E-07	3.78E-08	0.27	0.000
1.01E-08	2.47E-07	4.10E-08	0.30	0.000
1.09E-08	2.66E-07	4.43E-08	0.32	0.000
1.18E-08	2.87E-07	4.78E-08	0.35	0.000
1.26E-08	3.09E-07	5.14E-08	0.37	0.000
1.34E-08	3.28E-07	5.46E-08	0.40	0.000
1.42E-08	3.47E-07	5.77E-08	0.42	0.000
1.49E-08	3.65E-07	6.08E-08	0.44	0.000
1.56E-08	3.81E-07	6.34E-08	0.46	0.000
1.62E-08	3.95E-07	6.57E-08	0.48	0.000
1.66E-08	4.07E-07	6.77E-08	0.49	0.000
1.71E-08	4.17E-07	6.95E-08	0.50	0.000
1.74E-08	4.24E-07	7.06E-08	0.51	0.000
1.75E-08	4.29E-07	7.14E-08	0.52	0.000
1.77E-08	4.33E-07	7.20E-08	0.52	0.000
1.77E-08	4.33E-07	7.22E-08	0.52	0.000
1.77E-08	4.32E-07	7.20E-08	0.52	0.000
1.77E-08	4.32E-07	7.19E-08	0.52	0.000
1.76E-08	4.31E-07	7.17E-08	0.52	0.000
1.76E-08	4.30E-07	7.17E-08	0.52	0.000
1.76E-08	4.29E-07	7.14E-08	0.52	0.000
1.75E-08	4.28E-07	7.13E-08	0.52	0.000
1.75E-08	4.28E-07	7.13E 08	0.52	0.000
1.75E-08	4.28E-07	7.13E-08	0.52	0.000
1.75E-08	4.29E-07	7.14E-08	0.52	0.000
1.76E-08	4.31E-07	7.18E-08	0.52	0.000
1.78E-08	4.34E-07	7.22E-08	0.52	0.000
1.80E-08	4.39E-07	7.31E-08	0.53	0.000
1.82E-08	4.44E-07	7.39E-08	0.54	0.000
1.84E-08	4.49E-07	7.48E-08	0.54	0.000
1.86E-08	4.53E-07	7.55E-08	0.55	0.000
1.87E-08	4.58E-07	7.63E-08	0.55	0.000
1.89E-08	4.63E-07	7.71E-08	0.56	0.000
1.91E-08	4.66E-07	7.76E-08	0.56	0.000
1.91E-08	4.67E-07	7.78E-08	0.56	0.000
1.90E-08	4.64E-07	7.72E-08	0.56	0.000
1.89E-08	4.63E-07	7.70E-08	0.56	0.000

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568545.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16 568685.16	4148330.16 4148330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568705.16	4148330.16	0.000	0.000	0.000	0.000	0.000 0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4148330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16 567585.16	4148350.16 4148350.16	0.000 0.000									
567605.16 567605.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567665.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567965.16 567985.16	4148350.16 4148350.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568005.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568025.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568045.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568065.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568105.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568125.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568145.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568185.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568225.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568245.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16 568205.16	4148350.16 4148350.16	0.000	0.000	0.000	0.000 0.000	0.000	0.002	0.002 0.002	0.002	0.002	0.002
568305.16 568325.16	4148350.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.002 0.002	0.002	0.002 0.002	0.002 0.002	0.002 0.002
568325.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568365.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568385.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568405.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Califer Kisk - 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.87E-08	4.58E-07	7.62E-08	0.55	0.000
1.84E-08	4.49E-07	7.48E-08		0.000
			0.54	
1.81E-08	4.41E-07	7.35E-08	0.53	0.000
1.78E-08	4.35E-07	7.24E-08	0.52	0.000
1.76E-08	4.30E-07	7.16E-08	0.52	0.000
1.73E-08	4.22E-07	7.03E-08	0.51	0.000
1.68E-08	4.11E-07	6.84E-08	0.50	0.000
1.65E-08	4.02E-07	6.70E-08	0.49	0.000
1.61E-08	3.92E-07	6.53E-08	0.47	0.000
1.56E-08	3.82E-07	6.36E-08	0.46	0.000
1.55E-09	3.80E-08	6.33E-09	0.05	0.000
1.65E-09	4.04E-08	6.73E-09	0.05	0.000
1.76E-09	4.31E-08	7.17E-09	0.05	0.000
1.89E-09	4.61E-08	7.67E-09	0.06	0.000
2.02E-09	4.93E-08	8.21E-09	0.06	0.000
2.16E-09	5.28E-08	8.80E-09	0.06	0.000
2.33E-09	5.70E-08	9.48E-09	0.07	0.000
2.51E-09	6.14E-08	1.02E-08	0.07	0.000
2.71E-09	6.63E-08	1.10E-08	0.08	0.000
2.95E-09	7.20E-08	1.20E-08	0.09	0.000
3.19E-09	7.80E-08	1.30E-08	0.09	0.000
3.48E-09	8.51E-08	1.42E-08	0.10	0.000
				0.000
3.82E-09	9.33E-08	1.55E-08	0.11	
4.19E-09	1.02E-07	1.71E-08	0.12	0.000
4.62E-09	1.13E-07	1.88E-08	0.14	0.000
5.05E-09	1.23E-07	2.06E-08	0.15	0.000
5.50E-09	1.34E-07	2.24E-08	0.16	0.000
6.05E-09	1.48E-07	2.46E-08	0.18	0.000
6.66E-09	1.63E-07	2.71E-08	0.20	0.000
8.81E-09	2.15E-07	3.59E-08	0.26	0.000
9.64E-09	2.36E-07	3.92E-08	0.28	0.000
1.05E-08	2.57E-07	4.27E-08	0.31	0.000
1.14E-08	2.79E-07	4.64E-08	0.34	0.000
1.23E-08	3.02E-07	5.02E-08	0.36	0.000
1.33E-08	3.24E-07	5.40E-08	0.39	0.000
1.42E-08	3.47E-07	5.78E-08	0.42	0.000
1.51E-08	3.68E-07	6.13E-08	0.44	0.000
1.59E-08	3.87E-07	6.45E-08	0.47	0.000
1.66E-08	4.06E-07	6.76E-08	0.49	0.000
1.72E-08	4.21E-07	7.01E-08	0.51	0.000
1.78E-08	4.35E-07	7.24E-08	0.52	0.000
1.83E-08	4.47E-07	7.44E-08	0.54	0.000
1.86E-08	4.55E-07	7.58E-08	0.55	0.000
1.88E-08	4.60E-07	7.66E-08	0.56	0.000
	4.64E-07	7.73E-08		0.000
1.90E-08			0.56	
1.91E-08	4.66E-07	7.75E-08	0.56	0.000
1.90E-08	4.64E-07	7.73E-08	0.56	0.000
1.90E-08	4.64E-07	7.72E-08	0.56	0.000
1.89E-08	4.62E-07	7.69E-08	0.56	0.000
1.88E-08	4.60E-07	7.67E-08	0.56	0.000
1.88E-08	4.60E-07	7.66E-08	0.56	0.000
1.88E-08	4.60E-07	7.66E-08	0.56	0.000
1.88E-08	4.59E-07	7.65E-08	0.55	0.000
1.88E-08	4.59E-07	7.64E-08	0.55	0.000
1.89E-08	4.62E-07	7.69E-08	0.56	0.000
1.90E-08	4.64E-07	7.72E-08	0.56	0.000
1.91E-08	4.67E-07	7.78E-08	0.56	0.000
1.93E-08	4.73E-07	7.87E-08	0.57	0.000
1.96E-08	4.78E-07	7.96E-08	0.58	0.000
1.98E-08	4.84E-07	8.06E-08	0.58	0.000
2.00E-08	4.89E-07	8.14E-08	0.59	0.000
2.02E-08	4.93E-07	8.20E-08	0.60	0.000
2.03E-08	4.97E-07	8.27E-08	0.60	0.000
2.03E-08	4.96E-07	8.26E-08	0.60	0.000
2.01E-08	4.92E-07	8.18E-08	0.59	0.000
1.99E-08	4.88E-07	8.12E-08	0.59	0.000
1.97E-08	4.82E-07	8.02E-08	0.58	0.000

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568565.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16 568645.16	4148350.16 4148350.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568665.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4148350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16 567445.16	4148370.16 4148370.16	0.000 0.000									
567465.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148370.16	0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000
567645.16 567665.16	4148370.16 4148370.16	0.000 0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000 0.001	0.001	0.001
567685.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16 567905.16	4148370.16 4148370.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567925.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567965.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567985.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568005.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568025.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568045.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568065.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16 568105.16	4148370.16 4148370.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002	0.002 0.002	0.002 0.002
568105.16 568125.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002 0.002	0.002	0.002
568145.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568185.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568225.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568245.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16 568205.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568305.16 568325.16	4148370.16 4148370.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568345.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568365.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568385.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568445.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568465.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

		Cancer Risk = ∑R	1*C <sub>DPM</sub>		HI
REA1	3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
027					unitless
)2					
	1.93E-08	4.71E-07	7.84E-08	0.57	0.000
	1.89E-08	4.62E-07	7.70E-08	0.56	0.000
	1.86E-08	4.55E-07	7.57E-08	0.55	0.000
	1.83E-08	4.46E-07	7.43E-08	0.54	0.000
	1.78E-08	4.36E-07	7.26E-08	0.53	0.000
	1.74E-08	4.26E-07	7.09E-08	0.51	0.000
	1.70E-08	4.15E-07	6.90E-08	0.50	0.000
	1.65E-08	4.03E-07	6.71E-08	0.49	0.000
	1.60E-08	3.91E-07	6.51E-08	0.47	0.000
	1.55E-09	3.79E-08	6.31E-09	0.05	0.000
	1.65E-09	4.03E-08	6.72E-09	0.05	0.000
	1.76E-09	4.31E-08	7.18E-09	0.05	0.000
	1.88E-09		7.67E-09	0.06	0.000
		4.61E-08			
	2.02E-09	4.93E-08	8.20E-09	0.06	0.000
	2.17E-09	5.30E-08	8.82E-09	0.06	0.000
	2.33E-09	5.70E-08	9.49E-09	0.07	0.000
	2.52E-09	6.15E-08	1.02E-08	0.07	0.000
	2.72E-09	6.65E-08	1.11E-08	0.08	0.000
	2.96E-09	7.23E-08	1.20E-08	0.09	0.000
	3.22E-09	7.86E-08	1.31E-08	0.09	0.000
	3.51E-09	8.58E-08	1.43E-08	0.10	0.000
	3.85E-09	9.41E-08	1.57E-08	0.11	0.000
	4.24E-09	1.04E-07	1.72E-08	0.12	0.000
	4.62E-09	1.13E-07	1.88E-08	0.14	0.000
	5.07E-09	1.13E-07 1.24E-07	2.06E-08	0.14	0.000
	5.07E-09 5.57E-09				
		1.36E-07	2.27E-08	0.16	0.000
	6.15E-09	1.50E-07	2.50E-08	0.18	0.000
	6.82E-09	1.67E-07	2.78E-08	0.20	0.000
	7.51E-09	1.84E-07	3.06E-08	0.22	0.000
	9.99E-09	2.44E-07	4.07E-08	0.29	0.000
	1.09E-08	2.67E-07	4.44E-08	0.32	0.000
	1.19E-08	2.92E-07	4.86E-08	0.35	0.000
	1.29E-08	3.16E-07	5.27E-08	0.38	0.000
	1.40E-08	3.42E-07	5.69E-08	0.41	0.000
	1.50E-08	3.67E-07	6.11E-08	0.44	0.000
	1.60E-08	3.92E-07	6.52E-08	0.47	0.000
	1.69E-08	4.13E-07	6.87E-08	0.50	0.000
	1.78E-08	4.34E-07	7.22E-08	0.52	0.000
	1.75E-08 1.85E-08	4.52E-07	7.52E-08	0.55	0.000
	1.91E-08	4.68E-07	7.79E-08	0.56	0.000
	1.96E-08	4.80E-07	7.99E-08	0.58	0.000
	2.00E-08	4.89E-07	8.15E-08	0.59	0.000
	2.03E-08	4.96E-07	8.26E-08	0.60	0.000
	2.04E-08	4.99E-07	8.30E-08	0.60	0.000
	2.05E-08	5.00E-07	8.33E-08	0.60	0.000
	2.05E-08	5.02E-07	8.35E-08	0.61	0.000
	2.04E-08	4.99E-07	8.31E-08	0.60	0.000
	2.04E-08	4.98E-07	8.29E-08	0.60	0.000
	2.03E-08	4.96E-07	8.26E-08	0.60	0.000
	2.02E-08	4.94E-07	8.22E-08	0.60	0.000
	2.03E-08	4.96E-07	8.25E-08	0.60	0.000
	2.02E-08	4.95E-07	8.23E-08	0.60	0.000
	2.03E-08	4.95E-07	8.25E-08	0.60	0.000
	2.04E-08	4.98E-07	8.29E-08	0.60	0.000
	2.04L-08 2.05E-08	5.00E-07	8.32E-08	0.60	0.000
	2.07E-08	5.06E-07	8.43E-08	0.61	0.000
	2.09E-08	5.11E-07	8.50E-08	0.62	0.000
	2.11E-08	5.16E-07	8.60E-08	0.62	0.000
	2.14E-08	5.22E-07	8.69E-08	0.63	0.000
	2.16E-08	5.27E-07	8.78E-08	0.64	0.000
	2.17E-08	5.30E-07	8.83E-08	0.64	0.000
		5.30E-07	8.82E-08	0.64	0.000
	2.17E-08				
	2.17E-08 2.16E-08	5.27E-07	8.77E-08	0.64	0.000
			8.77E-08 8.74E-08	0.64 0.63	0.000 0.000
	2.16E-08	5.27E-07			
	2.16E-08 2.15E-08	5.27E-07 5.25E-07	8.74E-08	0.63	0.000

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568565.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148370.16	0.000 0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16 568725.16	4148370.16 4148370.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567325.16	4148370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.001
567345.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16 567645.16	4148390.16 4148390.16	0.000 0.000									
567665.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567685.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567965.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567985.16 568005.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002 0.002
568025.16	4148390.16 4148390.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002
568045.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568065.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568105.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568125.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568145.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568185.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568225.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568245.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568305.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568325.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568345.16 568365.16	4148390.16 4148390.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568365.16 568405.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568405.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568445.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568465.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Califer Kisk = 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.03E-08	4.96E-07	8.25E-08	0.60	0.000
1.98E-08	4.84E-07	8.07E-08	0.58	0.000
1.93E-08	4.73E-07	7.87E-08	0.57	0.000
				0.000
1.89E-08	4.62E-07	7.70E-08	0.56	
1.84E-08	4.50E-07	7.50E-08	0.54	0.000
1.79E-08	4.38E-07	7.30E-08	0.53	0.000
1.74E-08	4.25E-07	7.08E-08	0.51	0.000
1.69E-08	4.13E-07	6.87E-08	0.50	0.000
1.64E-08	4.00E-07	6.66E-08	0.48	0.000
1.55E-09	3.78E-08	6.29E-09	0.05	0.000
1.65E-09	4.02E-08	6.70E-09	0.05	0.000
1.76E-09	4.30E-08	7.16E-09	0.05	0.000
1.88E-09	4.60E-08	7.65E-09	0.06	0.000
2.02E-09	4.93E-08	8.21E-09	0.06	0.000
2.17E-09	5.30E-08	8.83E-09	0.06	0.000
2.33E-09	5.70E-08	9.50E-09	0.07	0.000
2.52E-09	6.15E-08	1.02E-08	0.07	0.000
2.73E-09	6.68E-08	1.11E-08	0.08	0.000
2.97E-09	7.25E-08	1.21E-08	0.09	0.000
3.23E-09	7.90E-08	1.31E-08	0.10	0.000
3.54E-09	8.65E-08	1.44E-08	0.10	0.000
3.88E-09	9.49E-08	1.58E-08	0.11	0.000
4.24E-09	1.04E-07	1.72E-08	0.13	0.000
4.71E-09	1.15E-07	1.92E-08	0.14	0.000
5.15E-09	1.26E-07	2.09E-08	0.15	0.000
5.67E-09	1.38E-07	2.31E-08	0.17	0.000
6.29E-09	1.54E-07	2.56E-08	0.19	0.000
6.97E-09	1.70E-07	2.83E-08	0.21	0.000
7.73E-09	1.89E-07	3.15E-08	0.23	0.000
8.55E-09	2.09E-07	3.48E-08	0.25	0.000
1.14E-08	2.79E-07	4.64E-08	0.34	0.000
1.25E-08	3.05E-07	5.08E-08	0.37	0.000
1.36E-08	3.33E-07	5.55E-08	0.40	0.000
1.48E-08	3.61E-07	6.00E-08	0.44	0.000
1.59E-08	3.88E-07	6.46E-08	0.47	0.000
1.70E-08	4.16E-07	6.93E-08	0.50	0.000
1.81E-08	4.43E-07	7.37E-08	0.53	0.000
1.90E-08	4.64E-07	7.73E-08	0.56	0.000
1.99E-08	4.86E-07	8.09E-08	0.59	0.000
2.06E-08	5.03E-07	8.37E-08	0.61	0.000
2.11E-08	5.17E-07	8.60E-08	0.62	0.000
2.15E-08	5.26E-07	8.76E-08	0.64	0.000
2.19E-08	5.36E-07	8.92E-08	0.65	0.000
2.21E-08	5.39E-07	8.98E-08	0.65	0.000
2.21E-08	5.41E-07	9.00E-08	0.65	0.000
2.21E-08	5.41E-07	9.00E-08	0.65	0.000
2.21E-08	5.40E-07	8.99E-08	0.65	0.000
2.20E-08	5.37E-07	8.94E-08	0.65	0.000
2.19E-08	5.35E-07	8.90E-08	0.65	0.000
2.19E-08	5.35E-07	8.90E-08	0.65	0.000
2.19E-08 2.18E-08	5.33E-07	8.87E-08	0.64	0.000
2.18E-08	5.34E-07			
		8.89E-08	0.64	0.000
2.19E-08	5.36E-07	8.92E-08	0.65	0.000
2.20E-08	5.37E-07	8.95E-08	0.65	0.000
2.21E-08	5.40E-07	9.00E-08	0.65	0.000
2.24E-08	5.47E-07	9.10E-08	0.66	0.000
2.27E-08	5.54E-07	9.22E-08	0.67	0.000
2.28E-08	5.58E-07	9.29E-08	0.67	0.000
2.30E-08	5.63E-07	9.38E-08	0.68	0.000
2.33E-08	5.69E-07	9.46E-08	0.69	0.000
2.34E-08	5.71E-07	9.50E-08	0.69	0.000
2.32E-08	5.68E-07	9.45E-08	0.69	0.000
2.31E-08	5.64E-07	9.38E-08	0.68	0.000
2.29E-08	5.59E-07	9.31E-08	0.68	0.000
2.27E-08	5.54E-07	9.23E-08	0.67	0.000
2.24E-08	5.47E-07	9.11E-08	0.66	0.000
2.20E-08	5.37E-07	8.95E-08	0.65	0.000
2.232 00	5.5,2 6,	5.55E 66	5.05	2.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
<b>,</b>	,	2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568565.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16 567325.16	4148390.16 4148410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.000	0.001 0.000	0.001 0.000	0.001 0.000	0.001 0.000
567345.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16 567665.16	4148410.16 4148410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567685.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567905.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567965.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567985.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568005.16 568025.16	4148410.16 4148410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568045.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568065.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568105.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568125.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568145.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568185.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568225.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568245.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568305.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568325.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568385.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568405.16 568425.16	4148410.16 4148410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568445.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568465.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
			<del>-</del>	<del>-</del>	<del>-</del>	<del>-</del>		<del>-</del>	<del>-</del>	<del>-</del>	

	Califer Kisk = 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.11E-08	5.17E-07	8.60E-08	0.62	0.000
2.06E-08	5.03E-07	8.38E-08	0.61	0.000
2.01E-08	4.90E-07	8.16E-08	0.59	0.000
1.95E-08	4.78E-07	7.95E-08		0.000
			0.58	
1.90E-08	4.63E-07	7.71E-08	0.56	0.000
1.84E-08	4.51E-07	7.51E-08	0.54	0.000
1.79E-08	4.36E-07	7.26E-08	0.53	0.000
1.73E-08	4.23E-07	7.04E-08	0.51	0.000
1.67E-08	4.09E-07	6.80E-08	0.49	0.000
1.54E-09	3.76E-08	6.26E-09	0.05	0.000
1.64E-09	4.01E-08	6.67E-09	0.05	0.000
1.76E-09	4.29E-08	7.14E-09	0.05	0.000
1.88E-09	4.59E-08	7.64E-09	0.06	0.000
2.01E-09	4.92E-08	8.18E-09	0.06	0.000
2.17E-09	5.30E-08	8.82E-09	0.06	0.000
2.33E-09	5.70E-08	9.49E-09	0.07	0.000
2.52E-09	6.16E-08	1.03E-08	0.07	0.000
2.74E-09	6.69E-08	1.11E-08	0.07	0.000
2.97E-09	7.27E-08	1.21E-08	0.09	0.000
3.25E-09	7.94E-08	1.32E-08	0.10	0.000
3.55E-09	8.69E-08	1.45E-08	0.10	0.000
3.89E-09	9.52E-08	1.58E-08	0.11	0.000
4.27E-09	1.04E-07	1.74E-08	0.13	0.000
4.72E-09	1.15E-07	1.92E-08	0.14	0.000
5.27E-09	1.29E-07	2.14E-08	0.16	0.000
5.79E-09	1.41E-07	2.36E-08	0.17	0.000
6.40E-09	1.57E-07	2.61E-08	0.19	0.000
7.14E-09	1.74E-07	2.90E-08	0.21	0.000
7.94E-09	1.94E-07	3.23E-08	0.23	0.000
8.77E-09	2.14E-07	3.57E-08	0.26	0.000
9.71E-09	2.37E-07	3.95E-08	0.29	0.000
1.19E-08	2.91E-07	4.84E-08	0.35	0.000
1.31E-08	3.20E-07	5.32E-08	0.39	0.000
1.43E-08	3.50E-07	5.83E-08	0.42	0.000
1.56E-08	3.82E-07	6.36E-08	0.46	0.000
1.68E-08	4.12E-07	6.85E-08	0.50	0.000
1.81E-08	4.43E-07	7.37E-08	0.53	0.000
1.93E-08	4.73E-07	7.87E-08	0.57	0.000
2.04E-08	4.99E-07	8.30E-08	0.60	0.000
2.14E-08	5.22E-07	8.69E-08	0.63	0.000
2.22E-08	5.42E-07	9.03E-08	0.65	0.000
2.29E-08	5.59E-07	9.30E-08	0.67	0.000
2.33E-08	5.70E-07	9.48E-08	0.69	0.000
2.37E-08	5.78E-07	9.62E-08	0.70	0.000
2.40E-08	5.86E-07	9.76E-08	0.71	0.000
2.40E-08	5.86E-07	9.75E-08	0.71	0.000
2.39E-08	5.84E-07	9.73E-08	0.71	0.000
2.40E-08	5.86E-07	9.75E-08	0.71	0.000
2.39E-08	5.83E-07	9.71E-08	0.70	0.000
2.37E-08	5.80E-07	9.65E-08	0.70	0.000
2.36E-08	5.77E-07	9.61E-08	0.70	0.000
	5.76E-07			
2.36E-08		9.58E-08	0.70	0.000
2.37E-08	5.78E-07	9.62E-08	0.70	0.000
2.38E-08	5.83E-07	9.70E-08	0.70	0.000
2.40E-08	5.86E-07	9.75E-08	0.71	0.000
2.41E-08	5.90E-07	9.82E-08	0.71	0.000
2.43E-08	5.95E-07	9.90E-08	0.72	0.000
2.46E-08	6.00E-07	1.00E-07	0.72	0.000
2.48E-08	6.05E-07	1.01E-07	0.73	0.000
2.52E-08	6.15E-07	1.02E-07	0.74	0.000
2.50E-08	6.11E-07	1.02E-07	0.74	0.000
2.48E-08	6.07E-07	1.01E-07	0.73	0.000
2.46E-08	6.01E-07	1.00E-07	0.73	0.000
2.43E-08	5.94E-07	9.89E-08	0.72	0.000
2.39E-08	5.85E-07	9.74E-08	0.71	0.000
2.35E-08	5.74E-07	9.56E-08	0.69	0.000
2.30E-08	5.61E-07	9.34E-08	0.68	0.000
	5.022 07	2.3.2 00	0.00	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568545.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16 568645.16	4148410.16 4148410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568665.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.002	0.002	0.002
568725.16	4148410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16 567485.16	4148430.16 4148430.16	0.000 0.000									
567505.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16 567705.16	4148430.16 4148430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567725.16	4148430.16	0.000	0.000	0.000	0.000	0.000 0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567885.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567905.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16 567965.16	4148430.16 4148430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567985.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568005.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568025.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568045.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568065.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568105.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568125.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568145.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16 568185.16	4148430.16 4148430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568205.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568225.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568245.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568305.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568365.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568385.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568425.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568445.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568465.16 568485.16	4148430.16 4148430.16	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568485.16 568505.16	4148430.16	0.000	0.000 0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
555525.20	. 1.0.00.10	5.000	0.000	3.000	0.000	3.000	J.002	3.002	5.002	0.002	0.002

	Califer Kisk = 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.25E-08	5.49E-07	9.14E-08	0.66	0.000
2.19E-08	5.35E-07	8.91E-08	0.65	0.000
2.13E-08	5.21E-07	8.67E-08	0.63	0.000
2.08E-08	5.07E-07	8.45E-08	0.61	0.000
2.01E-08	4.91E-07	8.18E-08	0.59	0.000
1.95E-08	4.77E-07	7.93E-08	0.58	0.000
1.89E-08	4.62E-07	7.70E-08	0.56	0.000
1.83E-08	4.47E-07	7.45E-08	0.54	0.000
1.76E-08	4.31E-07	7.18E-08	0.52	0.000
1.70E-08	4.16E-07	6.93E-08	0.50	0.000
1.53E-09	3.75E-08	6.24E-09	0.05	0.000
1.64E-09	4.00E-08	6.66E-09	0.05	0.000
1.75E-09	4.27E-08	7.12E-09	0.05	0.000
1.87E-09	4.57E-08	7.61E-09	0.06	0.000
2.01E-09	4.91E-08	8.17E-09	0.06	0.000
2.16E-09	5.29E-08	8.80E-09	0.06	0.000
2.33E-09	5.70E-08	9.49E-09	0.07	0.000
2.53E-09	6.18E-08	1.03E-08	0.07	0.000
2.74E-09	6.69E-08	1.11E-08	0.08	0.000
2.98E-09	7.28E-08	1.21E-08	0.09	0.000
3.26E-09	7.96E-08	1.32E-08	0.10	0.000
	8.70E-08			0.000
3.56E-09		1.45E-08	0.11	
3.90E-09	9.53E-08	1.59E-08	0.12	0.000
4.31E-09	1.05E-07	1.75E-08	0.13	0.000
4.75E-09	1.16E-07	1.93E-08	0.14	0.000
5.28E-09	1.29E-07	2.15E-08	0.16	0.000
5.93E-09	1.45E-07	2.41E-08	0.17	0.000
6.55E-09	1.60E-07	2.67E-08	0.19	0.000
7.30E-09	1.79E-07	2.97E-08	0.22	0.000
8.13E-09	1.99E-07	3.31E-08	0.24	0.000
9.05E-09	2.21E-07	3.68E-08	0.27	0.000
1.01E-08	2.46E-07	4.09E-08	0.30	0.000
1.12E-08	2.74E-07	4.57E-08	0.33	0.000
1.37E-08	3.35E-07	5.58E-08	0.40	0.000
1.51E-08	3.68E-07	6.13E-08	0.44	0.000
1.65E-08	4.03E-07	6.71E-08	0.49	0.000
1.80E-08	4.39E-07	7.31E-08	0.53	0.000
1.94E-08	4.73E-07	7.88E-08	0.57	0.000
2.07E-08	5.06E-07	8.42E-08	0.61	0.000
2.19E-08	5.36E-07	8.93E-08	0.65	0.000
2.31E-08	5.64E-07	9.40E-08	0.68	0.000
	5.86E-07			
2.40E-08		9.75E-08	0.71	0.000
2.47E-08	6.05E-07	1.01E-07	0.73	0.000
2.54E-08	6.20E-07	1.03E-07	0.75	0.000
2.58E-08	6.30E-07	1.05E-07	0.76	0.000
2.60E-08	6.36E-07	1.06E-07	0.77	0.000
2.62E-08	6.40E-07	1.07E-07	0.77	0.000
2.61E-08	6.38E-07	1.06E-07	0.77	0.000
2.60E-08	6.35E-07	1.06E-07	0.77	0.000
2.59E-08	6.33E-07	1.05E-07	0.76	0.000
2.57E-08	6.29E-07	1.05E-07	0.76	0.000
2.56E-08	6.27E-07	1.04E-07	0.76	0.000
2.57E-08	6.28E-07			
		1.05E-07	0.76	0.000
2.57E-08	6.29E-07	1.05E-07	0.76	0.000
2.59E-08	6.33E-07	1.05E-07	0.76	0.000
2.61E-08	6.39E-07	1.06E-07	0.77	0.000
2.63E-08	6.43E-07	1.07E-07	0.78	0.000
2.65E-08	6.49E-07	1.08E-07	0.78	0.000
2.68E-08	6.54E-07	1.09E-07	0.79	0.000
2.69E-08	6.57E-07	1.09E-07	0.79	0.000
2.69E-08	6.58E-07	1.10E-07	0.79	0.000
2.66E-08	6.49E-07	1.10E-07 1.08E-07	0.79	0.000
2.62E-08	6.39E-07	1.06E-07	0.77	0.000
2.57E-08	6.28E-07	1.05E-07	0.76	0.000
2.52E-08	6.16E-07	1.03E-07	0.74	0.000
2.46E-08	6.01E-07	1.00E-07	0.73	0.000
2.40E-08	5.86E-07	9.75E-08	0.71	0.000

						Proiect	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568545.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16 568605.16	4148430.16 4148430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568625.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16 567425.16	4148450.16 4148450.16	0.000 0.000									
567445.16 567445.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148450.16	0.000 0.000	0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.001	0.000 0.001	0.000	0.000	0.000 0.001
567645.16 567665.16	4148450.16 4148450.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000	0.001	0.001	0.001 0.001	0.001 0.001	0.001
567685.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567865.16 567885.16	4148450.16 4148450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567905.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567965.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567985.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568005.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568025.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568045.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568065.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16 568105.16	4148450.16 4148450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568125.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568145.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568185.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568225.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568245.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16 568345.16	4148450.16 4148450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568365.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568385.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.002	0.002	0.002
568405.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568425.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568445.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568465.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Cancer Risk = ∑R	1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REI
				unitless
2 225 00	F 70F 07	0.405.00	0.60	0.000
2.33E-08	5.70E-07	9.49E-08	0.69	0.000
2.27E-08	5.54E-07	9.23E-08	0.67	0.000
2.21E-08	5.39E-07	8.98E-08	0.65	0.000
2.14E-08	5.22E-07	8.69E-08	0.63	0.000
2.07E-08	5.06E-07	8.42E-08	0.61 0.59	0.000
2.00E-08	4.89E-07	8.15E-08		0.000
1.93E-08 1.87E-08	4.73E-07 4.58E-07	7.87E-08 7.62E-08	0.57 0.55	0.000
1.80E-08	4.40E-07	7.02L-08 7.33E-08	0.53	0.000
1.53E-09	3.73E-08	6.21E-09	0.05	0.000
1.63E-09	3.99E-08	6.64E-09	0.05	0.000
1.74E-09	4.26E-08	7.09E-09	0.05	0.000
1.86E-09	4.56E-08	7.59E-09	0.06	0.000
2.01E-09	4.90E-08	8.16E-09	0.06	0.000
2.16E-09	5.27E-08	8.78E-09	0.06	0.000
2.33E-09	5.69E-08	9.47E-09	0.07	0.000
2.52E-09	6.17E-08	1.03E-08	0.07	0.000
2.74E-09	6.69E-08	1.11E-08	0.08	0.000
2.99E-09	7.30E-08	1.21E-08	0.09	0.000
3.26E-09	7.98E-08	1.33E-08	0.10	0.000
3.56E-09	8.70E-08	1.45E-08	0.11	0.000
3.92E-09	9.57E-08	1.59E-08	0.12	0.000
4.34E-09	1.06E-07	1.76E-08	0.13	0.000
4.80E-09	1.17E-07	1.95E-08	0.14	0.000
5.35E-09	1.31E-07	2.18E-08	0.16	0.000
5.97E-09	1.46E-07	2.43E-08	0.18	0.000
6.69E-09	1.64E-07	2.72E-08	0.20	0.000
7.46E-09	1.82E-07	3.04E-08	0.22	0.000
8.35E-09	2.04E-07	3.40E-08	0.25	0.000
9.33E-09	2.28E-07	3.80E-08	0.28	0.000
1.04E-08	2.55E-07	4.24E-08	0.31	0.000
1.16E-08	2.84E-07	4.73E-08	0.34	0.000
1.30E-08	3.17E-07	5.27E-08	0.38	0.000
1.59E-08	3.88E-07	6.46E-08	0.47	0.000
1.75E-08	4.27E-07	7.11E-08	0.52	0.000
1.91E-08 2.07E-08	4.67E-07 5.06E-07	7.77E-08 8.42E-08	0.56	0.000
2.07E-08 2.22E-08	5.43E-07	9.05E-08	0.61	0.000
2.22E-08 2.37E-08	5.79E-07	9.63E-08	0.66 0.70	0.000
2.50E-08	6.12E-07	1.02E-07	0.74	0.000
2.61E-08	6.39E-07	1.06E-07	0.77	0.000
2.70E-08	6.60E-07	1.10E-07	0.80	0.000
2.77E-08	6.76E-07	1.13E-07	0.82	0.000
2.81E-08	6.88E-07	1.14E-07	0.83	0.000
2.84E-08	6.95E-07	1.16E-07	0.84	0.000
2.85E-08	6.97E-07	1.16E-07	0.84	0.001
2.86E-08	6.99E-07	1.16E-07	0.84	0.001
2.84E-08	6.95E-07	1.16E-07	0.84	0.000
2.82E-08	6.88E-07	1.15E-07	0.83	0.000
2.82E-08	6.88E-07	1.15E-07	0.83	0.000
2.81E-08	6.86E-07	1.14E-07	0.83	0.000
2.80E-08	6.85E-07	1.14E-07	0.83	0.000
2.82E-08	6.88E-07	1.15E-07	0.83	0.000
2.83E-08	6.91E-07	1.15E-07	0.83	0.000
2.85E-08	6.96E-07	1.16E-07	0.84	0.000
2.87E-08	7.02E-07	1.17E-07	0.85	0.001
2.89E-08	7.07E-07	1.18E-07	0.85	0.001
2.99E-08	7.32E-07	1.22E-07	0.88	0.001
2.89E-08	7.07E-07	1.18E-07	0.85	0.001
2.88E-08	7.03E-07	1.17E-07	0.85	0.001
2.86E-08	6.98E-07	1.16E-07	0.84	0.001
2.82E-08	6.89E-07	1.15E-07	0.83	0.000
2.77E-08	6.78E-07	1.13E-07	0.82	0.000
2.72E-08	6.64E-07	1.11E-07	0.80	0.000
	6 405 07	1 005 07	0.70	0.000
2.65E-08 2.58E-08	6.48E-07 6.30E-07	1.08E-07 1.05E-07	0.78 0.76	0.000

						Proiect	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568545.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148450.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148450.16	0.000 0.000	0.000	0.000	0.000	0.000	0.002 0.002	0.002	0.002	0.002	0.002
568685.16 567325.16	4148450.16 4148470.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002	0.002 0.000	0.002 0.000	0.002 0.000	0.002 0.000
567345.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16 567665.16	4148470.16 4148470.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567685.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567865.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567885.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567905.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567965.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567985.16 568005.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568025.16	4148470.16 4148470.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568045.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568065.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568085.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568105.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568125.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568145.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568165.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568185.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568205.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568225.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568245.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568265.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568325.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568345.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568365.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568385.16 568405.16	4148470.16 4148470.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568405.16 568425.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568425.16 568445.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Calicel Kisk - 2K1	- CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
			. =-	
2.43E-08	5.93E-07	9.87E-08	0.72	0.000
2.35E-08	5.75E-07	9.58E-08	0.69	0.000
2.28E-08	5.57E-07	9.27E-08	0.67	0.000
2.20E-08	5.38E-07	8.96E-08	0.65	0.000
2.13E-08	5.20E-07	8.66E-08	0.63	0.000
2.05E-08	5.01E-07	8.34E-08	0.61	0.000
1.98E-08	4.84E-07	8.05E-08	0.58	0.000
1.91E-08	4.66E-07	7.76E-08	0.56	0.000
1.52E-09	3.71E-08	6.18E-09	0.04	0.000
1.62E-09	3.97E-08	6.61E-09	0.05	0.000
1.74E-09	4.24E-08	7.06E-09	0.05	0.000
1.86E-09	4.54E-08	7.56E-09	0.05	0.000
2.00E-09	4.89E-08	8.14E-09	0.06	0.000
2.15E-09	5.26E-08	8.75E-09	0.06	0.000
2.32E-09	5.67E-08	9.45E-09	0.07	0.000
2.52E-09	6.16E-08	1.03E-08	0.07	0.000
2.74E-09	6.69E-08	1.11E-08	0.08	0.000
2.99E-09	7.30E-08	1.22E-08	0.09	0.000
3.26E-09	7.96E-08	1.32E-08	0.10	0.000
3.56E-09	8.71E-08	1.45E-08	0.11	0.000
3.94E-09	9.62E-08	1.60E-08	0.12	0.000
4.36E-09	1.07E-07	1.77E-08	0.13	0.000
4.83E-09	1.18E-07	1.97E-08	0.14	0.000
5.38E-09	1.32E-07	2.19E-08	0.16	0.000
6.02E-09	1.47E-07	2.45E-08	0.18	0.000
6.84E-09	1.67E-07	2.78E-08	0.20	0.000
7.62E-09	1.86E-07	3.10E-08	0.22	0.000
8.57E-09	2.09E-07	3.49E-08	0.25	0.000
9.61E-09	2.35E-07	3.91E-08	0.28	0.000
1.08E-08	2.63E-07	4.39E-08	0.32	0.000
1.21E-08	2.95E-07	4.91E-08	0.36	0.000
1.35E-08	3.30E-07	5.50E-08	0.40	0.000
1.51E-08	3.69E-07	6.14E-08		0.000
			0.45	
1.85E-08	4.53E-07	7.54E-08	0.55	0.000
2.04E-08	4.98E-07	8.29E-08	0.60	0.000
2.22E-08	5.42E-07	9.03E-08	0.65	0.000
2.40E-08	5.87E-07	9.77E-08	0.71	0.000
2.56E-08	6.25E-07	1.04E-07	0.76	0.000
2.71E-08	6.63E-07	1.10E-07	0.80	0.000
2.85E-08	6.96E-07	1.16E-07	0.84	0.001
2.96E-08	7.22E-07	1.20E-07	0.87	0.001
3.03E-08	7.41E-07	1.23E-07	0.90	0.001
3.09E-08	7.54E-07	1.26E-07	0.91	0.001
3.12E-08	7.62E-07	1.27E-07	0.92	0.001
3.14E-08	7.67E-07	1.28E-07	0.93	0.001
3.13E-08	7.66E-07	1.28E-07	0.93	0.001
3.12E-08	7.63E-07	1.27E-07	0.92	0.001
3.12E-08 3.10E-08				
	7.57E-07	1.26E-07	0.91	0.001
3.09E-08	7.54E-07	1.26E-07	0.91	0.001
3.09E-08	7.55E-07	1.26E-07	0.91	0.001
3.09E-08	7.55E-07	1.26E-07	0.91	0.001
3.08E-08	7.53E-07	1.25E-07	0.91	0.001
3.10E-08	7.59E-07	1.26E-07	0.92	0.001
3.10E-08	7.57E-07	1.26E-07	0.91	0.001
3.14E-08	7.66E-07	1.28E-07	0.93	0.001
3.15E-08	7.69E-07	1.28E-07	0.93	0.001
3.17E-08	7.75E-07	1.29E-07	0.94	0.001
3.15E-08	7.71E-07	1.28E-07	0.93	0.001
3.08E-08	7.54E-07	1.25E-07	0.91	0.001
3.04E-08	7.43E-07	1.24E-07	0.90	0.001
2.97E-08	7.27E-07	1.21E-07	0.88	0.001
2.92E-08	7.14E-07	1.19E-07	0.86	0.001
2.85E-08	6.98E-07	1.16E-07	0.84	0.001
2.70E-08	6.59E-07	1.10E-07	0.80	0.000
2.60E-08	6.36E-07	1.06E-07	0.77	0.000
2.51E-08	6.13E-07	1.02E-07	0.74	0.000
2.34E-08	5.72E-07	9.52E-08	0.69	0.000
00			05	2.000

						Proiect	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568605.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148490.16	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000
567345.16 567365.16	4148490.16 4148490.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000
567385.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16 567705.16	4148490.16 4148490.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567725.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567865.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567885.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567905.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567965.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567985.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568005.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568025.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568045.16 568065.16	4148490.16 4148490.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568085.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568105.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568125.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568145.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568165.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568185.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568205.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568225.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568245.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568305.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568325.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568345.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568365.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568385.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568405.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568425.16 568445.16	4148490.16 4148490.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568445.16 568465.16	4148490.16 4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Calicel Risk = 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
				2.222
2.26E-08	5.52E-07	9.19E-08	0.67	0.000
2.18E-08	5.33E-07	8.87E-08	0.64	0.000
2.10E-08	5.13E-07	8.53E-08	0.62	0.000
2.02E-08	4.94E-07	8.23E-08	0.60	0.000
1.87E-08	4.56E-07	7.59E-08	0.55	0.000
1.80E-08	4.41E-07	7.34E-08	0.53	0.000
1.51E-09	3.70E-08	6.16E-09	0.04	0.000
1.62E-09	3.95E-08	6.58E-09	0.05	0.000
1.73E-09	4.22E-08	7.03E-09	0.05	0.000
1.85E-09	4.52E-08	7.53E-09	0.05	0.000
1.99E-09	4.87E-08	8.11E-09	0.06	0.000
2.14E-09	5.24E-08	8.73E-09	0.06	0.000
2.32E-09	5.66E-08	9.42E-09	0.07	0.000
2.52E-09	6.15E-08	1.02E-08	0.07	0.000
2.73E-09	6.67E-08	1.11E-08	0.08	0.000
2.98E-09	7.29E-08	1.21E-08	0.09	0.000
3.25E-09	7.94E-08	1.32E-08	0.10	0.000
3.58E-09	8.74E-08	1.46E-08	0.11	0.000
3.95E-09	9.65E-08	1.61E-08	0.12	0.000
4.37E-09	1.07E-07	1.78E-08	0.13	0.000
4.83E-09	1.18E-07	1.97E-08	0.14	0.000
5.43E-09	1.33E-07	2.21E-08	0.16	0.000
6.08E-09	1.49E-07	2.47E-08	0.18	0.000
6.84E-09	1.67E-07	2.78E-08	0.20	0.000
7.76E-09	1.90E-07	3.16E-08	0.23	0.000
8.76E-09	2.14E-07	3.56E-08	0.26	0.000
9.90E-09	2.42E-07			
		4.03E-08	0.29	0.000
1.12E-08	2.73E-07	4.54E-08	0.33	0.000
1.26E-08	3.07E-07	5.11E-08	0.37	0.000
1.41E-08	3.45E-07	5.75E-08	0.42	0.000
1.58E-08	3.86E-07	6.43E-08	0.47	0.000
1.77E-08	4.33E-07	7.21E-08	0.52	0.000
2.17E-08	5.30E-07	8.83E-08	0.64	0.000
2.38E-08	5.82E-07	9.68E-08	0.70	0.000
2.58E-08	6.31E-07	1.05E-07	0.76	0.000
2.78E-08	6.80E-07	1.13E-07	0.82	0.000
2.96E-08	7.23E-07	1.20E-07	0.87	0.001
3.12E-08	7.62E-07	1.27E-07	0.92	0.001
3.25E-08	7.95E-07	1.32E-07	0.96	0.001
3.34E-08	8.17E-07	1.36E-07	0.99	0.001
3.41E-08	8.33E-07	1.39E-07	1.01	0.001
3.46E-08	8.45E-07	1.41E-07	1.02	0.001
3.47E-08	8.48E-07	1.41E-07	1.02	0.001
3.44E-08	8.42E-07	1.40E-07	1.02	0.001
3.44E-08	8.40E-07	1.40E-07	1.01	0.001
3.42E-08	8.36E-07	1.39E-07	1.01	0.001
3.39E-08	8.29E-07	1.38E-07	1.00	0.001
3.39E-08	8.29E-07	1.38E-07	1.00	0.001
3.39E-08	8.29E-07	1.38E-07	1.00	0.001
3.40E-08	8.31E-07	1.38E-07		
			1.00	0.001
3.40E-08	8.31E-07	1.38E-07	1.00	0.001
3.42E-08	8.37E-07	1.39E-07	1.01	0.001
3.43E-08	8.39E-07	1.40E-07	1.01	0.001
3.41E-08	8.34E-07	1.39E-07	1.01	0.001
3.38E-08	8.26E-07	1.38E-07	1.00	0.001
3.44E-08	8.40E-07	1.40E-07	1.01	0.001
3.31E-08	8.08E-07	1.35E-07	0.98	0.001
3.23E-08	7.88E-07	1.31E-07	0.95	0.001
3.15E-08	7.70E-07	1.28E-07	0.93	0.001
3.09E-08	7.54E-07	1.26E-07	0.91	0.001
2.99E-08	7.31E-07	1.22E-07	0.88	0.001
2.89E-08	7.07E-07	1.18E-07	0.85	0.001
2.80E-08	6.84E-07	1.14E-07	0.83	0.000
2.60E-08	6.35E-07	1.06E-07	0.77	0.000
2.51E-08	6.12E-07	1.02E-07	0.74	0.000
2.41E-08	5.88E-07	9.79E-08	0.71	0.000
2.31E-08	5.65E-07	9.41E-08	0.68	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568625.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16 567385.16	4148510.16 4148510.16	0.000 0.000									
567405.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148510.16 4148510.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000	0.001	0.001 0.001	0.001	0.001	0.001
567685.16 567705.16	4148510.16	0.000	0.000	0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001	0.001 0.001	0.001 0.001	0.001 0.001
567725.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567845.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567885.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567905.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567945.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567965.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567985.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568005.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568025.16 568045.16	4148510.16 4148510.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568065.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568085.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568105.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568125.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568145.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568165.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568185.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568205.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568225.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568285.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568305.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568325.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568345.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568385.16 568405.16	4148510.16 4148510.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568425.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Calicel Risk = 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2 225 00	5 455 07	0.005.00	0.55	0.000
2.23E-08	5.45E-07	9.08E-08	0.66	0.000
1.99E-08	4.85E-07	8.08E-08	0.59	0.000
1.91E-08	4.66E-07	7.76E-08	0.56	0.000
1.84E-08	4.49E-07	7.47E-08	0.54	0.000
1.51E-09	3.69E-08	6.15E-09	0.04	0.000
1.61E-09	3.94E-08	6.56E-09	0.05	0.000
1.72E-09	4.21E-08	7.01E-09	0.05	0.000
1.84E-09	4.51E-08	7.50E-09	0.05	0.000
1.99E-09	4.85E-08	8.08E-09	0.06	0.000
2.14E-09	5.22E-08	8.70E-09	0.06	0.000
2.31E-09	5.65E-08	9.40E-09	0.07	0.000
2.51E-09	6.13E-08	1.02E-08	0.07	0.000
2.73E-09	6.66E-08	1.11E-08		0.000
			0.08	
2.97E-09	7.26E-08	1.21E-08	0.09	0.000
3.26E-09	7.96E-08	1.32E-08	0.10	0.000
3.58E-09	8.75E-08	1.46E-08	0.11	0.000
3.95E-09	9.64E-08	1.61E-08	0.12	0.000
4.37E-09	1.07E-07	1.78E-08	0.13	0.000
4.89E-09	1.19E-07	1.99E-08	0.14	0.000
5.48E-09	1.34E-07	2.23E-08	0.16	0.000
6.14E-09	1.50E-07	2.50E-08	0.18	0.000
6.95E-09	1.70E-07	2.83E-08	0.21	0.000
7.86E-09	1.92E-07	3.20E-08	0.23	0.000
8.95E-09	2.19E-07	3.64E-08	0.26	0.000
1.02E-08	2.48E-07	4.14E-08	0.30	0.000
1.15E-08	2.81E-07	4.69E-08	0.34	0.000
1.30E-08	3.18E-07	5.30E-08	0.38	0.000
1.48E-08	3.61E-07	6.01E-08	0.44	0.000
1.67E-08	4.08E-07	6.79E-08	0.49	0.000
1.87E-08	4.57E-07	7.60E-08	0.55	0.000
2.09E-08	5.10E-07	8.49E-08	0.62	0.000
2.56E-08	6.25E-07	1.04E-07	0.75	0.000
2.79E-08	6.81E-07	1.13E-07	0.82	0.000
3.03E-08	7.39E-07	1.23E-07	0.89	0.001
3.23E-08	7.90E-07	1.32E-07	0.95	0.001
3.42E-08	8.36E-07	1.39E-07	1.01	0.001
3.58E-08	8.74E-07	1.46E-07	1.06	0.001
3.71E-08	9.06E-07	1.51E-07	1.09	0.001
3.78E-08	9.25E-07	1.54E-07	1.12	0.001
3.83E-08	9.35E-07	1.56E-07	1.13	0.001
3.83E-08		1.56E-07		
	9.36E-07		1.13	0.001
3.82E-08	9.33E-07	1.55E-07	1.13	0.001
3.79E-08	9.26E-07	1.54E-07	1.12	0.001
3.79E-08	9.26E-07	1.54E-07	1.12	0.001
3.78E-08	9.23E-07	1.54E-07	1.11	0.001
3.76E-08	9.18E-07	1.53E-07	1.11	0.001
3.74E-08	9.14E-07	1.52E-07	1.10	0.001
3.77E-08	9.20E-07	1.53E-07	1.11	0.001
3.78E-08	9.23E-07	1.54E-07	1.11	0.001
3.76E-08	9.18E-07	1.53E-07	1.11	0.001
3.78E-08	9.23E-07	1.54E-07	1.11	0.001
3.74E-08	9.13E-07	1.52E-07	1.10	0.001
3.65E-08	8.92E-07	1.48E-07	1.08	0.001
3.60E-08	8.81E-07	1.47E-07	1.06	0.001
3.42E-08	8.35E-07	1.39E-07	1.01	0.001
3.34E-08	8.16E-07	1.36E-07	0.99	0.001
3.13E-08	7.64E-07	1.27E-07	0.92	0.001
3.01E-08	7.35E-07	1.22E-07	0.89	0.001
2.89E-08	7.07E-07	1.18E-07	0.85	0.001
2.78E-08	6.80E-07	1.13E-07	0.82	0.000
2.58E-08	6.30E-07	1.05E-07	0.76	0.000
2.47E-08	6.03E-07	1.00E-07	0.73	0.000
2.37E-08	5.79E-07	9.64E-08	0.70	0.000
2.11E-08	5.15E-07	8.57E-08	0.62	0.000
2.02E-08	4.94E-07	8.22E-08	0.60	0.000
1.94E-08	4.74E-07	7.89E-08	0.57	0.000
1.87E-08	4.56E-07	7.59E-08	0.55	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567325.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16 567425.16	4148530.16 4148530.16	0.000 0.000									
567445.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16 567625.16	4148530.16 4148530.16	0.000 0.000									
567645.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
567665.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16 567825.16	4148530.16 4148530.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567825.16 567845.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567905.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567945.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567965.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567985.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568005.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568025.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568045.16 568065.16	4148530.16 4148530.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568085.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568105.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568125.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568145.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568165.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568185.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568205.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568265.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568285.16 568305.16	4148530.16 4148530.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568325.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568345.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568365.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568385.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568405.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568425.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568445.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16 568485.16	4148530.16 4148530.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568505.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148530.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16 568705.16	4148530.16 4148530.16	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568705.16	4148530.16	0.000	0.000 0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
		<del>-</del>			<del>-</del>		<del>-</del>	·		*	

	Califer Risk = 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.51E-09	3.69E-08	6.15E-09	0.04	0.000
1.61E-09	3.93E-08	6.55E-09	0.05	0.000
1.72E-09	4.20E-08	6.99E-09	0.05	0.000
1.84E-09	4.50E-08	7.49E-09	0.05	0.000
1.98E-09	4.84E-08	8.05E-09	0.06	0.000
2.13E-09	5.21E-08	8.67E-09	0.06	0.000
2.31E-09	5.64E-08	9.38E-09	0.07	0.000
2.50E-09	6.11E-08	1.02E-08	0.07	0.000
2.72E-09	6.65E-08	1.11E-08	0.08	0.000
2.97E-09	7.26E-08	1.21E-08	0.09	0.000
3.25E-09	7.95E-08	1.32E-08	0.10	0.000
3.58E-09	8.74E-08	1.46E-08		0.000
			0.11	
3.95E-09	9.65E-08	1.61E-08	0.12	0.000
4.39E-09	1.07E-07	1.79E-08	0.13	0.000
4.91E-09	1.20E-07	2.00E-08	0.14	0.000
5.50E-09	1.34E-07	2.24E-08	0.16	0.000
6.22E-09	1.52E-07	2.53E-08	0.18	0.000
7.04E-09	1.72E-07	2.86E-08	0.21	0.000
7.99E-09	1.95E-07	3.25E-08	0.24	0.000
9.28E-09	2.27E-07	3.78E-08	0.27	0.000
1.04E-08	2.54E-07	4.22E-08	0.31	0.000
1.19E-08	2.91E-07	4.84E-08	0.35	0.000
1.35E-08	3.31E-07	5.51E-08	0.40	0.000
1.55E-08	3.78E-07	6.30E-08	0.46	0.000
1.75E-08	4.28E-07	7.13E-08	0.52	0.000
1.97E-08	4.81E-07	8.01E-08	0.58	0.000
2.22E-08	5.42E-07	9.03E-08	0.65	0.000
3.05E-08	7.45E-07	1.24E-07	0.90	0.001
3.32E-08	8.11E-07	1.35E-07	0.98	0.001
3.55E-08	8.67E-07	1.44E-07	1.05	0.001
3.78E-08	9.24E-07	1.54E-07	1.12	0.001
3.97E-08	9.70E-07	1.62E-07	1.17	0.001
4.12E-08	1.01E-06	1.68E-07	1.22	0.001
4.22E-08	1.03E-06	1.72E-07	1.25	0.001
4.26E-08	1.04E-06	1.73E-07	1.26	0.001
4.24E-08	1.04E-06	1.73E-07	1.25	0.001
4.25E-08	1.04E-06	1.73E-07	1.25	0.001
4.24E-08	1.04E-06	1.72E-07	1.25	0.001
4.22E-08	1.03E-06	1.72E-07	1.25	0.001
4.21E-08	1.03E-06	1.71E-07	1.24	0.001
4.20E-08	1.03E-06	1.71E-07	1.24	0.001
4.17E-08	1.02E-06	1.70E-07	1.23	0.001
4.18E-08	1.02E-06	1.70E-07	1.23	0.001
4.12E-08	1.01E-06	1.68E-07	1.22	0.001
4.10E-08	1.00E-06	1.67E-07	1.21	0.001
4.17E-08	1.02E-06	1.70E-07	1.23	0.001
4.09E-08	1.00E-06	1.66E-07	1.21	0.001
3.96E-08	9.67E-07	1.61E-07	1.17	0.001
3.84E-08	9.38E-07	1.56E-07	1.13	0.001
3.77E-08	9.23E-07	1.54E-07	1.11	0.001
3.68E-08	9.00E-07	1.50E-07	1.09	0.001
3.53E-08		1.44E-07	1.04	
	8.63E-07			0.001
3.40E-08	8.30E-07	1.38E-07	1.00	0.001
3.26E-08	7.97E-07	1.33E-07	0.96	0.001
3.13E-08	7.64E-07	1.27E-07	0.92	0.001
2.99E-08	7.31E-07	1.22E-07	0.88	0.001
2.87E-08	7.01E-07	1.17E-07	0.85	0.001
2.76E-08	6.74E-07	1.12E-07	0.81	0.000
2.65E-08	6.48E-07	1.08E-07	0.78	0.000
2.53E-08	6.19E-07	1.03E-07	0.75	0.000
2.33E-08	5.70E-07	9.49E-08	0.73	0.000
2.24E-08	5.47E-07	9.10E-08	0.66	0.000
2.15E-08	5.25E-07	8.74E-08	0.63	0.000
2.06E-08	5.04E-07	8.39E-08	0.61	0.000
1.97E-08	4.83E-07	8.03E-08	0.58	0.000
1.89E-08	4.63E-07	7.70E-08	0.56	0.000
1.51E-09	3.69E-08	6.15E-09	0.04	0.000

Cancer Risk =  $\sum R1*C_{DPM}$ 

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567345.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16 567445.16	4148550.16 4148550.16	0.000 0.000									
567465.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16 567645.16	4148550.16 4148550.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001
567665.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16 567845.16	4148550.16 4148550.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567865.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567965.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567985.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568005.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568025.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568045.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568065.16 568085.16	4148550.16 4148550.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568105.16	4148550.16	0.000	0.000	0.000	0.000	0.000 0.000	0.004	0.004	0.004	0.004	0.004
568125.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568145.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568165.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568225.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568245.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568265.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568285.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568305.16 568325.16	4148550.16 4148550.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568345.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568365.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568385.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568405.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568425.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568445.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16 568525.16	4148550.16 4148550.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568545.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148550.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16 567325.16	4148550.16 4148570.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.000	0.002 0.000	0.002 0.000	0.002 0.000	0.002 0.000
567345.16 567345.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55.5.5.25		3.000	0.000	3.000	0.000	3.000	3.000	3.000	5.000	0.000	0.000

	Calicel Kisk = 2K1	. C <sub>DPM</sub>		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
			'	
1.61E-09	3.93E-08	6.54E-09	0.05	0.000
1.71E-09	4.19E-08	6.98E-09	0.05	0.000
1.84E-09	4.50E-08	7.49E-09	0.05	0.000
1.97E-09	4.83E-08	8.04E-09	0.06	0.000
2.13E-09	5.19E-08	8.65E-09	0.06	0.000
2.30E-09	5.62E-08	9.36E-09	0.07	0.000
2.50E-09	6.10E-08	1.02E-08	0.07	0.000
2.72E-09	6.66E-08	1.11E-08	0.08	0.000
2.97E-09	7.25E-08	1.21E-08	0.09	0.000
3.25E-09	7.93E-08	1.32E-08	0.10	0.000
3.57E-09	8.73E-08	1.45E-08	0.11	0.000
3.95E-09	9.66E-08	1.43E 08	0.12	0.000
4.40E-09	1.08E-07	1.79E-08	0.13	0.000
4.93E-09	1.21E-07	2.01E-08	0.15	0.000
5.55E-09	1.36E-07	2.26E-08	0.16	0.000
6.27E-09	1.53E-07	2.55E-08	0.18	0.000
7.11E-09	1.74E-07	2.89E-08	0.21	0.000
8.11E-09	1.98E-07	3.30E-08	0.24	0.000
9.29E-09	2.27E-07	3.78E-08	0.27	0.000
1.08E-08	2.64E-07	4.39E-08	0.32	0.000
1.23E-08	3.00E-07	4.99E-08	0.36	0.000
1.41E-08	3.44E-07	5.73E-08	0.42	0.000
1.61E-08	3.93E-07	6.55E-08	0.47	0.000
1.84E-08	4.49E-07	7.48E-08	0.54	0.000
2.09E-08	5.11E-07	8.50E-08	0.62	0.000
2.37E-08	5.78E-07	9.63E-08	0.70	0.000
2.67E-08	6.52E-07	1.09E-07	0.79	0.000
3.65E-08	8.92E-07	1.49E-07	1.08	0.001
3.91E-08	9.54E-07	1.59E-07	1.15	0.001
4.19E-08	1.02E-06	1.70E-07	1.24	0.001
4.44E-08	1.08E-06	1.81E-07	1.31	0.001
4.63E-08	1.13E-06	1.88E-07	1.37	0.001
4.73E-08	1.16E-06	1.93E-07	1.40	0.001
4.78E-08	1.17E-06	1.94E-07	1.41	0.001
4.79E-08	1.17E-06	1.95E-07	1.41	0.001
4.79E-08	1.17E-06	1.95E-07	1.41	0.001
4.75E-08	1.16E-06	1.93E-07	1.40	0.001
4.72E-08	1.15E-06	1.92E-07	1.39	0.001
4.71E-08	1.15E-06	1.92E-07	1.39	0.001
4.71E-08	1.15E-06	1.92E-07	1.39	0.001
4.65E-08	1.14E-06	1.89E-07	1.37	0.001
4.62E-08	1.13E-06	1.88E-07	1.36	0.001
4.53E-08	1.11E-06	1.84E-07	1.34	0.001
4.47E-08	1.09E-06	1.82E-07	1.32	0.001
4.47E-08	1.09E-06	1.82E-07	1.32	0.001
4.40E-08	1.07E-06	1.79E-07	1.30	0.001
4.24E-08	1.04E-06	1.73E-07	1.25	0.001
4.10E-08	1.00E-06	1.67E-07	1.21	0.001
3.96E-08	9.69E-07	1.61E-07	1.17	0.001
3.91E-08	9.54E-07	1.59E-07	1.15	0.001
3.71E-08	9.07E-07	1.51E-07	1.09	0.001
3.55E-08	8.68E-07	1.45E-07	1.05	0.001
3.40E-08	8.31E-07	1.38E-07	1.00	0.001
3.25E-08	7.94E-07	1.32E-07	0.96	0.001
3.09E-08	7.56E-07	1.26E-07	0.91	0.001
2.96E-08	7.23E-07	1.20E-07	0.87	0.001
2.83E-08	6.92E-07	1.15E-07	0.83	0.000
2.71E-08	6.63E-07	1.10E-07	0.80	0.000
2.49E-08	6.08E-07	1.01E-07	0.73	0.000
2.38E-08	5.82E-07	9.68E-08	0.70	0.000
2.28E-08	5.57E-07	9.28E-08	0.67	0.000
2.19E-08	5.34E-07	8.89E-08	0.65	0.000
2.10E-08	5.12E-07	8.53E-08	0.62	0.000
2.01E-08	4.92E-07	8.19E-08	0.59	0.000
1.93E-08	4.71E-07	7.85E-08	0.57	0.000
1.51E-09	3.70E-08	6.15E-09	0.04	0.000
1.61E-09	3.93E-08	6.54E-09	0.05	0.000

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567365.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16 567485.16	4148570.16 4148570.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
567505.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16 567805.16	4148570.16 4148570.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.002	0.001 0.002	0.001 0.002	0.001 0.002	0.001 0.002
567825.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567845.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567865.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567885.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567945.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567965.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567985.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568005.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568025.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568045.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568065.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568085.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568105.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568125.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568145.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568205.16 568225.16	4148570.16 4148570.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.004	0.005 0.004	0.005 0.004	0.005 0.004	0.005 0.004
568245.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568265.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568285.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568305.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568325.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568345.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568365.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568405.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568425.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568445.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16 568585.16	4148570.16 4148570.16	0.000	0.000	0.000 0.000	0.000 0.000	0.000	0.003	0.003 0.002	0.003	0.003	0.003 0.002
568585.16	4148570.16	0.000 0.000	0.000 0.000	0.000	0.000	0.000 0.000	0.002 0.002	0.002	0.002 0.002	0.002 0.002	0.002
568625.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Calicel Risk = 2K1	. C <sub>DPM</sub>		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.72E-09	4.20E-08	6.99E-09	0.05	0.000
1.84E-09	4.49E-08	7.48E-09	0.05	0.000
1.97E-09	4.82E-08	8.02E-09	0.06	0.000
2.12E-09	5.19E-08	8.64E-09		0.000
			0.06	
2.30E-09	5.62E-08	9.35E-09	0.07	0.000
2.50E-09	6.10E-08	1.02E-08	0.07	0.000
2.72E-09	6.66E-08	1.11E-08	0.08	0.000
2.97E-09	7.26E-08	1.21E-08	0.09	0.000
3.25E-09	7.94E-08	1.32E-08	0.10	0.000
3.57E-09	8.74E-08	1.45E-08	0.11	0.000
3.96E-09	9.68E-08	1.61E-08	0.12	0.000
4.41E-09	1.08E-07	1.79E-08	0.13	0.000
4.96E-09	1.21E-07	2.02E-08	0.15	0.000
5.57E-09	1.36E-07	2.27E-08	0.16	0.000
6.30E-09	1.54E-07	2.56E-08	0.19	0.000
7.19E-09	1.76E-07	2.92E-08	0.21	0.000
8.21E-09	2.01E-07	3.34E-08	0.24	0.000
	2.31E-07		0.24	0.000
9.44E-09		3.84E-08		
1.09E-08	2.67E-07	4.44E-08	0.32	0.000
1.26E-08	3.09E-07	5.14E-08	0.37	0.000
1.46E-08	3.57E-07	5.94E-08	0.43	0.000
1.68E-08	4.12E-07	6.85E-08	0.50	0.000
1.94E-08	4.73E-07	7.88E-08	0.57	0.000
2.22E-08	5.42E-07	9.02E-08	0.65	0.000
2.52E-08	6.17E-07	1.03E-07	0.74	0.000
2.86E-08	6.99E-07	1.16E-07	0.84	0.001
3.22E-08	7.87E-07	1.31E-07	0.95	0.001
4.32E-08	1.06E-06	1.76E-07	1.28	0.001
4.68E-08	1.14E-06	1.90E-07	1.38	0.001
4.98E-08	1.22E-06	2.03E-07	1.47	0.001
5.22E-08	1.28E-06	2.12E-07	1.54	0.001
5.36E-08	1.31E-06	2.12E 07	1.58	0.001
5.46E-08	1.34E-06	2.22E-07	1.61	0.001
5.47E-08	1.34E-06	2.23E-07	1.62	0.001
5.43E-08	1.33E-06	2.21E-07	1.60	0.001
5.40E-08	1.32E-06	2.20E-07	1.59	0.001
5.35E-08	1.31E-06	2.17E-07	1.58	0.001
5.34E-08	1.30E-06	2.17E-07	1.57	0.001
5.22E-08	1.28E-06	2.13E-07	1.54	0.001
5.15E-08	1.26E-06	2.09E-07	1.52	0.001
5.12E-08	1.25E-06	2.08E-07	1.51	0.001
5.00E-08	1.22E-06	2.04E-07	1.48	0.001
4.90E-08	1.20E-06	1.99E-07	1.45	0.001
4.80E-08	1.17E-06	1.95E-07	1.42	0.001
4.65E-08	1.14E-06	1.89E-07	1.37	0.001
4.45E-08	1.09E-06	1.81E-07	1.31	0.001
4.34E-08	1.06E-06	1.77E-07	1.28	0.001
4.06E-08	9.92E-07	1.65E-07	1.20	0.001
4.01E-08	9.80E-07	1.63E-07	1.18	0.001
3.70E-08				
	9.04E-07	1.51E-07	1.09	0.001
3.52E-08	8.61E-07	1.43E-07	1.04	0.001
3.35E-08	8.19E-07	1.36E-07	0.99	0.001
3.19E-08	7.79E-07	1.30E-07	0.94	0.001
3.04E-08	7.43E-07	1.24E-07	0.90	0.001
2.66E-08	6.49E-07	1.08E-07	0.78	0.000
2.53E-08	6.19E-07	1.03E-07	0.75	0.000
2.43E-08	5.93E-07	9.88E-08	0.72	0.000
2.33E-08	5.68E-07	9.46E-08	0.69	0.000
2.23E-08	5.45E-07	9.08E-08	0.66	0.000
2.14E-08	5.23E-07	8.71E-08	0.63	0.000
2.05E-08	5.02E-07	8.36E-08	0.61	0.000
1.97E-08	4.81E-07	8.01E-08	0.58	0.000
1.52E-09	3.71E-08	6.17E-09	0.04	0.000
1.61E-09	3.95E-08	6.57E-09	0.05	0.000
1.72E-09	4.21E-08	7.01E-09	0.05	0.000
1.84E-09	4.50E-08	7.49E-09	0.05	0.000
1.97E-09	4.82E-08	8.02E-09	0.06	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
567425.46	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567425.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16 567465.16	4148590.16 4148590.16	0.000 0.000									
567485.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16 567765.16	4148590.16 4148590.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567785.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567845.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567865.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567885.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567905.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567965.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567985.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568005.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568025.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568045.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568065.16 568085.16	4148590.16 4148590.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005
568105.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568125.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568185.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568205.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568225.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568245.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568265.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568285.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568305.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568325.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568345.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568365.16 568385.16	4148590.16 4148590.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568405.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16 568685.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16 568705.16	4148590.16 4148590.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568705.16	4148590.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Cancer Risk = ∑F			HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.12E-09	5.19E-08	8.64E-09	0.06	0.000
2.30E-09	5.61E-08	9.34E-09	0.07	0.000
2.49E-09	6.09E-08	1.01E-08	0.07	0.000
2.71E-09	6.61E-08	1.10E-08	0.08	0.000
2.97E-09	7.27E-08	1.21E-08	0.09	0.000
3.26E-09	7.96E-08	1.32E-08	0.10	0.000
3.57E-09	8.72E-08	1.45E-08	0.11	0.000
3.97E-09	9.69E-08	1.61E-08	0.12	0.000
4.44E-09	1.08E-07	1.81E-08	0.13	0.000
4.96E-09 5.58E-09	1.21E-07 1.36E-07	2.02E-08 2.27E-08	0.15 0.16	0.000 0.000
6.32E-09	1.54E-07	2.57E-08	0.10	0.000
7.24E-09	1.77E-07	2.95E-08	0.21	0.000
8.30E-09	2.03E-07	3.38E-08	0.24	0.000
9.58E-09	2.34E-07	3.90E-08	0.28	0.000
1.12E-08	2.73E-07	4.54E-08	0.33	0.000
1.30E-08	3.18E-07	5.29E-08	0.38	0.000
1.51E-08	3.69E-07	6.15E-08	0.45	0.000
1.76E-08	4.29E-07	7.14E-08	0.52	0.000
2.04E-08	4.98E-07	8.29E-08	0.60	0.000
2.35E-08	5.74E-07	9.56E-08	0.69	0.000
2.70E-08	6.61E-07	1.10E-07	0.80	0.000
3.08E-08	7.53E-07	1.25E-07	0.91	0.001
3.49E-08	8.54E-07	1.42E-07	1.03	0.001
3.92E-08	9.58E-07	1.60E-07	1.16	0.001
5.25E-08	1.28E-06	2.14E-07	1.55	0.001
5.62E-08	1.37E-06	2.29E-07	1.66	0.001
5.92E-08	1.45E-06	2.41E-07	1.75	0.001
6.13E-08	1.50E-06	2.49E-07	1.81	0.001
6.24E-08	1.52E-06	2.54E-07	1.84	0.001
6.27E-08	1.53E-06	2.55E-07	1.85	0.001
6.23E-08	1.52E-06	2.54E-07	1.84	0.001
6.16E-08 6.13E-08	1.51E-06 1.50E-06	2.51E-07 2.49E-07	1.82 1.81	0.001 0.001
5.93E-08	1.45E-06	2.43E-07 2.41E-07	1.75	0.001
5.85E-08	1.43E-06	2.38E-07	1.73	0.001
5.77E-08	1.41E-06	2.35E-07	1.70	0.001
5.67E-08	1.39E-06	2.31E-07	1.67	0.001
5.50E-08	1.34E-06	2.24E-07	1.62	0.001
5.38E-08	1.31E-06	2.19E-07	1.59	0.001
5.20E-08	1.27E-06	2.12E-07	1.53	0.001
4.97E-08	1.21E-06	2.02E-07	1.47	0.001
4.80E-08	1.17E-06	1.95E-07	1.42	0.001
4.60E-08	1.12E-06	1.87E-07	1.36	0.001
4.41E-08	1.08E-06	1.79E-07	1.30	0.001
4.21E-08	1.03E-06	1.71E-07	1.24	0.001
4.15E-08	1.01E-06	1.69E-07	1.22	0.001
3.82E-08	9.33E-07	1.55E-07	1.13	0.001
3.63E-08	8.87E-07	1.48E-07	1.07	0.001
3.45E-08	8.43E-07	1.40E-07	1.02	0.001
2.84E-08 2.71F-08	6.95E-07 6.63E-07	1.16E-07 1.10E-07	0.84	0.000 0.000
2.71E-08 2.59E-08	6.83E-07	1.10E-07 1.05E-07	0.80 0.76	0.000
2.47E-08	6.05E-07	1.01E-07	0.73	0.000
2.47E-08 2.37E-08	5.80E-07	9.65E-08	0.70	0.000
2.28E-08	5.56E-07	9.26E-08	0.67	0.000
2.18E-08	5.33E-07	8.88E-08	0.64	0.000
2.10E-08	5.12E-07	8.53E-08	0.62	0.000
2.01E-08	4.91E-07	8.18E-08	0.59	0.000
1.53E-09	3.73E-08	6.21E-09	0.05	0.000
1.62E-09	3.96E-08	6.60E-09	0.05	0.000
1.73E-09	4.22E-08	7.02E-09	0.05	0.000
1.84E-09	4.50E-08	7.50E-09	0.05	0.000
1.97E-09	4.82E-08	8.03E-09	0.06	0.000
2.13E-09	5.20E-08	8.66E-09	0.06	0.000
2.30E-09 2.48E-09	5.62E-08 6.06E-08	9.36E-09 1.01E-08	0.07 0.07	0.000 0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
F6740F 46	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567485.16 567505.16	4148610.16 4148610.16	0.000 0.000									
567525.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16 567745.16	4148610.16 4148610.16	0.000 0.000	0.000	0.000 0.000	0.000	0.000	0.001 0.001	0.001 0.001	0.001	0.001	0.001 0.001
567765.16	4148610.16	0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.001	0.001	0.001 0.001	0.001 0.001	0.001
567785.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002
567805.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567845.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567865.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567885.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567905.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567925.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567965.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567985.16 568005.16	4148610.16 4148610.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006
568025.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568045.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568065.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568085.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568105.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568165.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568185.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568205.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568225.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568245.16 568265.16	4148610.16 4148610.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005
568285.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568325.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568345.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568365.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568385.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568405.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16 568525.16	4148610.16 4148610.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568545.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148610.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16 568775.16	4148610.16 4148610.16	0.000	0.000	0.000 0.000	0.000	0.000	0.002 0.002	0.002	0.002	0.002	0.002 0.002
568725.16 567325.16	4148610.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.002	0.002 0.000	0.002 0.000	0.002 0.000	0.002
567345.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Cancer Risk = ∑R:	1*CDBM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.69E-09	6.59E-08	1.10E-08	0.08	0.000
2.95E-09	7.21E-08	1.20E-08	0.09	0.000
3.26E-09	7.98E-08	1.33E-08	0.10	0.000
3.58E-09	8.75E-08	1.46E-08	0.11	0.000
3.98E-09	9.74E-08	1.62E-08	0.12	0.000
4.44E-09	1.09E-07	1.81E-08	0.13	0.000
4.95E-09	1.21E-07	2.02E-08	0.15	0.000
5.59E-09	1.37E-07	2.27E-08	0.16	0.000
6.37E-09	1.56E-07	2.59E-08	0.19	0.000
7.27E-09	1.78E-07	2.96E-08	0.21	0.000
8.39E-09	2.05E-07	3.41E-08	0.25	0.000
9.75E-09	2.38E-07	3.97E-08	0.29	0.000
1.14E-08 1.33E-08	2.79E-07 3.26E-07	4.64E-08 5.42E-08	0.34 0.39	0.000 0.000
1.58E-08	3.87E-07	6.44E-08	0.39	0.000
1.83E-08	4.48E-07	7.46E-08	0.47	0.000
2.14E-08	5.23E-07	8.71E-08	0.63	0.000
2.51E-08	6.12E-07	1.02E-07	0.74	0.000
2.89E-08	7.07E-07	1.18E-07	0.85	0.001
3.32E-08	8.11E-07	1.35E-07	0.98	0.001
3.80E-08	9.30E-07	1.55E-07	1.12	0.001
4.31E-08	1.05E-06	1.75E-07	1.27	0.001
4.85E-08	1.18E-06	1.97E-07	1.43	0.001
5.93E-08	1.45E-06	2.41E-07	1.75	0.001
6.41E-08	1.57E-06	2.61E-07	1.89	0.001
6.81E-08	1.66E-06	2.77E-07	2.01	0.001
7.08E-08	1.73E-06	2.88E-07	2.09	0.001
7.22E-08	1.77E-06	2.94E-07	2.13	0.001
7.24E-08 7.20E-08	1.77E-06 1.76E-06	2.95E-07 2.93E-07	2.14 2.12	0.001 0.001
7.20E-08 7.16E-08	1.75E-06	2.93E-07 2.91E-07	2.12	0.001
6.86E-08	1.68E-06	2.79E-07	2.03	0.001
6.70E-08	1.64E-06	2.73E-07	1.98	0.001
6.57E-08	1.61E-06	2.67E-07	1.94	0.001
6.47E-08	1.58E-06	2.63E-07	1.91	0.001
6.30E-08	1.54E-06	2.56E-07	1.86	0.001
6.06E-08	1.48E-06	2.47E-07	1.79	0.001
5.85E-08	1.43E-06	2.38E-07	1.73	0.001
5.32E-08	1.30E-06	2.16E-07	1.57	0.001
5.08E-08	1.24E-06	2.07E-07	1.50	0.001
4.87E-08	1.19E-06	1.98E-07	1.44	0.001
4.65E-08	1.14E-06	1.89E-07	1.37	0.001
4.40E-08	1.08E-06	1.79E-07	1.30	0.001
4.19E-08	1.02E-06	1.71E-07	1.24	0.001
3.94E-08 3.74E-08	9.64E-07 9.13E-07	1.60E-07 1.52E-07	1.16 1.10	0.001 0.001
3.54E-08	8.65E-07	1.44E-07	1.10	0.001
3.20E-08	7.82E-07	1.30E-07	0.94	0.001
3.04E-08	7.42E-07	1.24E-07	0.90	0.001
2.90E-08	7.10E-07	1.18E-07	0.86	0.001
2.77E-08	6.77E-07	1.13E-07	0.82	0.000
2.65E-08	6.48E-07	1.08E-07	0.78	0.000
2.53E-08	6.18E-07	1.03E-07	0.75	0.000
2.42E-08	5.93E-07	9.87E-08	0.72	0.000
2.33E-08	5.69E-07	9.47E-08	0.69	0.000
2.23E-08	5.46E-07	9.09E-08	0.66	0.000
2.15E-08	5.24E-07	8.73E-08	0.63	0.000
2.05E-08	5.02E-07	8.35E-08	0.61	0.000
1.53E-09	3.75E-08	6.24E-09	0.05	0.000
1.63E-09 1.73E-09	3.98E-08 4.24E-08	6.63E-09 7.05E-09	0.05	0.000 0.000
1.73E-09 1.85E-09	4.24E-08 4.52E-08	7.05E-09 7.52E-09	0.05 0.05	0.000
1.98E-09	4.83E-08	8.05E-09	0.06	0.000
2.13E-09	5.21E-08	8.68E-09	0.06	0.000
2.30E-09	5.61E-08	9.34E-09	0.07	0.000
2.48E-09	6.06E-08	1.01E-08	0.07	0.000
2.69E-09	6.58E-08	1.10E-08	0.08	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567505.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16 567565.16	4148630.16 4148630.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000
567585.16	4148630.16	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000
567605.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16 567785.16	4148630.16 4148630.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.001 0.002	0.001 0.002	0.001 0.002	0.001 0.002	0.001 0.002
567805.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567845.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567865.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567885.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567905.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567925.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567945.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567985.16	4148630.16	0.000 0.000	0.000	0.000	0.000	0.000	0.006	0.006 0.007	0.006	0.006	0.006
568005.16 568025.16	4148630.16 4148630.16	0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.007 0.007	0.007	0.007 0.007	0.007 0.007	0.007 0.007
568045.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568065.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568085.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568145.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568165.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568185.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568205.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568225.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.006 0.006	0.006	0.006	0.006	0.006
568245.16 568265.16	4148630.16 4148630.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006
568305.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568325.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568345.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568365.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568385.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568405.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16 568465.16	4148630.16 4148630.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003	0.003	0.003 0.003
568505.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003 0.003	0.003 0.003	0.003
568525.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16 568685.16	4148630.16 4148630.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568705.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148630.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16 567465.16	4148650.16 4148650.16	0.000 0.000									
567485.16 567485.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Cancer Risk = ∑F			HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.94E-09	7.18E-08	1.20E-08	0.09	0.000
3.25E-09	7.95E-08	1.32E-08	0.10	0.000
3.59E-09	8.78E-08	1.46E-08	0.11	0.000
3.98E-09	9.73E-08	1.62E-08	0.12	0.000
4.42E-09	1.08E-07	1.80E-08	0.13	0.000
4.95E-09	1.21E-07	2.01E-08	0.15	0.000
5.59E-09	1.37E-07	2.27E-08	0.16	0.000
6.38E-09	1.56E-07	2.59E-08	0.19	0.000
7.31E-09	1.79E-07	2.98E-08	0.22	0.000
8.47E-09 9.88E-09	2.07E-07 2.42E-07	3.44E-08 4.02E-08	0.25 0.29	0.000 0.000
1.16E-08	2.83E-07	4.02E-08 4.72E-08	0.29	0.000
1.36E-08	3.33E-07	5.54E-08	0.40	0.000
1.62E-08	3.95E-07	6.58E-08	0.48	0.000
1.91E-08	4.66E-07	7.76E-08	0.56	0.000
2.25E-08	5.50E-07	9.16E-08	0.66	0.000
2.66E-08	6.49E-07	1.08E-07	0.78	0.000
3.10E-08	7.58E-07	1.26E-07	0.92	0.001
3.59E-08	8.76E-07	1.46E-07	1.06	0.001
4.14E-08	1.01E-06	1.69E-07	1.22	0.001
4.75E-08	1.16E-06	1.93E-07	1.40	0.001
5.37E-08	1.31E-06	2.18E-07	1.58	0.001
6.04E-08	1.48E-06	2.46E-07	1.78	0.001
7.39E-08	1.81E-06	3.01E-07	2.18	0.001
7.93E-08	1.94E-06	3.23E-07	2.34	0.001
8.28E-08	2.02E-06	3.37E-07	2.44	0.001
8.46E-08	2.07E-06	3.44E-07	2.50	0.001
8.48E-08	2.07E-06	3.45E-07	2.50	0.001
8.45E-08 8.01E-08	2.06E-06 1.96E-06	3.44E-07 3.26E-07	2.49 2.36	0.001 0.001
7.80E-08	1.91E-06	3.20E-07 3.17E-07	2.30	0.001
7.65E-08	1.87E-06	3.11E-07	2.26	0.001
7.42E-08	1.81E-06	3.02E-07	2.19	0.001
7.20E-08	1.76E-06	2.93E-07	2.13	0.001
6.91E-08	1.69E-06	2.81E-07	2.04	0.001
6.66E-08	1.63E-06	2.71E-07	1.97	0.001
6.02E-08	1.47E-06	2.45E-07	1.78	0.001
5.68E-08	1.39E-06	2.31E-07	1.68	0.001
5.38E-08	1.31E-06	2.19E-07	1.59	0.001
5.09E-08	1.24E-06	2.07E-07	1.50	0.001
4.87E-08	1.19E-06	1.98E-07	1.44	0.001
4.97E-08	1.22E-06	2.02E-07	1.47	0.001
4.34E-08	1.06E-06	1.77E-07	1.28	0.001
4.07E-08	9.95E-07	1.66E-07	1.20	0.001
3.85E-08	9.41E-07	1.57E-07	1.14	0.001
3.44E-08 3.28E-08	8.41E-07 8.02E-07	1.40E-07 1.33E-07	1.02 0.97	0.001 0.001
3.28E-08 3.11E-08	7.61E-07	1.33E-07 1.27E-07	0.97	0.001
2.96E-08	7.01L-07 7.24E-07	1.21E-07	0.92	0.001
2.83E-08	6.92E-07	1.15E-07	0.84	0.000
2.70E-08	6.60E-07	1.10E-07	0.80	0.000
2.59E-08	6.34E-07	1.06E-07	0.77	0.000
2.48E-08	6.07E-07	1.01E-07	0.73	0.000
2.38E-08	5.83E-07	9.70E-08	0.70	0.000
2.29E-08	5.60E-07	9.32E-08	0.68	0.000
2.20E-08	5.38E-07	8.96E-08	0.65	0.000
2.11E-08	5.15E-07	8.58E-08	0.62	0.000
1.54E-09	3.77E-08	6.27E-09	0.05	0.000
1.64E-09	4.01E-08	6.67E-09	0.05	0.000
1.74E-09	4.26E-08	7.09E-09	0.05	0.000
1.86E-09	4.54E-08	7.56E-09	0.05	0.000
1.99E-09	4.85E-08	8.08E-09	0.06	0.000
2.13E-09	5.22E-08	8.68E-09	0.06	0.000
2.30E-09	5.61E-08	9.34E-09	0.07	0.000
2.49E-09 2.69E-09	6.08E-08 6.59E-08	1.01E-08 1.10E-08	0.07	0.000 0.000
2.69E-09 2.94E-09	6.59E-08 7.18E-08	1.10E-08 1.19E-08	0.08 0.09	0.000
2.546 05	7.10L-00	1.136 00	5.05	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567525.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16 567605.16	4148650.16 4148650.16	0.000 0.000									
567625.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16 567825.16	4148650.16 4148650.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567845.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567865.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567885.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567905.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567925.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567945.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567965.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568005.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568025.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568045.16 568065.16	4148650.16 4148650.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.009 0.009	0.009 0.009	0.009 0.009	0.009 0.009	0.009 0.009
568125.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.008
568145.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568165.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568185.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568225.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568245.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568265.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568285.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568305.16 568325.16	4148650.16 4148650.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.005	0.006 0.005	0.006 0.005	0.006 0.005	0.006 0.005
568345.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568365.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568385.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568405.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16 568565.16	4148650.16 4148650.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568585.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568605.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148650.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16 567365.16	4148670.16 4148670.16	0.000 0.000									
567385.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Cancer Risk = ∑R1	L*Copm		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.22E-09	7.87E-08	1.31E-08	0.10	0.000
3.57E-09 3.99E-09	8.73E-08 9.74E-08	1.45E-08 1.62E-08	0.11 0.12	0.000 0.000
4.43E-09	1.08E-07	1.80E-08	0.13	0.000
4.95E-09	1.21E-07	2.02E-08	0.15	0.000
5.61E-09	1.37E-07	2.28E-08	0.17	0.000
6.40E-09	1.56E-07	2.60E-08	0.19	0.000
7.37E-09	1.80E-07	3.00E-08	0.22	0.000
8.56E-09	2.09E-07	3.48E-08	0.25	0.000
9.97E-09	2.44E-07	4.06E-08	0.29	0.000
1.17E-08	2.87E-07	4.78E-08	0.35	0.000
1.40E-08	3.41E-07	5.68E-08	0.41	0.000
1.67E-08 2.01E-08	4.07E-07 4.92E-07	6.78E-08 8.19E-08	0.49	0.000 0.000
2.37E-08	4.92E-07 5.79E-07	9.64E-08	0.59 0.70	0.000
2.81E-08	6.86E-07	1.14E-07	0.83	0.000
3.33E-08	8.14E-07	1.36E-07	0.98	0.001
3.91E-08	9.56E-07	1.59E-07	1.15	0.001
4.55E-08	1.11E-06	1.85E-07	1.34	0.001
5.22E-08	1.28E-06	2.12E-07	1.54	0.001
5.98E-08	1.46E-06	2.43E-07	1.77	0.001
6.81E-08	1.66E-06	2.77E-07	2.01	0.001
7.66E-08	1.87E-06	3.12E-07	2.26	0.001
9.36E-08	2.29E-06	3.81E-07	2.76	0.002
9.84E-08	2.41E-06	4.01E-07	2.90	0.002
1.00E-07 1.01E-07	2.45E-06 2.48E-06	4.08E-07 4.12E-07	2.96 2.99	0.002 0.002
9.59E-08	2.34E-06	3.90E-07	2.83	0.002
9.27E-08	2.27E-06	3.77E-07	2.74	0.002
8.96E-08	2.19E-06	3.65E-07	2.65	0.002
8.69E-08	2.12E-06	3.54E-07	2.57	0.002
7.97E-08	1.95E-06	3.24E-07	2.35	0.001
7.63E-08	1.87E-06	3.11E-07	2.25	0.001
7.29E-08	1.78E-06	2.97E-07	2.15	0.001
6.84E-08	1.67E-06	2.78E-07	2.02	0.001
6.46E-08	1.58E-06	2.63E-07	1.91	0.001
6.05E-08 5.69E-08	1.48E-06 1.39E-06	2.46E-07 2.32E-07	1.79	0.001 0.001
5.36E-08	1.39E-06	2.32E-07 2.18E-07	1.68 1.58	0.001
5.06E-08	1.24E-06	2.16E 07 2.06E-07	1.49	0.001
4.77E-08	1.17E-06	1.94E-07	1.41	0.001
4.46E-08	1.09E-06	1.82E-07	1.32	0.001
3.74E-08	9.14E-07	1.52E-07	1.10	0.001
3.52E-08	8.60E-07	1.43E-07	1.04	0.001
3.35E-08	8.19E-07	1.36E-07	0.99	0.001
3.19E-08	7.79E-07	1.30E-07	0.94	0.001
3.03E-08	7.41E-07	1.23E-07	0.89	0.001
2.89E-08	7.07E-07	1.18E-07	0.85	0.001
2.76E-08 2.65E-08	6.76E-07 6.48E-07	1.12E-07 1.08E-07	0.82 0.78	0.000 0.000
2.54E-08	6.48E-07 6.21E-07	1.08E-07 1.03E-07	0.78	0.000
2.44E-08	5.97E-07	9.94E-08	0.72	0.000
2.35E-08	5.75E-07	9.57E-08	0.69	0.000
2.26E-08	5.53E-07	9.21E-08	0.67	0.000
2.17E-08	5.31E-07	8.84E-08	0.64	0.000
1.55E-09	3.80E-08	6.32E-09	0.05	0.000
1.65E-09	4.02E-08	6.69E-09	0.05	0.000
1.75E-09	4.28E-08	7.13E-09	0.05	0.000
1.87E-09	4.56E-08	7.59E-09	0.06	0.000
2.00E-09	4.88E-08	8.12E-09	0.06	0.000
2.14E-09 2.31E-09	5.22E-08 5.64E-08	8.69E-09 9.39E-09	0.06 0.07	0.000 0.000
2.49E-09	6.08E-08	1.01E-08	0.07	0.000
2.71E-09	6.62E-08	1.10E-08	0.08	0.000
2.94E-09	7.19E-08	1.20E-08	0.09	0.000
3.22E-09	7.86E-08	1.31E-08	0.09	0.000
3.55E-09	8.67E-08	1.44E-08	0.10	0.000

						Proiect	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567565.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16 567645.16	4148670.16 4148670.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001
567665.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567845.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567865.16 567885.16	4148670.16 4148670.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
567905.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.005	0.004
567925.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567945.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567965.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568025.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568125.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568145.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568165.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568185.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568205.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568225.16 568245.16	4148670.16 4148670.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.008 0.007	0.008 0.007	0.008 0.007	0.008 0.007	0.008 0.007
568245.16 568265.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568285.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.006	0.006
568305.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568325.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.005	0.006	0.006	0.006	0.006
568345.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568365.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568385.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.004	0.005	0.004	0.004	0.004
568405.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568465.16	4148670.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568485.16 568505.16	4148670.16 4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568585.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148670.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16 568725.16	4148670.16 4148670.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567325.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16 567545.16	4148690.16 4148690.16	0.000 0.000									
567545.16 567565.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Cancer Risk = ∑R1	L*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.95E-09	9.65E-08	1.61E-08	0.12	0.000
4.44E-09	1.09E-07	1.81E-08	0.13	0.000
4.96E-09	1.21E-07	2.02E-08	0.15	0.000
5.62E-09	1.37E-07	2.29E-08	0.17	0.000
6.42E-09	1.57E-07	2.61E-08	0.19	0.000
7.40E-09	1.81E-07	3.01E-08	0.22	0.000
8.57E-09	2.10E-07	3.49E-08	0.25	0.000
1.00E-08	2.45E-07	4.08E-08	0.30	0.000
1.19E-08	2.91E-07	4.84E-08	0.35	0.000
1.42E-08	3.48E-07	5.79E-08	0.42	0.000
1.72E-08	4.20E-07	6.99E-08	0.51	0.000
2.07E-08	5.05E-07	8.42E-08	0.61	0.000
2.53E-08 3.00E-08	6.19E-07 7.34E-07	1.03E-07 1.22E-07	0.75 0.89	0.000 0.001
3.59E-08	8.77E-07	1.46E-07	1.06	0.001
4.24E-08	1.04E-06	1.72E-07	1.25	0.001
4.98E-08	1.22E-06	2.03E-07	1.47	0.001
5.79E-08	1.41E-06	2.35E-07	1.71	0.001
6.69E-08	1.64E-06	2.72E-07	1.98	0.001
7.71E-08	1.88E-06	3.14E-07	2.27	0.001
8.83E-08	2.16E-06	3.59E-07	2.61	0.002
1.19E-07	2.91E-06	4.84E-07	3.51	0.002
1.14E-07	2.78E-06	4.63E-07	3.36	0.002
1.09E-07	2.65E-06	4.42E-07	3.20	0.002
1.03E-07	2.52E-06	4.20E-07	3.04	0.002
9.80E-08	2.40E-06	3.99E-07	2.89	0.002
9.34E-08	2.28E-06	3.80E-07	2.76	0.002
8.86E-08	2.16E-06	3.60E-07	2.61	0.002
8.34E-08 7.79E-08	2.04E-06 1.90E-06	3.39E-07 3.17E-07	2.46 2.30	0.001 0.001
7.79E-08 7.30E-08	1.78E-06	2.97E-07	2.15	0.001
6.85E-08	1.67E-06	2.79E-07	2.02	0.001
6.38E-08	1.56E-06	2.59E-07	1.88	0.001
6.00E-08	1.47E-06	2.44E-07	1.77	0.001
5.61E-08	1.37E-06	2.28E-07	1.66	0.001
5.25E-08	1.28E-06	2.14E-07	1.55	0.001
4.90E-08	1.20E-06	1.99E-07	1.45	0.001
4.32E-08	1.06E-06	1.76E-07	1.27	0.001
4.06E-08	9.93E-07	1.65E-07	1.20	0.001
3.82E-08	9.33E-07	1.55E-07	1.13	0.001
3.60E-08	8.79E-07	1.46E-07	1.06	0.001
3.42E-08	8.35E-07	1.39E-07	1.01	0.001
3.26E-08	7.96E-07	1.33E-07	0.96	0.001
3.10E-08	7.57E-07	1.26E-07	0.91	0.001
2.95E-08 2.83E-08	7.21E-07 6.91E-07	1.20E-07 1.15E-07	0.87	0.001 0.000
2.71E-08	6.63E-07	1.13E-07 1.10E-07	0.83 0.80	0.000
2.61E-08	6.37E-07	1.06E-07	0.77	0.000
2.51E-08	6.13E-07	1.02E-07	0.74	0.000
2.42E-08	5.92E-07	9.86E-08	0.72	0.000
2.34E-08	5.72E-07	9.52E-08	0.69	0.000
2.25E-08	5.49E-07	9.14E-08	0.66	0.000
1.56E-09	3.82E-08	6.36E-09	0.05	0.000
1.66E-09	4.05E-08	6.73E-09	0.05	0.000
1.76E-09	4.30E-08	7.16E-09	0.05	0.000
1.88E-09	4.59E-08	7.64E-09	0.06	0.000
2.00E-09	4.90E-08	8.15E-09	0.06	0.000
2.14E-09	5.24E-08	8.73E-09	0.06	0.000
2.31E-09	5.64E-08	9.39E-09	0.07	0.000
2.50E-09	6.11E-08	1.02E-08	0.07	0.000
2.71E-09	6.61E-08	1.10E-08	0.08	0.000
2.96E-09 3.24E-09	7.24E-08 7.92E-08	1.21E-08 1.32E-08	0.09 0.10	0.000
3.55E-09	7.92E-08 8.68E-08	1.45E-08	0.10	0.000
3.94E-09	9.63E-08	1.43E-08 1.60E-08	0.10	0.000
4.40E-09	1.07E-07	1.79E-08	0.13	0.000
4.99E-09	1.22E-07	2.03E-08	0.15	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567625.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16 567725.16	4148690.16 4148690.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567745.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.001	0.002	0.001
567785.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567845.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567865.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567885.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567905.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567925.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567945.16	4148690.16 4148690.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567965.16 567985.16	4148690.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.009 0.010	0.009 0.010	0.009 0.010	0.009 0.010	0.009 0.010
568085.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.013
568105.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568145.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568165.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568185.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568205.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568225.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568245.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568265.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568285.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568305.16 568325.16	4148690.16 4148690.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006
568345.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568365.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568385.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568425.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568465.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16 568565.16	4148690.16 4148690.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003	0.003 0.003	0.003 0.003
568585.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003 0.002	0.003	0.003
568605.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148690.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16 567385.16	4148710.16 4148710.16	0.000 0.000									
567405.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16 567625.16	4148710.16 4148710.16	0.000 0.000									
567645.16 567645.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
567665.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
22.000.20	3,20.20	2.200	2.300	2.200		2.300	2.302	2.302		2.302	

	Cancer Risk = ∑R1	L*Copy		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
5.63E-09	1.38E-07	2.29E-08	0.17	0.000
6.43E-09	1.57E-07	2.61E-08	0.17	0.000
7.39E-09	1.81E-07	3.01E-08	0.22	0.000
8.58E-09	2.10E-07	3.49E-08	0.25	0.000
1.01E-08	2.47E-07	4.11E-08	0.30	0.000
1.21E-08	2.95E-07	4.91E-08	0.36	0.000
1.45E-08	3.55E-07	5.90E-08	0.43	0.000
1.77E-08 2.16E-08	4.32E-07 5.28E-07	7.20E-08 8.79E-08	0.52 0.64	0.000 0.000
2.63E-08	6.43E-07	1.07E-07	0.78	0.000
3.33E-08	8.14E-07	1.35E-07	0.98	0.001
3.87E-08	9.46E-07	1.58E-07	1.14	0.001
4.62E-08	1.13E-06	1.88E-07	1.36	0.001
5.51E-08	1.35E-06	2.24E-07	1.63	0.001
6.49E-08 7.56E-08	1.59E-06 1.85E-06	2.64E-07 3.08E-07	1.92 2.23	0.001 0.001
8.82E-08	2.16E-06	3.59E-07	2.23	0.001
1.02E-07	2.50E-06	4.16E-07	3.02	0.002
1.17E-07	2.86E-06	4.77E-07	3.46	0.002
1.48E-07	3.62E-06	6.02E-07	4.37	0.003
1.42E-07	3.48E-06	5.79E-07	4.20	0.002
1.27E-07	3.10E-06	5.16E-07	3.74	0.002
1.19E-07 1.11E-07	2.90E-06 2.72E-06	4.83E-07 4.53E-07	3.50 3.29	0.002 0.002
1.04E-07	2.55E-06	4.33E-07 4.25E-07	3.08	0.002
9.74E-08	2.38E-06	3.96E-07	2.87	0.002
9.03E-08	2.21E-06	3.67E-07	2.66	0.002
8.39E-08	2.05E-06	3.41E-07	2.47	0.001
7.80E-08	1.91E-06	3.17E-07	2.30	0.001
7.24E-08	1.77E-06	2.95E-07	2.14	0.001
6.71E-08 6.28E-08	1.64E-06 1.53E-06	2.73E-07	1.98	0.001
5.84E-08	1.43E-06	2.55E-07 2.38E-07	1.85 1.72	0.001 0.001
5.42E-08	1.33E-06	2.21E-07	1.60	0.001
4.73E-08	1.16E-06	1.92E-07	1.39	0.001
4.41E-08	1.08E-06	1.80E-07	1.30	0.001
4.16E-08	1.02E-06	1.69E-07	1.23	0.001
3.89E-08	9.52E-07	1.58E-07	1.15	0.001
3.70E-08 3.50E-08	9.05E-07 8.56E-07	1.51E-07 1.42E-07	1.09	0.001 0.001
3.32E-08	8.11E-07	1.42E-07 1.35E-07	1.03 0.98	0.001
3.16E-08	7.73E-07	1.29E-07	0.93	0.001
3.02E-08	7.37E-07	1.23E-07	0.89	0.001
2.89E-08	7.06E-07	1.17E-07	0.85	0.001
2.78E-08	6.79E-07	1.13E-07	0.82	0.000
2.68E-08	6.54E-07	1.09E-07	0.79	0.000
2.58E-08	6.29E-07	1.05E-07	0.76	0.000
2.48E-08 2.40E-08	6.05E-07 5.86E-07	1.01E-07 9.75E-08	0.73 0.71	0.000 0.000
1.57E-09	3.83E-08	6.38E-09	0.05	0.000
1.66E-09	4.07E-08	6.77E-09	0.05	0.000
1.77E-09	4.32E-08	7.19E-09	0.05	0.000
1.88E-09	4.61E-08	7.67E-09	0.06	0.000
2.01E-09	4.92E-08	8.18E-09	0.06	0.000
2.15E-09	5.26E-08	8.76E-09	0.06	0.000
2.31E-09 2.50E-09	5.65E-08 6.11E-08	9.41E-09 1.02E-08	0.07 0.07	0.000 0.000
2.72E-09	6.64E-08	1.02E-08 1.11E-08	0.07	0.000
2.97E-09	7.26E-08	1.21E-08	0.09	0.000
3.25E-09	7.93E-08	1.32E-08	0.10	0.000
3.56E-09	8.70E-08	1.45E-08	0.10	0.000
3.93E-09	9.61E-08	1.60E-08	0.12	0.000
4.38E-09	1.07E-07	1.78E-08	0.13	0.000
4.95E-09 5.62E-09	1.21E-07 1.37E-07	2.01E-08 2.29E-08	0.15 0.17	0.000 0.000
6.40E-09	1.56E-07	2.60E-08	0.17	0.000
7.37E-09	1.80E-07	3.00E-08	0.22	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567685.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16 567725.16	4148710.16 4148710.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567745.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567845.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567865.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567885.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567905.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567925.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567945.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567965.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567985.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568065.16 568085.16	4148710.16 4148710.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.017 0.016	0.017 0.016	0.017 0.016	0.017 0.016	0.017 0.016
568105.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.016	0.016	0.016	0.015	0.015
568125.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568165.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.012	0.012
568185.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568205.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568225.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568245.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568265.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568285.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568305.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568325.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568345.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568405.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16 568445.16	4148710.16 4148710.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568465.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568585.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148710.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002 0.002
568685.16 567325.16	4148710.16 4148730.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.000	0.002 0.000	0.002 0.000	0.002 0.000	0.002
567345.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16 567565.16	4148730.16 4148730.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000						
567565.16 567585.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001

	Cancer Risk = ∑R1	L*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
8.60E-09	2.10E-07	3.50E-08	0.25	0.000
1.02E-08	2.48E-07	4.13E-08	0.23	0.000
1.21E-08	2.97E-07	4.94E-08	0.36	0.000
1.48E-08	3.61E-07	6.02E-08	0.44	0.000
1.81E-08	4.43E-07	7.37E-08	0.53	0.000
2.24E-08	5.48E-07	9.12E-08	0.66	0.000
2.76E-08 3.44E-08	6.74E-07 8.40E-07	1.12E-07 1.40E-07	0.81 1.01	0.000 0.001
4.17E-08	1.02E-06	1.70E-07	1.01	0.001
5.06E-08	1.24E-06	2.06E-07	1.49	0.001
6.11E-08	1.49E-06	2.49E-07	1.80	0.001
7.33E-08	1.79E-06	2.98E-07	2.16	0.001
8.63E-08	2.11E-06	3.51E-07	2.55	0.002
1.01E-07 1.18E-07	2.48E-06 2.89E-06	4.12E-07 4.82E-07	2.99 3.50	0.002 0.002
1.39E-07	3.39E-06	5.65E-07	4.10	0.002
1.95E-07	4.77E-06	7.94E-07	5.76	0.003
1.84E-07	4.50E-06	7.50E-07	5.44	0.003
1.73E-07	4.23E-06	7.04E-07	5.10	0.003
1.61E-07	3.93E-06	6.55E-07	4.75	0.003
1.37E-07 1.26E-07	3.34E-06 3.07E-06	5.56E-07 5.12E-07	4.03 3.71	0.002 0.002
1.16E-07	2.84E-06	4.73E-07	3.43	0.002
1.07E-07	2.62E-06	4.37E-07	3.17	0.002
9.80E-08	2.39E-06	3.99E-07	2.89	0.002
8.92E-08	2.18E-06	3.63E-07	2.63	0.002
8.26E-08	2.02E-06	3.36E-07	2.44	0.001
7.65E-08 7.04E-08	1.87E-06 1.72E-06	3.11E-07 2.86E-07	2.26 2.08	0.001 0.001
6.53E-08	1.72E-06 1.60E-06	2.66E-07	1.93	0.001
5.20E-08	1.27E-06	2.11E-07	1.53	0.001
4.84E-08	1.18E-06	1.97E-07	1.43	0.001
4.52E-08	1.11E-06	1.84E-07	1.34	0.001
4.26E-08	1.04E-06	1.73E-07	1.26	0.001
4.00E-08 3.77E-08	9.79E-07 9.22E-07	1.63E-07 1.53E-07	1.18 1.11	0.001 0.001
3.57E-08	8.71E-07	1.45E-07	1.05	0.001
3.38E-08	8.25E-07	1.37E-07	1.00	0.001
3.22E-08	7.88E-07	1.31E-07	0.95	0.001
3.09E-08	7.54E-07	1.26E-07	0.91	0.001
2.95E-08	7.20E-07	1.20E-07	0.87	0.001
2.84E-08 2.74E-08	6.94E-07 6.70E-07	1.16E-07 1.12E-07	0.84 0.81	0.000 0.000
2.64E-08	6.46E-07	1.12L-07 1.08E-07	0.78	0.000
2.54E-08	6.21E-07	1.03E-07	0.75	0.000
1.57E-09	3.83E-08	6.38E-09	0.05	0.000
1.67E-09	4.08E-08	6.79E-09	0.05	0.000
1.77E-09	4.33E-08	7.20E-09	0.05	0.000
1.89E-09 2.01E-09	4.62E-08 4.92E-08	7.69E-09 8.20E-09	0.06 0.06	0.000 0.000
2.16E-09	5.27E-08	8.78E-09	0.06	0.000
2.32E-09	5.67E-08	9.44E-09	0.07	0.000
2.50E-09	6.12E-08	1.02E-08	0.07	0.000
2.71E-09	6.63E-08	1.10E-08	0.08	0.000
2.96E-09	7.22E-08	1.20E-08	0.09	0.000
3.24E-09 3.56E-09	7.92E-08 8.71E-08	1.32E-08 1.45E-08	0.10 0.11	0.000 0.000
3.94E-09	9.63E-08	1.43E-08 1.60E-08	0.11	0.000
4.39E-09	1.07E-07	1.78E-08	0.13	0.000
4.92E-09	1.20E-07	2.00E-08	0.15	0.000
5.58E-09	1.36E-07	2.27E-08	0.16	0.000
6.42E-09	1.57E-07	2.61E-08	0.19	0.000
7.36E-09 8.58E-09	1.80E-07 2.10E-07	3.00E-08 3.49E-08	0.22 0.25	0.000 0.000
8.58E-09 1.02E-08	2.10E-07 2.48E-07	3.49E-08 4.13E-08	0.25	0.000
1.23E-08	2.99E-07	4.99E-08	0.36	0.000
1.49E-08	3.65E-07	6.08E-08	0.44	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
E67765 46	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567765.16 567785.16	4148730.16 4148730.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567805.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567845.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567865.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567885.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567905.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567925.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567945.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567965.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568085.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568105.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.018 0.017	0.018	0.018	0.018	0.018 0.017
568125.16 568145.16	4148730.16 4148730.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.017	0.017 0.015	0.017 0.015	0.017 0.015	0.017
568165.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568185.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568205.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568225.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568245.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568265.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568285.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568305.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568325.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568365.16 568385.16	4148730.16 4148730.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005	0.005 0.005
568405.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568425.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.004	0.004	0.004
568465.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568585.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16 568625.16	4148730.16 4148730.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568645.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16 567465.16	4148750.16 4148750.16	0.000 0.000									
567485.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16 567665.16	4148750.16 4148750.16	0.000	0.000	0.000 0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16 567685.16	4148750.16 4148750.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567705.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567825.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567845.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004

	Cancer Risk = ∑R1	L*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.84E-08	4.50E-07	7.48E-08	0.54	0.000
2.31E-08	5.65E-07	9.40E-08	0.68	0.000
2.90E-08	7.08E-07	1.18E-07	0.85	0.001
3.64E-08	8.88E-07	1.48E-07	1.07	0.001
4.60E-08	1.12E-06	1.87E-07	1.36	0.001
5.57E-08	1.36E-06	2.26E-07	1.64	0.001
6.79E-08	1.66E-06	2.76E-07	2.00	0.001
8.27E-08	2.02E-06	3.36E-07	2.44	0.001
9.98E-08	2.44E-06	4.06E-07	2.95	0.002
1.18E-07 1.39E-07	2.88E-06 3.41E-06	4.80E-07 5.67E-07	3.48 4.12	0.002 0.002
2.33E-07	5.69E-06	9.48E-07	6.87	0.002
2.11E-07	5.15E-06	8.58E-07	6.22	0.004
1.91E-07	4.67E-06	7.77E-07	5.63	0.003
1.73E-07	4.22E-06	7.03E-07	5.10	0.003
1.57E-07	3.82E-06	6.37E-07	4.62	0.003
1.42E-07	3.46E-06	5.77E-07	4.18	0.002
1.29E-07	3.15E-06	5.24E-07	3.80	0.002
1.16E-07	2.85E-06	4.74E-07	3.44	0.002
1.06E-07 9.46E-08	2.60E-06	4.32E-07 3.85E-07	3.13	0.002 0.002
9.46E-08 8.67E-08	2.31E-06 2.12E-06	3.53E-07	2.79 2.56	0.002
7.97E-08	1.95E-06	3.24E-07	2.35	0.002
7.35E-08	1.80E-06	2.99E-07	2.17	0.001
6.20E-08	1.51E-06	2.52E-07	1.83	0.001
5.83E-08	1.42E-06	2.37E-07	1.72	0.001
5.33E-08	1.30E-06	2.17E-07	1.57	0.001
4.95E-08	1.21E-06	2.01E-07	1.46	0.001
4.32E-08	1.06E-06	1.76E-07	1.28	0.001
4.07E-08	9.95E-07	1.66E-07	1.20	0.001
3.84E-08 3.64E-08	9.38E-07 8.89E-07	1.56E-07 1.48E-07	1.13 1.07	0.001 0.001
3.44E-08	8.40E-07	1.40E-07	1.07	0.001
3.29E-08	8.05E-07	1.34E-07	0.97	0.001
3.14E-08	7.67E-07	1.28E-07	0.93	0.001
3.00E-08	7.34E-07	1.22E-07	0.89	0.001
2.89E-08	7.07E-07	1.18E-07	0.85	0.001
2.79E-08	6.83E-07	1.14E-07	0.82	0.000
2.39E-08	5.84E-07	9.72E-08	0.70	0.000
2.25E-08	5.49E-07	9.14E-08	0.66	0.000
1.57E-09	3.83E-08	6.38E-09	0.05	0.000
1.66E-09 1.77E-09	4.07E-08 4.33E-08	6.77E-09 7.20E-09	0.05 0.05	0.000 0.000
1.89E-09	4.61E-08	7.68E-09	0.06	0.000
2.01E-09	4.92E-08	8.20E-09	0.06	0.000
2.16E-09	5.27E-08	8.77E-09	0.06	0.000
2.32E-09	5.67E-08	9.44E-09	0.07	0.000
2.51E-09	6.14E-08	1.02E-08	0.07	0.000
2.71E-09	6.63E-08	1.10E-08	0.08	0.000
2.95E-09	7.21E-08	1.20E-08	0.09	0.000
3.23E-09 3.54E-09	7.89E-08 8.66E-08	1.31E-08 1.44E-08	0.10 0.10	0.000 0.000
3.92E-09	9.59E-08	1.44E-08 1.60E-08	0.10	0.000
4.36E-09	1.07E-07	1.77E-08	0.13	0.000
4.91E-09	1.20E-07	2.00E-08	0.14	0.000
5.57E-09	1.36E-07	2.27E-08	0.16	0.000
6.35E-09	1.55E-07	2.58E-08	0.19	0.000
7.36E-09	1.80E-07	3.00E-08	0.22	0.000
8.54E-09	2.09E-07	3.47E-08	0.25	0.000
1.02E-08	2.48E-07	4.13E-08	0.30	0.000
1.22E-08 1.50E-08	2.99E-07	4.98E-08	0.36	0.000
1.50E-08 1.87E-08	3.66E-07 4.57E-07	6.09E-08 7.61E-08	0.44 0.55	0.000 0.000
2.37E-08	4.37E-07 5.80E-07	9.66E-08	0.33	0.000
3.06E-08	7.47E-07	1.24E-07	0.90	0.001
3.89E-08	9.50E-07	1.58E-07	1.15	0.001
4.98E-08	1.22E-06	2.03E-07	1.47	0.001

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
E6705F 46	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567865.16 567885.16	4148750.16 4148750.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.007	0.005 0.007	0.005 0.007	0.005 0.007	0.005 0.007
567905.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.008	0.007	0.007
567925.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
567945.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568085.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568105.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568125.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568165.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568185.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568205.16 568225.16	4148750.16 4148750.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.012 0.011	0.012 0.011	0.012 0.011	0.012 0.011	0.012 0.011
568245.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568265.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.009	0.009	0.009
568285.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568305.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568345.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568365.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568385.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568405.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568425.16	4148750.16	0.000	0.000	0.000	0.000 0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16 568465.16	4148750.16 4148750.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568485.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568585.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16 568685.16	4148750.16 4148750.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568705.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16 567445.16	4148770.16 4148770.16	0.000 0.000									
567465.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16 567625.16	4148770.16 4148770.16	0.000 0.000									
567645.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
567665.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16 567805.16	4148770.16 4148770.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003
567825.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567845.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567865.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567885.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
567905.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567925.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568105.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568145.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020

	Cancer Risk = ∑R	1*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
Jid Hilliester	0.2	2 13	Total	
				unitless
6.17E-08	1.51E-06	2.51E-07	1.82	0.001
7.61E-08	1.86E-06	3.09E-07	2.24	0.001
9.31E-08	2.28E-06	3.79E-07	2.75	0.002
1.15E-07	2.80E-06	4.67E-07	3.39	0.002
1.40E-07	3.41E-06	5.68E-07	4.12	0.002
2.98E-07	7.28E-06	1.21E-06	8.79	0.005
2.57E-07	6.28E-06	1.04E-06	7.58	0.005
2.26E-07	5.52E-06	9.19E-07	6.67	0.004
1.76E-07	4.31E-06	7.18E-07	5.21	0.003
1.58E-07	3.85E-06	6.42E-07	4.65	0.003
1.41E-07	3.44E-06	5.73E-07	4.16	0.002
1.26E-07	3.09E-06	5.14E-07	3.73	0.002
1.11E-07	2.70E-06	4.50E-07	3.27	0.002
9.89E-08	2.42E-06	4.02E-07	2.92	0.002
9.04E-08	2.21E-06	3.68E-07	2.67	0.002
8.34E-08	2.04E-06	3.39E-07	2.46	0.001
6.94E-08	1.70E-06	2.82E-07	2.05	0.001
6.30E-08	1.54E-06	2.56E-07	1.86	0.001
5.89E-08	1.44E-06	2.39E-07	1.74	0.001
5.40E-08	1.32E-06	2.20E-07	1.59	0.001
5.01E-08	1.22E-06	2.04E-07	1.48	0.001
4.67E-08	1.14E-06	1.90E-07	1.38	0.001
4.38E-08	1.07E-06	1.78E-07	1.29	0.001
4.12E-08	1.01E-06	1.68E-07	1.22	0.001
3.90E-08	9.53E-07	1.59E-07	1.15	0.001
3.69E-08	9.01E-07	1.50E-07	1.09	0.001
3.52E-08	8.59E-07	1.43E-07	1.04	0.001
3.36E-08	8.20E-07	1.37E-07	0.99	0.001
3.19E-08	7.80E-07	1.30E-07	0.94	0.001
3.07E-08	7.49E-07	1.25E-07	0.90	0.001
2.61E-08	6.37E-07	1.06E-07	0.77	0.000
2.47E-08	6.05E-07	1.01E-07	0.73	0.000
2.32E-08	5.68E-07	9.45E-08	0.69	0.000
2.19E-08	5.35E-07	8.91E-08	0.65	0.000
1.56E-09	3.81E-08	6.35E-09	0.05	0.000
1.66E-09	4.05E-08	6.74E-09	0.05	0.000
1.76E-09	4.31E-08	7.18E-09	0.05	0.000
1.88E-09	4.60E-08	7.65E-09	0.06	0.000
2.01E-09	4.91E-08	8.17E-09	0.06	0.000
2.15E-09	5.26E-08	8.76E-09	0.06	0.000
2.32E-09	5.66E-08	9.43E-09	0.07	0.000
2.50E-09	6.12E-08	1.02E-08	0.07	0.000
2.71E-09	6.62E-08	1.10E-08	0.08	0.000
2.93E-09	7.17E-08	1.19E-08	0.09	0.000
3.21E-09	7.85E-08	1.31E-08	0.09	0.000
3.54E-09	8.64E-08	1.44E-08	0.10	
				0.000
3.89E-09	9.52E-08	1.58E-08	0.11	0.000
4.33E-09	1.06E-07	1.76E-08	0.13	0.000
4.89E-09	1.19E-07	1.99E-08	0.14	0.000
5.51E-09	1.35E-07	2.24E-08	0.16	0.000
6.28E-09	1.53E-07	2.55E-08	0.19	0.000
7.30E-09	1.78E-07	2.97E-08	0.22	0.000
8.52E-09	2.08E-07	3.47E-08	0.25	0.000
1.01E-08	2.46E-07	4.10E-08	0.30	0.000
1.21E-08	2.96E-07	4.93E-08	0.36	0.000
1.50E-08	3.66E-07	6.09E-08	0.44	0.000
1.89E-08	4.62E-07	7.69E-08	0.56	0.000
2.43E-08	5.95E-07	9.90E-08	0.72	0.000
3.20E-08	7.81E-07	1.30E-07	0.94	0.001
4.17E-08	1.02E-06	1.70E-07	1.23	0.001
5.47E-08	1.34E-06	2.23E-07	1.61	0.001
6.90E-08	1.69E-06	2.81E-07	2.04	0.001
8.62E-08	2.11E-06	3.51E-07	2.54	0.002
1.07E-07	2.62E-06	4.36E-07	3.16	0.002
1.34E-07	3.27E-06	5.44E-07	3.95	0.002
3.10E-07	7.57E-06	1.26E-06	9.14	0.005
2.27E-07	5.56E-06	9.25E-07	6.71	0.004
, _ 0,	J.JUL 00	3.232 07	0.71	0.004

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568165.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568185.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568205.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568225.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568245.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.010	0.010
568265.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568285.16	4148770.16	0.000 0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568325.16 568345.16	4148770.16 4148770.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.007 0.006	0.007 0.006	0.007 0.006	0.007 0.006	0.007 0.006
568365.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568385.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568405.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568445.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568465.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568625.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16 568705.16	4148770.16 4148770.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568725.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16 567605.16	4148790.16 4148790.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16 567645.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567665.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567825.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567845.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567865.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
567885.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
567905.16 568125.16	4148790.16 4148790.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.011 0.027	0.011 0.027	0.011 0.027	0.011 0.027	0.011 0.027
568145.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.027	0.027	0.027	0.027	0.027
568165.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.022
568185.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019
568205.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.010	0.014	0.014
568225.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568245.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568305.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568325.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568345.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568365.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568385.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005

	Calicel Kisk = 2K1	. C <sub>DPM</sub>		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
			'	
1.97E-07	4.80E-06	8.00E-07	5.80	0.003
1.74E-07	4.24E-06	7.07E-07	5.12	0.003
1.53E-07	3.73E-06	6.22E-07	4.51	0.003
1.34E-07	3.28E-06	5.47E-07	3.97	0.003
1.19E-07	2.92E-06	4.86E-07	3.52	0.002
1.03E-07	2.53E-06	4.21E-07	3.05	0.002
9.39E-08	2.30E-06	3.82E-07	2.77	0.002
7.81E-08	1.91E-06	3.18E-07	2.30	0.001
7.04E-08	1.72E-06	2.86E-07	2.08	0.001
6.47E-08	1.58E-06	2.63E-07	1.91	0.001
5.88E-08	1.44E-06	2.39E-07	1.73	0.001
5.46E-08	1.33E-06	2.22E-07	1.61	0.001
4.73E-08	1.16E-06	1.92E-07	1.39	0.001
4.43E-08	1.08E-06	1.80E-07	1.31	0.001
4.16E-08	1.02E-06	1.69E-07	1.23	0.001
3.96E-08	9.67E-07	1.61E-07	1.17	0.001
3.72E-08	9.10E-07	1.51E-07	1.10	0.001
3.55E-08	8.67E-07	1.44E-07	1.05	0.001
3.40E-08	8.30E-07	1.38E-07	1.00	0.001
2.88E-08	7.05E-07	1.17E-07	0.85	0.001
2.72E-08	6.65E-07	1.11E-07	0.80	0.000
2.55E-08	6.23E-07	1.04E-07	0.75	0.000
2.41E-08	5.88E-07	9.80E-08	0.71	0.000
2.41E-08 2.27E-08	5.56E-07	9.25E-08	0.71	0.000
				0.000
2.14E-08	5.24E-07	8.72E-08	0.63	
1.55E-09	3.78E-08	6.30E-09	0.05	0.000
1.64E-09	4.02E-08	6.69E-09	0.05	0.000
1.75E-09	4.27E-08	7.11E-09	0.05	0.000
1.87E-09	4.56E-08	7.60E-09	0.06	0.000
2.00E-09	4.89E-08	8.14E-09	0.06	0.000
2.15E-09	5.25E-08	8.73E-09	0.06	0.000
2.31E-09	5.64E-08	9.40E-09	0.07	0.000
2.48E-09	6.07E-08	1.01E-08	0.07	0.000
2.69E-09	6.58E-08	1.10E-08	0.08	0.000
2.93E-09	7.15E-08	1.19E-08	0.09	0.000
3.18E-09	7.78E-08	1.30E-08	0.09	0.000
3.51E-09	8.58E-08	1.43E-08	0.10	0.000
3.87E-09	9.47E-08	1.58E-08	0.11	0.000
4.29E-09	1.05E-07	1.75E-08	0.13	0.000
4.79E-09	1.17E-07	1.95E-08	0.14	0.000
5.47E-09	1.34E-07	2.22E-08	0.16	0.000
6.22E-09	1.52E-07	2.53E-08	0.18	0.000
7.16E-09	1.75E-07	2.91E-08	0.21	0.000
8.42E-09	2.06E-07	3.43E-08	0.25	0.000
1.00E-08	2.45E-07	4.07E-08	0.30	0.000
1.20E-08	2.94E-07	4.89E-08	0.35	0.000
1.49E-08	3.64E-07	6.06E-08	0.44	0.000
1.90E-08	4.64E-07	7.73E-08	0.56	0.000
2.48E-08	6.07E-07	1.01E-07	0.73	0.000
3.32E-08	8.11E-07	1.35E-07	0.98	0.001
4.46E-08	1.09E-06	1.81E-07	1.32	0.001
6.10E-08	1.49E-06	2.48E-07	1.80	0.001
7.72E-08	1.89E-06	3.14E-07	2.28	0.001
9.91E-08	2.42E-06	4.03E-07	2.93	0.001
1.25E-07	3.06E-06			
		5.09E-07	3.69	0.002
3.10E-07	7.59E-06	1.26E-06	9.16	0.005
2.55E-07	6.23E-06	1.04E-06	7.52	0.004
2.17E-07	5.30E-06	8.83E-07	6.40	0.004
1.87E-07	4.58E-06	7.63E-07	5.53	0.003
1.63E-07	3.99E-06	6.64E-07	4.82	0.003
1.42E-07	3.47E-06	5.78E-07	4.19	0.002
1.24E-07	3.03E-06	5.05E-07	3.66	0.002
8.76E-08	2.14E-06	3.57E-07	2.59	0.002
7.85E-08	1.92E-06	3.19E-07	2.32	0.001
6.93E-08	1.69E-06	2.82E-07	2.05	0.001
6.58E-08	1.61E-06	2.68E-07	1.94	0.001
5.95E-08	1.46E-06	2.42E-07	1.76	0.001

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
, ,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568405.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568445.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568465.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16 568525.16	4148790.16 4148790.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568585.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568605.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16 567405.16	4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
567425.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16 567625.16	4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
567645.16 567645.16	4148810.16	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000
567665.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567825.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567845.16 567865.16	4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.008	0.006 0.008	0.006 0.008	0.006 0.008	0.006 0.008
567885.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.010	0.010	0.010
568145.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568165.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020	0.020	0.020
568185.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568205.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568225.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568265.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568285.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	800.0
568305.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568325.16 568345.16	4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.007 0.006	0.007 0.006	0.007 0.006	0.007 0.006	0.007 0.006
568365.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568385.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568405.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568465.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568585.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16 568665.16	4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568685.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
			<del>-</del>		<del>-</del>			<del>-</del>			

	Cancer Risk = ∑R1*C <sub>DPM</sub>								
3rd Trimester	0<2	2<9	Total	HI C <sub>DPM</sub> /REL					
				unitless					
F F C F 00	1 205 00	2 265 07	1.64	0.001					
5.56E-08 4.79E-08	1.36E-06 1.17E-06	2.26E-07 1.95E-07	1.64 1.41	0.001 0.001					
4.45E-08	1.09E-06	1.81E-07	1.41	0.001					
4.19E-08	1.03E-06	1.71E-07	1.24	0.001					
3.98E-08	9.74E-07	1.62E-07	1.18	0.001					
3.78E-08	9.23E-07	1.54E-07	1.11	0.001					
3.17E-08	7.75E-07	1.29E-07	0.94	0.001					
2.99E-08	7.30E-07	1.22E-07	0.88	0.001					
2.81E-08	6.86E-07	1.14E-07	0.83	0.000					
2.63E-08	6.44E-07	1.07E-07	0.78	0.000					
2.49E-08 2.35E-08	6.08E-07 5.74E-07	1.01E-07 9.55E-08	0.73 0.69	0.000 0.000					
2.22E-08	5.43E-07	9.03E-08	0.66	0.000					
2.10E-08	5.13E-07	8.54E-08	0.62	0.000					
1.53E-09	3.74E-08	6.22E-09	0.05	0.000					
1.63E-09	3.98E-08	6.63E-09	0.05	0.000					
1.73E-09	4.23E-08	7.05E-09	0.05	0.000					
1.85E-09	4.52E-08	7.53E-09	0.05	0.000					
1.98E-09	4.85E-08	8.07E-09	0.06	0.000					
2.13E-09	5.21E-08	8.67E-09	0.06	0.000					
2.28E-09 2.46E-09	5.58E-08 6.02E-08	9.29E-09 1.00E-08	0.07	0.000					
2.46E-09 2.66E-09	6.51E-08	1.00E-08 1.08E-08	0.07 0.08	0.000 0.000					
2.90E-09	7.09E-08	1.18E-08	0.09	0.000					
3.15E-09	7.71E-08	1.28E-08	0.09	0.000					
3.47E-09	8.49E-08	1.41E-08	0.10	0.000					
3.84E-09	9.38E-08	1.56E-08	0.11	0.000					
4.23E-09	1.03E-07	1.72E-08	0.12	0.000					
4.75E-09	1.16E-07	1.93E-08	0.14	0.000					
5.39E-09	1.32E-07	2.19E-08	0.16	0.000					
6.16E-09	1.51E-07	2.51E-08	0.18	0.000					
7.08E-09 8.25E-09	1.73E-07 2.02E-07	2.88E-08 3.36E-08	0.21 0.24	0.000 0.000					
9.87E-09	2.41E-07	4.02E-08	0.29	0.000					
1.20E-08	2.93E-07	4.88E-08	0.35	0.000					
1.47E-08	3.60E-07	6.00E-08	0.43	0.000					
1.88E-08	4.61E-07	7.67E-08	0.56	0.000					
2.50E-08	6.12E-07	1.02E-07	0.74	0.000					
3.41E-08	8.34E-07	1.39E-07	1.01	0.001					
4.73E-08	1.16E-06	1.93E-07	1.40	0.001					
6.88E-08 8.76E-08	1.68E-06 2.14E-06	2.80E-07 3.56E-07	2.03	0.001 0.002					
1.15E-07	2.82E-06	4.69E-07	2.59 3.40	0.002					
3.00E-07	7.33E-06	1.22E-06	8.85	0.002					
2.31E-07	5.65E-06	9.40E-07	6.82	0.004					
1.96E-07	4.79E-06	7.97E-07	5.78	0.003					
1.68E-07	4.10E-06	6.82E-07	4.95	0.003					
1.45E-07	3.56E-06	5.92E-07	4.29	0.003					
1.11E-07	2.70E-06	4.50E-07	3.26	0.002					
9.75E-08	2.38E-06	3.97E-07	2.88	0.002					
8.65E-08 7.81E-08	2.11E-06 1.91E-06	3.52E-07 3.18E-07	2.55 2.30	0.002 0.001					
7.11E-08	1.74E-06	2.89E-07	2.10	0.001					
6.63E-08	1.62E-06	2.70E-07	1.96	0.001					
6.08E-08	1.49E-06	2.47E-07	1.79	0.001					
5.55E-08	1.36E-06	2.26E-07	1.64	0.001					
4.46E-08	1.09E-06	1.82E-07	1.32	0.001					
4.17E-08	1.02E-06	1.70E-07	1.23	0.001					
3.51E-08	8.59E-07	1.43E-07	1.04	0.001					
3.27E-08	8.00E-07	1.33E-07	0.97	0.001					
3.06E-08 2.88E-08	7.49E-07 7.05E-07	1.25E-07 1.17E-07	0.90 0.85	0.001 0.001					
2.72E-08	6.65E-07	1.11E-07	0.80	0.001					
2.56E-08	6.26E-07	1.04E-07	0.76	0.000					
2.42E-08	5.91E-07	9.83E-08	0.71	0.000					
2.28E-08	5.58E-07	9.29E-08	0.67	0.000					
2.16E-08	5.29E-07	8.80E-08	0.64	0.000					

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
EC072E 46	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568725.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16 567345.16	4148830.16 4148830.16	0.000 0.000									
567365.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16 567585.16	4148830.16 4148830.16	0.000 0.000									
567605.16 567605.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16 567825.16	4148830.16 4148830.16	0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003	0.003	0.003 0.004	0.003 0.004	0.003 0.004
567845.16	4148830.16	0.000 0.000	0.000 0.000	0.000	0.000	0.000	0.004 0.006	0.004 0.006	0.004	0.004	0.004
567865.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568165.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.026	0.026	0.026	0.026	0.026
568185.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.017
568205.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568245.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568265.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568285.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568305.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568325.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568345.16 568365.16	4148830.16 4148830.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.005	0.006 0.005	0.006 0.005	0.006 0.005	0.006 0.005
568385.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568405.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568465.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568505.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148830.16 4148830.16	0.000	0.000	0.000 0.000	0.000	0.000	0.003 0.002	0.003	0.003	0.003	0.003 0.002
568585.16 568605.16	4148830.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002
568625.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16 567405.16	4148850.16 4148850.16	0.000 0.000									
567425.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Califel Kisk - 5k1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2.055.00	E 02E 07	0.255.00	0.61	0.000
2.05E-08	5.02E-07	8.35E-08	0.61	0.000
1.51E-09	3.69E-08	6.14E-09	0.04	0.000
1.61E-09	3.93E-08	6.55E-09	0.05	0.000
1.71E-09	4.18E-08	6.97E-09	0.05	0.000
1.83E-09	4.48E-08	7.45E-09	0.05	0.000
1.96E-09	4.80E-08	7.99E-09	0.06	0.000
2.10E-09	5.13E-08	8.54E-09	0.06	0.000
2.25E-09	5.50E-08	9.15E-09	0.07	0.000
2.44E-09				
	5.95E-08	9.91E-09	0.07	0.000
2.64E-09	6.45E-08	1.07E-08	0.08	0.000
2.86E-09	7.00E-08	1.16E-08	0.08	0.000
3.12E-09	7.63E-08	1.27E-08	0.09	0.000
3.43E-09	8.37E-08	1.39E-08	0.10	0.000
3.79E-09	9.27E-08	1.54E-08	0.11	0.000
4.23E-09	1.03E-07	1.72E-08	0.12	0.000
4.77E-09	1.17E-07	1.94E-08	0.14	0.000
5.38E-09	1.32E-07	2.19E-08	0.16	0.000
6.11E-09				0.000
	1.49E-07	2.49E-08	0.18	
7.02E-09	1.71E-07	2.86E-08	0.21	0.000
8.17E-09	2.00E-07	3.32E-08	0.24	0.000
9.64E-09	2.35E-07	3.92E-08	0.28	0.000
1.17E-08	2.87E-07	4.78E-08	0.35	0.000
1.46E-08	3.57E-07	5.94E-08	0.43	0.000
1.86E-08	4.54E-07	7.56E-08	0.55	0.000
2.47E-08	6.05E-07	1.01E-07	0.73	0.000
3.46E-08	8.46E-07	1.41E-07	1.02	0.001
4.97E-08	1.22E-06	2.02E-07	1.47	0.001
7.25E-08	1.77E-06	2.95E-07	2.14	0.001
1.01E-07	2.47E-06	4.11E-07	2.98	0.002
2.97E-07	7.26E-06	1.21E-06	8.76	0.005
1.99E-07	4.87E-06	8.11E-07	5.88	0.003
1.68E-07	4.11E-06	6.84E-07	4.96	0.003
1.24E-07	3.04E-06	5.06E-07	3.67	0.002
1.08E-07	2.64E-06	4.40E-07	3.19	0.002
9.49E-08	2.32E-06	3.86E-07	2.80	0.002
8.50E-08	2.08E-06	3.46E-07	2.51	0.001
7.69E-08	1.88E-06	3.13E-07	2.27	0.001
7.09E-08	1.73E-06	2.88E-07	2.09	0.001
6.50E-08	1.59E-06	2.65E-07	1.92	0.001
5.98E-08	1.46E-06	2.43E-07	1.77	0.001
5.49E-08	1.34E-06	2.23E-07	1.62	0.001
5.08E-08	1.24E-06	2.07E-07	1.50	0.001
4.70E-08	1.15E-06	1.91E-07	1.39	0.001
4.44E-08	1.09E-06	1.81E-07	1.31	0.001
3.88E-08	9.49E-07	1.58E-07	1.15	0.001
3.61E-08	8.83E-07	1.47E-07	1.07	0.001
3.39E-08	8.28E-07	1.38E-07	1.00	0.001
3.16E-08	7.72E-07	1.28E-07	0.93	0.001
2.97E-08	7.26E-07	1.21E-07	0.88	0.001
2.79E-08	6.81E-07	1.13E-07	0.82	0.000
2.63E-08	6.43E-07	1.07E-07	0.78	0.000
2.48E-08	6.07E-07	1.01E-07	0.73	0.000
2.35E-08	5.74E-07	9.55E-08	0.69	0.000
2.22E-08	5.42E-07	9.03E-08		0.000
			0.65	
2.10E-08	5.14E-07	8.56E-08	0.62	0.000
2.00E-08	4.88E-07	8.13E-08	0.59	0.000
1.48E-09	3.63E-08	6.04E-09	0.04	0.000
1.58E-09	3.87E-08	6.44E-09	0.05	0.000
1.69E-09	4.13E-08	6.88E-09	0.05	0.000
1.81E-09	4.42E-08	7.36E-09	0.05	0.000
1.93E-09	4.72E-08	7.86E-09	0.06	0.000
2.06E-09	5.03E-08	8.37E-09	0.06	0.000
2.22E-09	5.42E-08	9.02E-09	0.07	0.000
2.41E-09	5.89E-08	9.81E-09	0.07	0.000
2.61E-09	6.39E-08	1.06E-08	0.08	0.000
2.83E-09	6.92E-08	1.15E-08	0.08	0.000
3.09E-09	7.55E-08	1.26E-08	0.09	0.000
5.552 65		1.202 00	3.05	3.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567545.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16 567585.16	4148850.16 4148850.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000						
567605.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567825.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568225.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568245.16 568265.16	4148850.16 4148850.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.010 0.009	0.010 0.009	0.010 0.009	0.010 0.009	0.010 0.009
568285.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568305.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.007
568325.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.007	0.006	0.006	0.006	0.006
568345.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568365.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568385.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568405.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568485.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16 568605.16	4148850.16 4148850.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568625.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567325.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16 567445.16	4148870.16 4148870.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
567465.16	4148870.16	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16 567725.16	4148870.16 4148870.16	0.000	0.000	0.000 0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001 0.001
567725.16 567745.16	4148870.16 4148870.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001
567745.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014
568225.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568245.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009

2nd Trime action	Cancer Risk = ∑F		Tatal	HI C. (DEL
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL unitless
				unitiess
3.39E-09	8.29E-08	1.38E-08	0.10	0.000
3.75E-09	9.16E-08	1.52E-08	0.11	0.000
4.20E-09	1.03E-07	1.71E-08	0.12	0.000
4.74E-09	1.16E-07	1.93E-08	0.14	0.000
5.33E-09	1.30E-07	2.17E-08	0.16	0.000
6.05E-09	1.48E-07	2.46E-08	0.18	0.000
6.95E-09	1.70E-07	2.83E-08	0.20	0.000
8.06E-09	1.97E-07	3.28E-08	0.24	0.000
9.51E-09 1.14E-08	2.32E-07 2.80E-07	3.87E-08 4.65E-08	0.28 0.34	0.000 0.000
1.43E-08	3.50E-07	5.82E-08	0.42	0.000
1.82E-08	4.44E-07	7.39E-08	0.54	0.000
2.41E-08	5.89E-07	9.81E-08	0.71	0.000
3.43E-08	8.37E-07	1.39E-07	1.01	0.001
5.18E-08	1.27E-06	2.11E-07	1.53	0.001
1.37E-07	3.36E-06	5.59E-07	4.06	0.002
1.20E-07	2.92E-06	4.87E-07	3.53	0.002
1.04E-07	2.54E-06	4.23E-07	3.07	0.002
9.15E-08	2.24E-06	3.72E-07	2.70	0.002
8.19E-08	2.00E-06	3.33E-07	2.42	0.001
7.44E-08	1.82E-06	3.03E-07	2.19	0.001
6.86E-08	1.68E-06	2.79E-07	2.02	0.001
6.31E-08	1.54E-06	2.57E-07	1.86	0.001
5.81E-08	1.42E-06	2.36E-07	1.71	0.001
5.36E-08	1.31E-06	2.18E-07	1.58	0.001
4.98E-08	1.22E-06	2.03E-07	1.47	0.001
3.98E-08	9.72E-07	1.62E-07	1.17	0.001
3.69E-08	9.01E-07	1.50E-07	1.09	0.001
3.44E-08 3.24E-08	8.42E-07	1.40E-07	1.02	0.001
3.04E-08	7.92E-07 7.44E-07	1.32E-07 1.24E-07	0.96 0.90	0.001 0.001
2.85E-08	6.97E-07	1.16E-07	0.84	0.001
2.68E-08	6.56E-07	1.10E-07 1.09E-07	0.79	0.000
2.54E-08	6.21E-07	1.03E-07	0.75	0.000
2.40E-08	5.87E-07	9.77E-08	0.71	0.000
2.27E-08	5.55E-07	9.24E-08	0.67	0.000
2.15E-08	5.26E-07	8.75E-08	0.63	0.000
2.04E-08	4.98E-07	8.30E-08	0.60	0.000
1.94E-08	4.74E-07	7.89E-08	0.57	0.000
1.46E-09	3.57E-08	5.94E-09	0.04	0.000
1.56E-09	3.80E-08	6.33E-09	0.05	0.000
1.66E-09	4.06E-08	6.76E-09	0.05	0.000
1.77E-09	4.33E-08	7.21E-09	0.05	0.000
1.89E-09	4.62E-08	7.70E-09	0.06	0.000
2.02E-09	4.95E-08	8.24E-09	0.06	0.000
2.18E-09	5.34E-08	8.89E-09	0.06	0.000
2.37E-09 2.58E-09	5.80E-08	9.66E-09 1.05E-08	0.07	0.000
2.58E-09 2.80E-09	6.30E-08 6.83E-08		0.08	0.000
3.06E-09	5.83E-08 7.48E-08	1.14E-08 1.24E-08	0.08 0.09	0.000 0.000
3.36E-09	8.21E-08	1.24E-08 1.37E-08	0.10	0.000
3.71E-09	9.07E-08	1.51E-08	0.11	0.000
4.18E-09	1.02E-07	1.70E-08	0.12	0.000
4.70E-09	1.15E-07	1.91E-08	0.14	0.000
5.28E-09	1.29E-07	2.15E-08	0.16	0.000
5.99E-09	1.46E-07	2.44E-08	0.18	0.000
6.87E-09	1.68E-07	2.79E-08	0.20	0.000
7.98E-09	1.95E-07	3.25E-08	0.24	0.000
9.38E-09	2.29E-07	3.81E-08	0.28	0.000
1.13E-08	2.75E-07	4.58E-08	0.33	0.000
1.38E-08	3.37E-07	5.61E-08	0.41	0.000
1.76E-08	4.30E-07	7.16E-08	0.52	0.000
2.34E-08	5.71E-07	9.51E-08	0.69	0.000
3.31E-08	8.10E-07	1.35E-07	0.98	0.001
1.66E-07	4.05E-06	6.74E-07	4.89	0.003
1.25E-07	3.06E-06	5.09E-07	3.70	0.002
1.09E-07	2.67E-06	4.45E-07	3.23	0.002

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568265.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568285.16 568305.16	4148870.16 4148870.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.007 0.007	0.007 0.007	0.007 0.007	0.007 0.007	0.007 0.007
568345.16 568345.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568365.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568385.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568405.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568465.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16 568525.16	4148870.16 4148870.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568545.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568565.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.002	0.003
568585.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16 568725.16	4148870.16 4148870.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567325.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16 567485.16	4148890.16 4148890.16	0.000	0.000 0.000								
567505.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148890.16	0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001	0.001
567665.16 567685.16	4148890.16 4148890.16	0.000	0.000 0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001 0.001	0.001 0.001
567705.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.015	0.015	0.015	0.015	0.015
568225.16 568245.16	4148890.16 4148890.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.011 0.008	0.011 0.008	0.011 0.008	0.011	0.011 0.008
568245.16 568265.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008 0.007	0.008
568285.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568325.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568345.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568365.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568385.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568405.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568445.16 568465.16	4148890.16 4148890.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568485.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568545.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

	Cancer Risk = ∑R1*C <sub>DPM</sub>								
3rd Trimester	0<2	2<9	Total	HI C <sub>DPM</sub> /REL					
				unitless					
9.71E-08	2.37E-06	3.95E-07	2.86	0.002					
8.63E-08	2.37E-06 2.11E-06	3.51E-07	2.55	0.002					
7.80E-08	1.91E-06	3.17E-07	2.30	0.001					
6.46E-08	1.58E-06	2.63E-07	1.91	0.001					
5.91E-08	1.44E-06	2.40E-07	1.74	0.001					
5.44E-08	1.33E-06	2.21E-07	1.61	0.001					
5.04E-08	1.23E-06	2.05E-07	1.49	0.001					
4.68E-08	1.14E-06	1.90E-07	1.38	0.001					
4.32E-08	1.06E-06	1.76E-07	1.28	0.001					
4.02E-08 3.77E-08	9.83E-07 9.22E-07	1.64E-07 1.53E-07	1.19 1.11	0.001 0.001					
3.52E-08	8.60E-07	1.43E-07	1.04	0.001					
3.29E-08	8.04E-07	1.34E-07	0.97	0.001					
3.09E-08	7.55E-07	1.26E-07	0.91	0.001					
2.91E-08	7.11E-07	1.18E-07	0.86	0.001					
2.74E-08	6.68E-07	1.11E-07	0.81	0.000					
2.58E-08	6.29E-07	1.05E-07	0.76	0.000					
2.44E-08	5.97E-07	9.94E-08	0.72	0.000					
2.31E-08	5.64E-07	9.40E-08	0.68	0.000					
2.19E-08	5.35E-07	8.90E-08	0.65	0.000					
2.08E-08 1.97E-08	5.08E-07 4.81E-07	8.45E-08 8.01E-08	0.61 0.58	0.000 0.000					
1.88E-08	4.58E-07	7.63E-08	0.55	0.000					
1.44E-09	3.52E-08	5.86E-09	0.04	0.000					
1.53E-09	3.74E-08	6.23E-09	0.05	0.000					
1.63E-09	3.99E-08	6.64E-09	0.05	0.000					
1.74E-09	4.26E-08	7.09E-09	0.05	0.000					
1.86E-09	4.55E-08	7.57E-09	0.05	0.000					
1.99E-09	4.86E-08	8.09E-09	0.06	0.000					
2.13E-09	5.22E-08	8.68E-09	0.06	0.000					
2.34E-09	5.72E-08	9.52E-09	0.07	0.000					
2.54E-09 2.77E-09	6.22E-08 6.78E-08	1.04E-08 1.13E-08	0.08 0.08	0.000 0.000					
3.05E-09	7.45E-08	1.13L-08 1.24E-08	0.08	0.000					
3.36E-09	8.22E-08	1.37E-08	0.10	0.000					
3.71E-09	9.06E-08	1.51E-08	0.11	0.000					
4.14E-09	1.01E-07	1.69E-08	0.12	0.000					
4.65E-09	1.14E-07	1.89E-08	0.14	0.000					
5.24E-09	1.28E-07	2.13E-08	0.15	0.000					
5.95E-09	1.45E-07	2.42E-08	0.18	0.000					
6.80E-09	1.66E-07	2.77E-08	0.20	0.000					
7.88E-09 9.27E-09	1.93E-07	3.21E-08	0.23	0.000 0.000					
1.11E-08	2.27E-07 2.71E-07	3.77E-08 4.51E-08	0.27 0.33	0.000					
1.35E-08	3.30E-07	5.50E-08	0.40	0.000					
1.70E-08	4.15E-07	6.91E-08	0.50	0.000					
2.25E-08	5.49E-07	9.13E-08	0.66	0.000					
1.66E-07	4.07E-06	6.77E-07	4.91	0.003					
1.23E-07	3.01E-06	5.01E-07	3.63	0.002					
9.76E-08	2.38E-06	3.97E-07	2.88	0.002					
8.81E-08	2.15E-06	3.58E-07	2.60	0.002					
7.96E-08	1.95E-06	3.24E-07	2.35	0.001					
6.52E-08 5.90E-08	1.59E-06 1.44E-06	2.65E-07 2.40E-07	1.92 1.74	0.001 0.001					
5.23E-08	1.44L-00 1.28E-06	2.40L-07 2.13E-07	1.54	0.001					
4.91E-08	1.20E-06	2.00E-07	1.45	0.001					
4.68E-08	1.14E-06	1.91E-07	1.38	0.001					
4.35E-08	1.06E-06	1.77E-07	1.28	0.001					
4.03E-08	9.85E-07	1.64E-07	1.19	0.001					
3.76E-08	9.18E-07	1.53E-07	1.11	0.001					
3.54E-08	8.65E-07	1.44E-07	1.04	0.001					
3.32E-08	8.12E-07	1.35E-07	0.98	0.001					
3.10E-08 2.93E-08	7.59E-07 7.17E-07	1.26E-07 1.19F-07	0.92 0.87	0.001					
2.93E-08 2.77E-08	7.17E-07 6.77E-07	1.19E-07 1.13E-07	0.87 0.82	0.001 0.000					
2.61E-08	6.38E-07	1.06E-07	0.77	0.000					
2.47E-08	6.03E-07	1.00E-07	0.73	0.000					

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568625.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16 568725.16	4148890.16 4148890.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567325.16	414890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567345.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4148910.16 4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16 567565.16	4148910.16	0.000 0.000									
567585.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16 568165.16	4148910.16 4148910.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.014 0.012	0.014 0.012	0.014 0.012	0.014 0.012	0.014 0.012
568185.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568245.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.010	0.010	0.007	0.007	0.007
568285.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568305.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568325.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568345.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568365.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568385.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568405.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568425.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568445.16 568465.16	4148910.16 4148910.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568485.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568505.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568525.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16 568685.16	4148910.16 4148910.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568705.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568725.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16 567525.16	4148930.16 4148930.16	0.000 0.000									
307323.10	7140330.10	0.000	0.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Calicel Kisk - 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
			'	
2.33E-08	5.71E-07	9.50E-08	0.69	0.000
2.21E-08	5.40E-07	9.00E-08	0.65	0.000
2.10E-08	5.14E-07	8.56E-08	0.62	0.000
2.00E-08	4.89E-07	8.14E-08	0.59	0.000
1.90E-08	4.65E-07	7.75E-08	0.56	0.000
1.81E-08	4.43E-07	7.38E-08	0.54	0.000
1.43E-09	3.49E-08	5.80E-09	0.04	0.000
1.52E-09	3.71E-08	6.18E-09	0.04	0.000
1.62E-09	3.96E-08	6.60E-09	0.05	0.000
1.73E-09	4.23E-08	7.04E-09	0.05	0.000
1.85E-09	4.53E-08	7.54E-09	0.05	0.000
1.98E-09	4.83E-08	8.04E-09	0.06	0.000
2.13E-09	5.20E-08	8.66E-09	0.06	0.000
2.32E-09	5.68E-08	9.45E-09	0.07	0.000
2.53E-09	6.19E-08	1.03E-08	0.07	0.000
2.77E-09	6.78E-08	1.13E-08	0.08	0.000
3.04E-09	7.43E-08	1.24E-08	0.09	0.000
3.35E-09	8.19E-08	1.36E-08	0.10	0.000
3.70E-09	9.05E-08	1.51E-08	0.11	0.000
4.12E-09	1.01E-07	1.68E-08	0.12	0.000
4.61E-09	1.13E-07	1.88E-08	0.14	0.000
5.20E-09	1.27E-07	2.12E-08	0.15	0.000
5.91E-09	1.44E-07	2.41E-08	0.17	0.000
6.76E-09	1.65E-07	2.75E-08	0.20	0.000
7.83E-09	1.91E-07	3.18E-08	0.23	0.000
9.19E-09	2.24E-07	3.74E-08	0.27	0.000
1.10E-08	2.68E-07	4.46E-08	0.32	0.000
1.34E-08	3.27E-07	5.44E-08	0.39	0.000
1.68E-08	4.12E-07	6.85E-08	0.50	0.000
1.55E-07	3.79E-06	6.31E-07	4.57	0.003
	3.26E-06			
1.33E-07		5.43E-07	3.94	0.002
1.16E-07	2.83E-06	4.71E-07	3.42	0.002
8.61E-08	2.10E-06	3.50E-07	2.54	0.002
7.04E-08	1.72E-06	2.87E-07	2.08	0.001
6.40E-08	1.56E-06	2.60E-07	1.89	0.001
5.89E-08	1.44E-06	2.40E-07	1.74	0.001
5.35E-08	1.31E-06	2.18E-07	1.58	0.001
4.79E-08	1.17E-06	1.95E-07	1.41	0.001
4.52E-08	1.10E-06	1.84E-07	1.33	0.001
4.34E-08	1.06E-06	1.76E-07	1.28	0.001
4.04E-08	9.88E-07	1.65E-07	1.19	0.001
3.75E-08	9.18E-07	1.53E-07	1.11	0.001
3.52E-08	8.60E-07	1.43E-07	1.04	0.001
3.30E-08	8.07E-07	1.34E-07	0.97	0.001
3.12E-08	7.62E-07	1.27E-07	0.92	0.001
2.94E-08	7.18E-07	1.19E-07	0.87	0.001
2.77E-08	6.76E-07	1.13E-07	0.82	0.000
2.62E-08	6.39E-07	1.06E-07	0.77	0.000
2.48E-08	6.06E-07	1.01E-07	0.73	0.000
2.35E-08	5.74E-07	9.56E-08	0.69	0.000
2.22E-08	5.43E-07	9.04E-08	0.66	0.000
2.11E-08	5.16E-07	8.59E-08	0.62	0.000
2.01E-08	4.92E-07	8.18E-08	0.59	0.000
1.92E-08	4.69E-07	7.82E-08	0.57	0.000
1.83E-08	4.47E-07	7.43E-08	0.54	0.000
1.74E-08	4.26E-07	7.09E-08	0.51	0.000
1.42E-09	3.48E-08	5.79E-09	0.04	0.000
1.52E-09	3.71E-08	6.18E-09	0.04	0.000
1.62E-09	3.96E-08	6.59E-09	0.05	0.000
1.73E-09	4.22E-08	7.03E-09	0.05	0.000
1.85E-09	4.52E-08	7.52E-09	0.05	0.000
1.98E-09	4.85E-08	8.07E-09	0.06	0.000
2.13E-09	5.21E-08	8.68E-09	0.06	0.000
2.31E-09	5.65E-08	9.41E-09	0.07	0.000
2.53E-09	6.19E-08	1.03E-08	0.07	0.000
2.78E-09	6.78E-08	1.13E-08	0.07	0.000
3.04E-09	7.44E-08	1.13E-08 1.24E-08	0.08	0.000
3.04L '03	/. <del></del>	1.276-00	0.03	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567545.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16 567645.16	4148930.16 4148930.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001
567645.16 567665.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567825.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568125.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.012	0.012	0.012
568145.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568165.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568185.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	800.0	800.0	0.008
568205.16 568265.16	4148930.16 4148930.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.007 0.006	0.007 0.006	0.007 0.006	0.007 0.006	0.007 0.006
568285.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568305.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568325.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568345.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568365.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568385.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568405.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568425.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568445.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16 568505.16	4148930.16 4148930.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.002	0.003 0.002	0.003 0.002	0.003 0.002	0.003 0.002
568525.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568705.16 568725.16	4148930.16 4148930.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567325.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000
567345.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16 567525.16	4148950.16 4148950.16	0.000 0.000									
567545.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16 567805.16	4148950.16 4148950.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003	0.002 0.003
567805.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567825.16 567845.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
55.5.5.20	.1.0550.10	3.000	3.000	3.000	0.000	3.000	3.003	3.003	5.005	0.005	0.000

	Calicel Kisk = 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
			'	
3.35E-09	8.20E-08	1.36E-08	0.10	0.000
3.70E-09	9.05E-08	1.51E-08	0.11	0.000
4.10E-09	1.00E-07	1.67E-08	0.12	0.000
4.60E-09	1.12E-07	1.87E-08	0.14	0.000
5.20E-09	1.27E-07	2.12E-08	0.15	0.000
5.90E-09	1.44E-07	2.40E-08	0.17	0.000
6.77E-09	1.65E-07	2.75E-08	0.20	0.000
7.83E-09	1.91E-07	3.18E-08	0.23	0.000
9.18E-09	2.24E-07	3.73E-08	0.27	0.000
1.09E-08	2.68E-07	4.45E-08	0.32	0.000
1.35E-08	3.29E-07	5.47E-08	0.40	0.000
3.01E-08	7.35E-07	1.22E-07	0.89	0.001
4.54E-08	1.11E-06	1.85E-07	1.34	0.001
1.40E-07	3.43E-06	5.72E-07	4.15	0.002
1.21E-07	2.96E-06	4.93E-07	3.58	0.002
1.07E-07	2.60E-06	4.33E-07	3.14	0.002
9.50E-08	2.32E-06	3.86E-07	2.80	0.002
8.54E-08	2.09E-06	3.47E-07	2.52	0.001
6.59E-08	1.61E-06	2.68E-07	1.94	0.001
6.05E-08	1.48E-06	2.46E-07	1.79	0.001
5.60E-08	1.37E-06	2.28E-07	1.65	0.001
5.23E-08		2.13E-07	1.54	
	1.28E-06			0.001
4.78E-08	1.17E-06	1.95E-07	1.41	0.001
4.32E-08	1.06E-06	1.76E-07	1.27	0.001
4.15E-08	1.01E-06	1.69E-07	1.22	0.001
3.95E-08	9.66E-07	1.61E-07	1.17	0.001
3.70E-08	9.05E-07	1.51E-07	1.09	0.001
3.47E-08	8.48E-07	1.41E-07	1.02	0.001
3.27E-08	7.98E-07	1.33E-07	0.96	0.001
3.07E-08	7.50E-07	1.25E-07	0.91	0.001
2.90E-08	7.09E-07	1.18E-07	0.86	0.001
2.75E-08	6.72E-07	1.12E-07	0.81	0.000
2.60E-08	6.35E-07	1.06E-07	0.77	0.000
2.46E-08	6.01E-07	1.00E-07	0.73	0.000
2.34E-08	5.71E-07	9.50E-08	0.69	0.000
2.22E-08	5.43E-07	9.04E-08	0.66	0.000
2.11E-08	5.16E-07	8.60E-08	0.62	0.000
2.01E-08	4.91E-07	8.17E-08	0.59	0.000
1.92E-08	4.69E-07	7.81E-08	0.57	0.000
1.83E-08	4.48E-07	7.45E-08	0.54	0.000
1.75E-08	4.28E-07	7.12E-08	0.52	0.000
1.67E-08	4.09E-07	6.81E-08	0.49	0.000
1.43E-09	3.49E-08	5.81E-09	0.04	0.000
1.53E-09	3.73E-08	6.21E-09	0.05	0.000
1.62E-09	3.97E-08	6.61E-09	0.05	0.000
1.73E-09	4.22E-08	7.03E-09	0.05	0.000
1.86E-09	4.53E-08	7.55E-09	0.05	0.000
2.00E-09	4.88E-08	8.12E-09	0.06	0.000
2.16E-09	5.27E-08	8.77E-09	0.06	0.000
2.34E-09	5.72E-08	9.52E-09	0.07	0.000
2.54E-09	6.21E-08	1.03E-08	0.07	0.000
2.79E-09	6.81E-08			
		1.13E-08	0.08	0.000
3.06E-09	7.48E-08	1.25E-08	0.09	0.000
3.37E-09	8.23E-08	1.37E-08	0.10	0.000
3.73E-09	9.11E-08	1.52E-08	0.11	0.000
4.13E-09	1.01E-07	1.68E-08	0.12	0.000
4.62E-09	1.13E-07	1.88E-08	0.14	0.000
5.22E-09	1.28E-07	2.13E-08	0.15	0.000
5.96E-09	1.46E-07	2.42E-08	0.18	0.000
6.81E-09	1.66E-07	2.77E-08	0.20	0.000
7.90E-09	1.93E-07	3.21E-08	0.23	0.000
9.27E-09	2.27E-07	3.77E-08	0.27	0.000
1.11E-08	2.71E-07	4.51E-08	0.33	0.000
2.22E-08	5.42E-07	9.02E-08	0.65	0.000
3.04E-08	7.43E-07	1.24E-07	0.90	0.001
4.23E-08	1.03E-06	1.72E-07	1.25	0.001
5.96E-08	1.46E-06	2.42E-07	1.76	0.001

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568085.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.013
568105.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011
568125.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568145.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568165.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568185.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568205.16	4148950.16	0.000 0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568225.16 568245.16	4148950.16 4148950.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.005	0.006 0.005	0.006 0.005	0.006 0.005	0.006 0.005
568265.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568285.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.004	0.004
568305.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568325.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568345.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568365.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568385.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568405.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568425.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568445.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568465.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568485.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16 568605.16	4148950.16 4148950.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568625.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568645.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568665.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567345.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16 567545.16	4148970.16 4148970.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
567565.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567825.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567845.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567865.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
568065.16 568085.16	4148970.16 4148970.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.011 0.009	0.011 0.009	0.011 0.009	0.011 0.009	0.011 0.009
568085.16 568105.16	4148970.16 4148970.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568105.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568145.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568165.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.006	0.007
568205.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568225.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568245.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
	.= .= . 0.20										

	Calicel Risk = 2K1	. C <sub>DPM</sub>		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.44E-07	3.52E-06	5.86E-07	4.25	0.003
1.24E-07	3.02E-06	5.04E-07	3.65	0.003
1.09E-07	2.65E-06	4.41E-07	3.20	0.002
9.61E-08	2.35E-06	3.91E-07	2.83	0.002
8.63E-08	2.11E-06	3.51E-07	2.55	0.002
7.81E-08	1.91E-06	3.18E-07	2.31	0.001
7.13E-08	1.74E-06	2.90E-07	2.10	0.001
6.51E-08	1.59E-06	2.65E-07	1.92	0.001
6.04E-08	1.48E-06	2.46E-07	1.78	0.001
5.57E-08	1.36E-06	2.26E-07	1.64	0.001
5.21E-08	1.27E-06	2.12E-07	1.54	0.001
4.87E-08	1.19E-06	1.98E-07	1.44	0.001
4.60E-08	1.12E-06	1.87E-07	1.36	0.001
4.24E-08	1.04E-06	1.72E-07	1.25	0.001
3.85E-08	9.42E-07	1.57E-07	1.14	0.001
3.69E-08	9.02E-07	1.50E-07	1.09	0.001
3.58E-08	8.75E-07	1.46E-07	1.06	0.001
3.37E-08	8.22E-07	1.37E-07	0.99	0.001
3.17E-08	7.76E-07	1.29E-07	0.94	0.001
3.00E-08	7.33E-07	1.22E-07	0.88	0.001
2.84E-08	6.94E-07	1.16E-07	0.84	0.000
2.68E-08	6.56E-07	1.09E-07	0.79	0.000
2.42E-08	5.92E-07	9.86E-08	0.71	0.000
2.30E-08	5.62E-07	9.36E-08	0.68	0.000
2.20E-08	5.36E-07	8.93E-08	0.65	0.000
2.09E-08	5.11E-07	8.51E-08	0.62	0.000
2.00E-08	4.88E-07	8.13E-08	0.59	0.000
1.91E-08	4.66E-07	7.75E-08	0.56	0.000
1.82E-08	4.45E-07	7.40E-08	0.54	0.000
1.74E-08	4.25E-07	7.08E-08	0.51	0.000
1.67E-08	4.08E-07	6.79E-08	0.49	0.000
1.60E-08	3.90E-07	6.50E-08	0.47	0.000
1.54E-09	3.77E-08	6.28E-09	0.05	0.000
1.64E-09	4.02E-08	6.69E-09	0.05	0.000
1.76E-09	4.29E-08	7.15E-09	0.05	0.000
1.88E-09	4.59E-08	7.65E-09	0.06	0.000
2.02E-09	4.93E-08	8.21E-09	0.06	0.000
2.19E-09	5.35E-08	8.90E-09	0.06	0.000
2.37E-09	5.79E-08	9.65E-09	0.07	0.000
2.57E-09	6.27E-08	1.04E-08	0.08	0.000
2.82E-09	6.89E-08	1.15E-08	0.08	0.000
3.10E-09	7.57E-08	1.26E-08	0.09	0.000
3.41E-09	8.34E-08	1.39E-08	0.10	0.000
3.77E-09	9.21E-08	1.53E-08	0.11	0.000
4.20E-09	1.03E-07	1.71E-08	0.12	0.000
4.70E-09	1.15E-07	1.91E-08	0.14	0.000
5.30E-09	1.29E-07	2.16E-08	0.16	0.000
6.05E-09	1.48E-07	2.46E-08	0.18	0.000
6.94E-09	1.70E-07	2.82E-08	0.20	0.000
8.07E-09	1.97E-07	3.28E-08	0.24	0.000
9.49E-09	2.32E-07	3.86E-08	0.28	0.000
				0.000
1.15E-08	2.81E-07	4.67E-08	0.34	
1.75E-08	4.28E-07	7.13E-08	0.52	0.000
2.24E-08	5.49E-07	9.13E-08	0.66	0.000
2.96E-08	7.23E-07	1.20E-07	0.87	0.001
3.75E-08	9.16E-07	1.53E-07	1.11	0.001
4.86E-08	1.19E-06	1.98E-07	1.43	0.001
6.78E-08	1.66E-06	2.76E-07	2.00	0.001
1.22E-07	2.97E-06	4.95E-07	3.59	0.002
1.06E-07	2.60E-06	4.32E-07	3.13	0.002
9.40E-08	2.30E-06	3.82E-07	2.77	0.002
8.42E-08	2.06E-06	3.43E-07	2.49	0.001
7.62E-08	1.86E-06	3.10E-07	2.25	0.001
6.95E-08	1.70E-06	2.83E-07	2.05	0.001
5.85E-08	1.43E-06	2.38E-07	1.73	0.001
5.43E-08	1.33E-06	2.21E-07	1.60	0.001
5.09E-08	1.24E-06	2.07E-07	1.50	0.001

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568265.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568285.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568305.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568325.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568345.16 568365.16	4148970.16 4148970.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568385.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568425.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568445.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568465.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148970.16 4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16 568645.16	4148970.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568665.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568685.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567365.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16 567505.16	4148990.16 4148990.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000
567525.16 567525.16	4148990.16	0.000	0.000	0.000 0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000 0.000
567545.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4148990.16 4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16 567785.16	4148990.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567805.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.003	0.003	0.003
567845.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567865.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
567885.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
567905.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568045.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.009
568065.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.008
568085.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568105.16 568125.16	4148990.16 4148990.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006	0.006 0.006
568145.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568185.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.005	0.003	0.003	0.003
568205.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568225.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568245.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568265.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568285.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568305.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568325.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568345.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568365.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568385.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003

	Cancer Risk = ∑F			HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
4.78E-08	1.17E-06	1.94E-07	1.41	0.001
4.50E-08	1.10E-06	1.83E-07	1.33	0.001
4.23E-08	1.03E-06	1.72E-07	1.25	0.001
4.01E-08	9.79E-07	1.63E-07	1.18	0.001
3.72E-08	9.10E-07	1.51E-07	1.10	0.001
3.45E-08	8.43E-07	1.40E-07	1.02	0.001
3.31E-08	8.10E-07	1.35E-07	0.98	0.001
3.04E-08	7.42E-07	1.24E-07	0.90	0.001
2.88E-08	7.04E-07	1.17E-07	0.85	0.001
2.74E-08	6.69E-07	1.11E-07	0.81	0.000
2.60E-08	6.36E-07	1.06E-07	0.77	0.000
2.47E-08 2.35E-08	6.04E-07 5.74E-07	1.01E-07 9.55E-08	0.73 0.69	0.000 0.000
2.25E-08	5.49E-07	9.15E-08	0.66	0.000
2.14E-08	5.24E-07	8.72E-08	0.63	0.000
2.05E-08	5.01E-07	8.34E-08	0.60	0.000
1.96E-08	4.78E-07	7.96E-08	0.58	0.000
1.88E-08	4.58E-07	7.63E-08	0.55	0.000
1.80E-08	4.39E-07	7.31E-08	0.53	0.000
1.72E-08	4.21E-07	7.01E-08	0.51	0.000
1.65E-08	4.03E-07	6.71E-08	0.49	0.000
1.58E-08	3.86E-07	6.42E-08	0.47	0.000
1.52E-08	3.71E-07	6.17E-08	0.45	0.000
1.67E-09	4.09E-08	6.81E-09	0.05	0.000
1.79E-09	4.38E-08	7.29E-09	0.05	0.000
1.92E-09	4.69E-08	7.80E-09	0.06	0.000
2.06E-09	5.03E-08	8.37E-09	0.06	0.000
2.23E-09	5.46E-08	9.09E-09	0.07	0.000
2.42E-09	5.93E-08	9.86E-09	0.07	0.000
2.65E-09	6.47E-08	1.08E-08	0.08	0.000
2.88E-09 3.16E-09	7.04E-08	1.17E-08	0.08	0.000
3.48E-09	7.72E-08 8.51E-08	1.28E-08 1.42E-08	0.09 0.10	0.000 0.000
3.85E-09	9.42E-08	1.57E-08	0.11	0.000
4.30E-09	1.05E-07	1.75E-08	0.13	0.000
4.82E-09	1.18E-07	1.96E-08	0.14	0.000
5.44E-09	1.33E-07	2.22E-08	0.16	0.000
6.21E-09	1.52E-07	2.53E-08	0.18	0.000
7.18E-09	1.75E-07	2.92E-08	0.21	0.000
8.39E-09	2.05E-07	3.41E-08	0.25	0.000
9.91E-09	2.42E-07	4.03E-08	0.29	0.000
1.45E-08	3.53E-07	5.88E-08	0.43	0.000
1.79E-08	4.38E-07	7.29E-08	0.53	0.000
2.25E-08	5.49E-07	9.14E-08	0.66	0.000
2.83E-08	6.92E-07	1.15E-07	0.84	0.000
3.48E-08 4.35E-08	8.51E-07 1.06E-06	1.42E-07 1.77F-07	1.03 1.28	0.001
4.35E-08 5.38E-08	1.06E-06 1.31E-06	1.77E-07 2.19E-07	1.28	0.001 0.001
6.90E-08	1.69E-06	2.19E-07 2.81E-07	2.04	0.001
9.55E-08	2.33E-06	3.88E-07	2.82	0.002
9.82E-08	2.40E-06	3.99E-07	2.90	0.002
8.82E-08	2.15E-06	3.59E-07	2.60	0.002
7.99E-08	1.95E-06	3.25E-07	2.36	0.001
7.28E-08	1.78E-06	2.96E-07	2.15	0.001
6.64E-08	1.62E-06	2.70E-07	1.96	0.001
6.10E-08	1.49E-06	2.48E-07	1.80	0.001
5.18E-08	1.27E-06	2.11E-07	1.53	0.001
4.83E-08	1.18E-06	1.97E-07	1.43	0.001
4.53E-08	1.11E-06	1.84E-07	1.34	0.001
4.27E-08	1.04E-06	1.74E-07	1.26	0.001
4.03E-08	9.86E-07	1.64E-07	1.19	0.001
3.87E-08	9.46E-07	1.58E-07	1.14	0.001
3.64E-08	8.90E-07	1.48E-07	1.07	0.001
3.46E-08	8.46E-07	1.41E-07	1.02	0.001
3.30E-08 3.13E-08	8.05E-07 7.65E-07	1.34E-07 1.27E-07	0.97	0.001 0.001
3.13E-08 2.99E-08	7.65E-07 7.30E-07	1.27E-07 1.22E-07	0.92 0.88	0.001
2.552 00	7.50L 07	1.222 07	3.00	0.001

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568425.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568445.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568465.16	4148990.16 4148990.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.002 0.002	0.002 0.002	0.002	0.002	0.002 0.002
568485.16 568505.16	4148990.16	0.000	0.000	0.000	0.000	0.000 0.000	0.002	0.002	0.002 0.002	0.002 0.002	0.002
568525.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568585.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568605.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568625.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16 567385.16	4149010.16 4149010.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
567405.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16 567645.16	4149010.16 4149010.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001
567665.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567845.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567865.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567885.16 567905.16	4149010.16 4149010.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.005 0.006	0.005 0.006	0.005 0.006	0.005 0.006	0.005 0.006
568005.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
568125.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568145.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568165.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568185.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568205.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568225.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568245.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568265.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568285.16 568305.16	4149010.16 4149010.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568325.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568345.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.002	0.002
568365.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568385.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568425.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568445.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568465.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568565.16 568585.16	4149010.16 4149010.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.001	0.002 0.001	0.002 0.001	0.002 0.001	0.002 0.001
568605.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
505055.10	11-3010.10	3.000	0.000	3.000	0.000	3.000	5.001	3.001	0.001	0.001	0.001

	Calicel Kisk - 2K1	. C <sub>DPM</sub>		п
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
2 725 00	6 655 07	4.445.07	0.00	0.000
2.72E-08	6.65E-07	1.11E-07	0.80	0.000
2.59E-08	6.34E-07	1.06E-07	0.77	0.000
2.48E-08	6.06E-07	1.01E-07	0.73	0.000
2.37E-08	5.79E-07	9.64E-08	0.70	0.000
2.26E-08	5.52E-07	9.20E-08	0.67	0.000
2.15E-08	5.26E-07	8.75E-08	0.63	0.000
	4.85E-07	8.07E-08		
1.98E-08			0.59	0.000
1.90E-08	4.65E-07	7.74E-08	0.56	0.000
1.82E-08	4.46E-07	7.42E-08	0.54	0.000
1.75E-08	4.28E-07	7.13E-08	0.52	0.000
1.68E-08	4.11E-07	6.85E-08	0.50	0.000
1.61E-08	3.94E-07	6.56E-08	0.48	0.000
1.55E-08	3.78E-07	6.29E-08	0.46	0.000
1.49E-08	3.63E-07	6.05E-08	0.44	0.000
1.44E-08	3.51E-07	5.84E-08	0.42	0.000
1.50E-09	3.66E-08	6.10E-09	0.04	0.000
1.83E-09	4.48E-08	7.46E-09	0.05	0.000
1.96E-09	4.79E-08	7.98E-09	0.06	0.000
2.11E-09	5.17E-08	8.60E-09	0.06	0.000
2.29E-09	5.60E-08	9.32E-09	0.07	0.000
2.49E-09	6.08E-08	1.01E-08	0.07	0.000
2.72E-09	6.64E-08	1.11E-08	0.08	0.000
2.96E-09	7.24E-08	1.20E-08	0.09	0.000
3.25E-09	7.94E-08	1.32E-08	0.10	0.000
3.57E-09	8.73E-08	1.45E-08	0.11	0.000
3.96E-09	9.68E-08	1.61E-08	0.12	0.000
4.42E-09				
	1.08E-07	1.80E-08	0.13	0.000
4.97E-09	1.22E-07	2.02E-08	0.15	0.000
5.64E-09	1.38E-07	2.30E-08	0.17	0.000
6.45E-09	1.58E-07	2.63E-08	0.19	0.000
7.47E-09	1.83E-07	3.04E-08	0.22	0.000
8.71E-09	2.13E-07	3.54E-08	0.26	0.000
1.24E-08	3.03E-07	5.04E-08	0.37	0.000
1.50E-08	3.67E-07	6.10E-08	0.44	0.000
1.83E-08	4.46E-07	7.43E-08	0.54	0.000
2.22E-08	5.43E-07	9.04E-08	0.66	0.000
2.69E-08	6.57E-07	1.09E-07	0.79	0.000
3.24E-08	7.92E-07	1.32E-07	0.96	0.001
3.90E-08	9.53E-07	1.59E-07	1.15	0.001
4.67E-08	1.14E-06	1.90E-07	1.38	0.001
5.71E-08	1.40E-06	2.32E-07	1.69	0.001
6.83E-08	1.67E-06	2.78E-07	2.01	0.001
8.08E-08	1.98E-06	3.29E-07	2.39	0.001
5.20E-08	1.27E-06	2.11E-07	1.53	0.001
4.87E-08	1.19E-06	1.98E-07	1.44	0.001
4.53E-08	1.11E-06	1.84E-07	1.34	0.001
4.25E-08	1.04E-06	1.73E-07	1.25	0.001
4.00E-08	9.77E-07	1.63E-07	1.18	0.001
3.78E-08	9.24E-07	1.54E-07	1.12	0.001
3.59E-08	8.77E-07	1.46E-07	1.06	0.001
3.41E-08	8.34E-07	1.39E-07	1.01	0.001
3.28E-08	8.02E-07	1.33E-07	0.97	0.001
3.11E-08	7.59E-07	1.26E-07	0.92	0.001
2.98E-08	7.29E-07	1.21E-07	0.88	0.001
2.85E-08	6.97E-07	1.16E-07	0.84	0.001
2.73E-08	6.68E-07	1.11E-07	0.81	0.000
2.62E-08	6.41E-07	1.07E-07	0.77	0.000
2.42E-08	5.91E-07	9.85E-08	0.71	0.000
2.33E-08	5.68E-07	9.46E-08	0.69	0.000
2.23E-08	5.46E-07	9.09E-08	0.66	0.000
2.15E-08	5.25E-07	8.74E-08	0.63	0.000
2.06E-08	5.03E-07	8.37E-08	0.61	0.000
1.96E-08	4.80E-07	7.99E-08	0.58	0.000
1.89E-08	4.62E-07	7.70E-08	0.56	0.000
1.83E-08	4.47E-07	7.45E-08	0.54	0.000
1.76E-08	4.30E-07	7.15E-08	0.52	0.000
1.69E-08	4.13E-07	6.88E-08	0.50	0.000

		Project Construction									
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568625.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4149030.16	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000
567345.16 567405.16	4149030.16 4149030.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000
567425.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16 567765.16	4149030.16 4149030.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.002	0.001 0.002	0.001 0.002	0.001 0.002	0.001 0.002
567785.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567845.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567865.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567885.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
567985.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568025.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
568045.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568065.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568085.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568105.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568125.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568145.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568165.16 568185.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568205.16	4149030.16 4149030.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
568225.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568245.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568265.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568305.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568325.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568345.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568365.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568385.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568425.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568445.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568465.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568505.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568525.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568545.16 568585.16	4149030.16 4149030.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568585.16 568605.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149030.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001

	Calicel Risk = 2K1	L C <sub>DPM</sub>		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.63E-08	3.98E-07	6.62E-08	0.48	0.000
1.57E-08	3.84E-07	6.39E-08	0.46	0.000
1.51E-08	3.69E-07	6.15E-08	0.45	0.000
1.45E-08	3.55E-07	5.91E-08	0.43	0.000
1.40E-08	3.42E-07	5.70E-08	0.41	0.000
1.35E-08	3.30E-07	5.50E-08	0.40	0.000
1.53E-09	3.74E-08	6.23E-09	0.05	0.000
1.64E-09	4.00E-08	6.66E-09	0.05	0.000
2.02E-09	4.94E-08	8.22E-09	0.06	0.000
2.17E-09	5.31E-08	8.84E-09	0.06	0.000
2.35E-09	5.74E-08	9.55E-09	0.07	0.000
2.56E-09	6.25E-08	1.04E-08	0.08	0.000
2.79E-09	6.81E-08	1.13E-08	0.08	0.000
3.06E-09	7.47E-08	1.24E-08	0.09	0.000
3.35E-09	8.20E-08	1.36E-08	0.10	0.000
3.70E-09	9.04E-08	1.50E-08	0.11	0.000
4.08E-09	9.98E-08	1.66E-08	0.12	0.000
4.58E-09	1.12E-07	1.87E-08	0.14	0.000
5.16E-09	1.26E-07	2.10E-08	0.15	0.000
5.86E-09	1.43E-07	2.39E-08	0.17	0.000
6.73E-09	1.64E-07	2.74E-08	0.20	0.000
7.81E-09	1.91E-07	3.18E-08	0.23	0.000
1.07E-08				
	2.61E-07	4.35E-08	0.32	0.000
1.27E-08	3.09E-07	5.15E-08	0.37	0.000
1.51E-08	3.70E-07	6.15E-08	0.45	0.000
1.82E-08	4.44E-07	7.39E-08	0.54	0.000
2.16E-08	5.27E-07	8.77E-08	0.64	0.000
2.57E-08	6.28E-07	1.05E-07	0.76	0.000
3.02E-08	7.38E-07	1.23E-07	0.89	0.001
3.56E-08	8.69E-07	1.45E-07	1.05	0.001
4.19E-08	1.02E-06	1.70E-07	1.24	0.001
4.84E-08	1.18E-06	1.97E-07	1.43	0.001
5.89E-08	1.44E-06	2.40E-07	1.74	0.001
5.35E-08	1.31E-06	2.18E-07	1.58	0.001
5.13E-08	1.25E-06	2.09E-07	1.51	0.001
4.88E-08	1.19E-06	1.99E-07	1.44	0.001
4.60E-08	1.13E-06	1.87E-07	1.36	0.001
4.35E-08	1.06E-06	1.77E-07	1.28	0.001
4.11E-08	1.00E-06	1.67E-07	1.21	0.001
3.92E-08	9.59E-07	1.60E-07	1.16	0.001
3.68E-08	8.99E-07	1.50E-07	1.09	0.001
3.49E-08	8.53E-07	1.42E-07	1.03	0.001
3.31E-08	8.10E-07	1.35E-07	0.98	0.001
3.16E-08	7.72E-07	1.29E-07	0.93	0.001
3.02E-08	7.37E-07	1.23E-07	0.89	0.001
2.88E-08	7.04E-07	1.17E-07	0.85	0.001
2.77E-08	6.78E-07	1.13E-07	0.82	0.000
2.65E-08	6.47E-07	1.08E-07	0.78	0.000
2.56E-08	6.26E-07	1.04E-07	0.76	0.000
2.47E-08	6.03E-07	1.00E-07	0.73	0.000
2.38E-08	5.81E-07	9.67E-08	0.70	0.000
2.29E-08	5.60E-07	9.33E-08	0.68	0.000
2.15E-08	5.24E-07	8.73E-08	0.63	0.000
2.07E-08	5.06E-07	8.43E-08	0.61	0.000
	4.89E-07			
2.00E-08		8.14E-08	0.59	0.000
1.93E-08	4.72E-07	7.86E-08	0.57	0.000
1.86E-08	4.55E-07	7.57E-08	0.55	0.000
1.79E-08	4.38E-07	7.30E-08	0.53	0.000
1.74E-08	4.24E-07	7.06E-08	0.51	0.000
1.62E-08	3.95E-07	6.58E-08	0.48	0.000
1.56E-08	3.81E-07	6.35E-08	0.46	0.000
1.50E-08	3.68E-07	6.12E-08	0.44	0.000
1.46E-08	3.56E-07	5.93E-08	0.43	0.000
1.41E-08	3.45E-07	5.74E-08	0.42	0.000
1.36E-08	3.32E-07	5.54E-08	0.42	
				0.000
1.32E-08	3.22E-07	5.35E-08	0.39	0.000
1.27E-08	3.10E-07	5.16E-08	0.37	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567325.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16 567445.16	4149050.16 4149050.16	0.000	0.000 0.000								
567465.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16 567705.16	4149050.16 4149050.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567725.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567785.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567845.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567865.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567965.16 568005.16	4149050.16 4149050.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004	0.004 0.004
568025.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568045.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
568065.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568085.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568105.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568125.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568145.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568165.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568185.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16 568225.16	4149050.16 4149050.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568245.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568305.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568325.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568345.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568365.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568385.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568425.16 568445.16	4149050.16 4149050.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
568465.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568485.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568505.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568525.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568545.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568565.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568585.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568605.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16 568645.16	4149050.16 4149050.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568665.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149050.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567485.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16 567585.16	4149070.16 4149070.16	0.000 0.000									
307363.10	7143070.10	0.000	0.000	0.000	0.000	0.000	0.000	5.000	0.000	0.000	0.000

	Calicel Kisk - 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.57E-09	3.83E-08	6.38E-09	0.05	0.000
1.68E-09	4.11E-08	6.84E-09	0.05	0.000
1.80E-09	4.39E-08	7.30E-09	0.05	0.000
2.24E-09	5.46E-08	9.10E-09	0.07	0.000
2.42E-09	5.91E-08	9.84E-09	0.07	0.000
2.63E-09	6.42E-08	1.07E-08	0.08	0.000
2.88E-09	7.03E-08	1.17E-08	0.08	0.000
3.15E-09	7.69E-08	1.28E-08	0.09	0.000
3.46E-09	8.46E-08	1.41E-08	0.10	0.000
3.83E-09	9.36E-08	1.56E-08	0.11	0.000
4.25E-09	1.04E-07	1.73E-08	0.13	0.000
4.73E-09	1.16E-07	1.92E-08	0.14	0.000
5.33E-09	1.30E-07	2.17E-08	0.16	0.000
6.10E-09	1.49E-07	2.48E-08	0.18	0.000
7.03E-09	1.72E-07	2.86E-08	0.21	0.000
1.11E-08	2.71E-07	4.51E-08	0.33	0.000
1.30E-08	3.18E-07	5.30E-08	0.38	0.000
1.53E-08	3.74E-07	6.22E-08	0.45	0.000
1.79E-08	4.38E-07	7.29E-08	0.53	0.000
2.10E-08	5.12E-07	8.53E-08	0.62	0.000
2.44E-08	5.97E-07	9.95E-08	0.72	0.000
2.82E-08	6.90E-07	1.15E-07	0.83	0.000
			0.96	
3.24E-08	7.92E-07	1.32E-07		0.001
3.70E-08	9.05E-07	1.51E-07	1.09	0.001
4.62E-08	1.13E-06	1.88E-07	1.36	0.001
4.33E-08	1.06E-06	1.76E-07	1.28	0.001
4.17E-08	1.02E-06	1.70E-07	1.23	0.001
4.03E-08	9.86E-07	1.64E-07	1.19	0.001
3.82E-08	9.34E-07	1.56E-07	1.13	0.001
3.65E-08	8.91E-07	1.48E-07	1.08	0.001
3.48E-08	8.49E-07	1.41E-07	1.03	0.001
3.32E-08	8.12E-07	1.35E-07	0.98	0.001
3.19E-08	7.80E-07	1.30E-07	0.94	0.001
3.03E-08	7.40E-07	1.23E-07	0.89	0.001
2.89E-08	7.06E-07	1.17E-07	0.85	0.001
2.76E-08	6.74E-07	1.12E-07	0.81	0.000
2.65E-08	6.46E-07	1.08E-07	0.78	0.000
2.54E-08	6.21E-07	1.03E-07	0.75	0.000
2.43E-08	5.95E-07	9.90E-08	0.72	0.000
2.36E-08	5.77E-07	9.60E-08	0.70	0.000
2.27E-08	5.54E-07	9.23E-08	0.67	0.000
2.20E-08	5.38E-07	8.96E-08	0.65	0.000
2.13E-08	5.21E-07	8.68E-08	0.63	0.000
2.06E-08	5.04E-07	8.39E-08	0.61	0.000
		8.14E-08		
2.00E-08	4.89E-07		0.59	0.000
1.90E-08	4.64E-07	7.72E-08	0.56	0.000
1.85E-08	4.52E-07	7.52E-08	0.55	0.000
1.79E-08	4.38E-07	7.29E-08	0.53	0.000
1.73E-08	4.24E-07	7.05E-08	0.51	0.000
1.68E-08	4.11E-07	6.84E-08	0.50	0.000
1.63E-08	3.99E-07	6.65E-08	0.48	0.000
1.58E-08	3.86E-07	6.43E-08	0.47	0.000
1.52E-08	3.72E-07	6.20E-08	0.45	0.000
1.48E-08	3.62E-07	6.03E-08	0.44	0.000
1.44E-08	3.51E-07	5.85E-08	0.42	0.000
1.39E-08	3.40E-07	5.66E-08	0.41	0.000
1.35E-08	3.29E-07	5.48E-08	0.40	0.000
1.31E-08	3.20E-07	5.32E-08	0.39	0.000
1.27E-08	3.10E-07	5.16E-08	0.37	0.000
1.23E-08	3.00E-07	4.99E-08	0.36	0.000
1.19E-08	2.90E-07	4.83E-08	0.35	0.000
2.94E-09	7.18E-08	1.19E-08	0.09	0.000
3.22E-09	7.88E-08	1.31E-08	0.10	0.000
3.54E-09	8.66E-08	1.44E-08	0.10	0.000
3.92E-09	9.58E-08	1.60E-08	0.12	0.000
4.38E-09	1.07E-07	1.78E-08	0.13	0.000
4.94E-09	1.21E-07	2.01E-08	0.15	0.000

Cancer Risk =  $\sum R1*C_{DPM}$ 

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567605.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16 567785.16	4149070.16 4149070.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567805.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567845.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567945.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567965.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568005.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568025.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568045.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568065.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568085.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568105.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568125.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568145.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4149070.16 4149070.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000	0.002 0.002	0.002 0.002	0.002	0.002	0.002
568185.16 568205.16	4149070.16	0.000	0.000	0.000	0.000 0.000	0.000 0.000	0.002	0.002	0.002 0.002	0.002 0.002	0.002 0.002
568225.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568245.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568305.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568325.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568345.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568365.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568385.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568425.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568445.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568465.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568485.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568505.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568525.16 568545.16	4149070.16 4149070.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568565.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568605.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149070.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16 567485.16	4149090.16 4149090.16	0.000 0.000									
567505.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567805.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567825.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567905.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567925.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
567945.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003

	Calicel Kisk - 2K1	. C <sub>DPM</sub>		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
F 64F 00	4 205 07	2 205 00	0.47	0.000
5.64E-09	1.38E-07	2.30E-08	0.17	0.000
6.43E-09	1.57E-07	2.61E-08	0.19	0.000
9.84E-09	2.41E-07	4.00E-08	0.29	0.000
1.14E-08	2.79E-07	4.64E-08	0.34	0.000
1.32E-08	3.23E-07	5.39E-08	0.39	0.000
1.53E-08	3.75E-07	6.24E-08	0.45	0.000
			0.52	
1.76E-08	4.31E-07	7.18E-08		0.000
2.03E-08	4.95E-07	8.24E-08	0.60	0.000
2.32E-08	5.67E-07	9.45E-08	0.69	0.000
2.62E-08	6.41E-07	1.07E-07	0.77	0.000
2.95E-08	7.22E-07	1.20E-07	0.87	0.001
3.96E-08	9.68E-07	1.61E-07	1.17	0.001
3.86E-08	9.42E-07	1.57E-07	1.14	0.001
3.55E-08				
	8.68E-07	1.45E-07	1.05	0.001
3.41E-08	8.34E-07	1.39E-07	1.01	0.001
3.27E-08	7.99E-07	1.33E-07	0.96	0.001
3.12E-08	7.61E-07	1.27E-07	0.92	0.001
2.99E-08	7.32E-07	1.22E-07	0.88	0.001
2.87E-08	7.01E-07	1.17E-07	0.85	0.001
2.74E-08	6.70E-07	1.12E-07	0.81	0.000
2.64E-08	6.46E-07	1.08E-07	0.78	0.000
2.52E-08	6.15E-07	1.02E-07	0.74	0.000
2.41E-08	5.90E-07	9.82E-08	0.71	0.000
2.32E-08	5.67E-07	9.43E-08	0.68	0.000
2.23E-08	5.45E-07	9.08E-08	0.66	0.000
2.14E-08	5.24E-07	8.72E-08	0.63	0.000
2.07E-08	5.05E-07	8.42E-08	0.61	0.000
2.01E-08	4.91E-07	8.17E-08	0.59	0.000
1.94E-08	4.75E-07	7.90E-08	0.57	0.000
1.89E-08	4.63E-07	7.70E-08	0.56	0.000
1.85E-08	4.51E-07	7.51E-08	0.54	0.000
1.79E-08	4.38E-07	7.29E-08	0.53	0.000
1.74E-08	4.26E-07	7.10E-08	0.51	0.000
1.69E-08	4.13E-07	6.87E-08	0.50	0.000
1.74E-08	4.25E-07	7.07E-08	0.51	0.000
1.70E-08	4.15E-07	6.90E-08	0.50	0.000
1.55E-08	3.79E-07	6.31E-08	0.46	0.000
1.51E-08	3.69E-07	6.15E-08	0.45	0.000
1.46E-08	3.58E-07	5.95E-08	0.43	0.000
1.42E-08	3.48E-07	5.79E-08	0.42	0.000
1.38E-08	3.38E-07	5.62E-08	0.41	0.000
1.32E-08	3.22E-07	5.35E-08	0.39	0.000
1.28E-08	3.12E-07	5.20E-08	0.38	0.000
1.24E-08	3.03E-07	5.04E-08	0.37	0.000
1.21E-08		4.91E-08		0.000
	2.95E-07		0.36	
1.18E-08	2.88E-07	4.79E-08	0.35	0.000
1.14E-08	2.80E-07	4.65E-08	0.34	0.000
1.11E-08	2.72E-07	4.52E-08	0.33	0.000
1.65E-09	4.04E-08	6.73E-09	0.05	0.000
1.77E-09	4.31E-08	7.18E-09	0.05	0.000
1.89E-09	4.63E-08	7.70E-09	0.06	0.000
2.03E-09	4.97E-08	8.27E-09	0.06	0.000
2.18E-09				0.000
	5.34E-08	8.89E-09	0.06	
2.77E-09	6.78E-08	1.13E-08	0.08	0.000
3.02E-09	7.38E-08	1.23E-08	0.09	0.000
3.35E-09	8.18E-08	1.36E-08	0.10	0.000
3.67E-09	8.98E-08	1.49E-08	0.11	0.000
4.10E-09	1.00E-07	1.67E-08	0.12	0.000
4.58E-09	1.12E-07	1.86E-08	0.14	0.000
5.16E-09	1.26E-07	2.10E-08	0.15	0.000
5.86E-09	1.43E-07	2.38E-08	0.17	0.000
1.95E-08	4.77E-07	7.95E-08	0.58	0.000
2.19E-08	5.35E-07	8.91E-08	0.65	0.000
2.43E-08	5.93E-07	9.87E-08	0.72	0.000
3.24E-08	7.91E-07	1.32E-07	0.96	0.001
3.34E-08	8.15E-07	1.36E-07	0.98	0.001
3.35E-08	8.19E-07	1.36E-07	0.99	0.001

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567965.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568005.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
568025.16 568045.16	4149090.16 4149090.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.002	0.003 0.002	0.003 0.002	0.003 0.002	0.003 0.002
568045.16 568065.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568105.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568125.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568145.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568185.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568225.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568245.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568265.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568285.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568305.16 568325.16	4149090.16 4149090.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568345.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568385.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568425.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568445.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568465.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568485.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568505.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568525.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568545.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568565.16 568585.16	4149090.16 4149090.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568605.16	4149090.16	0.000	0.000	0.000	0.000	0.000 0.000	0.001 0.001	0.001	0.001	0.001	0.001
568625.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149090.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16 567425.16	4149110.16 4149110.16	0.000 0.000									
567485.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567645.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16 567745.16	4149110.16 4149110.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567765.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568065.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568105.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568125.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568145.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568165.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568185.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568205.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568245.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001

	Calicel Kisk = 2K1	L C <sub>DPM</sub>		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.28E-08	8.03E-07	1.34E-07	0.97	0.001
3.04E-08	7.42E-07	1.24E-07	0.90	0.001
2.90E-08	7.09E-07	1.18E-07	0.86	0.001
2.78E-08	6.78E-07	1.13E-07	0.82	0.000
2.63E-08	6.44E-07	1.07E-07	0.78	0.000
2.52E-08	6.16E-07	1.03E-07	0.74	0.000
2.41E-08	5.90E-07	9.81E-08	0.71	0.000
2.31E-08	5.64E-07	9.40E-08	0.68	0.000
2.23E-08	5.46E-07	9.09E-08	0.66	0.000
2.13E-08	5.20E-07	8.66E-08	0.63	0.000
2.05E-08	5.01E-07	8.34E-08	0.60	0.000
1.97E-08	4.82E-07	8.02E-08	0.58	0.000
1.90E-08	4.65E-07	7.74E-08	0.56	0.000
1.83E-08	4.48E-07	7.46E-08	0.54	0.000
1.77E-08	4.33E-07	7.21E-08	0.52	0.000
1.71E-08	4.19E-07	6.97E-08	0.51	0.000
1.67E-08	4.08E-07	6.79E-08	0.49	0.000
1.63E-08	3.98E-07	6.63E-08	0.48	0.000
1.59E-08	3.90E-07	6.48E-08	0.47	0.000
1.56E-08	3.80E-07	6.33E-08	0.46	0.000
1.52E-08	3.72E-07	6.20E-08	0.45	0.000
1.57E-08	3.83E-07	6.37E-08	0.46	0.000
1.54E-08	3.77E-07	6.27E-08	0.45	0.000
1.51E-08	3.69E-07	6.14E-08	0.45	0.000
1.38E-08	3.38E-07	5.62E-08	0.41	0.000
1.35E-08	3.30E-07	5.49E-08	0.40	0.000
1.32E-08	3.21E-07	5.35E-08	0.39	0.000
1.28E-08	3.14E-07	5.23E-08	0.38	0.000
1.25E-08	3.06E-07	5.10E-08	0.37	0.000
1.23E-08	3.00E-07	4.99E-08	0.36	0.000
1.20E-08	2.94E-07	4.89E-08	0.35	0.000
1.17E-08	2.86E-07	4.76E-08	0.35	0.000
1.14E-08	2.79E-07	4.64E-08	0.34	0.000
1.11E-08	2.72E-07	4.54E-08	0.33	0.000
1.09E-08	2.66E-07	4.43E-08	0.32	0.000
1.06E-08	2.59E-07	4.31E-08	0.31	0.000
1.03E-08	2.52E-07	4.19E-08	0.30	0.000
1.70E-09	4.15E-08	6.90E-09	0.05	0.000
1.81E-09	4.43E-08	7.37E-09	0.05	0.000
1.95E-09	4.76E-08	7.93E-09	0.06	0.000
2.08E-09	5.08E-08	8.46E-09	0.06	0.000
2.25E-09	5.50E-08	9.15E-09	0.07	0.000
2.43E-09	5.95E-08	9.90E-09	0.07	0.000
3.16E-09	7.71E-08	1.28E-08	0.09	0.000
3.46E-09	8.45E-08	1.41E-08	0.10	0.000
3.79E-09	9.27E-08	1.54E-08	0.11	0.000
4.25E-09	1.04E-07	1.73E-08	0.13	0.000
4.76E-09	1.16E-07	1.94E-08	0.14	0.000
5.37E-09	1.31E-07	2.18E-08	0.16	0.000
7.85E-09	1.92E-07	3.19E-08	0.23	0.000
8.96E-09	2.19E-07	3.65E-08	0.26	0.000
1.02E-08	2.50E-07	4.17E-08	0.30	0.000
1.17E-08	2.85E-07	4.74E-08	0.34	0.000
1.32E-08	3.23E-07	5.37E-08	0.39	0.000
1.49E-08	3.63E-07	6.05E-08	0.44	0.000
1.67E-08	4.07E-07	6.78E-08	0.49	0.000
1.86E-08	4.54E-07	7.55E-08	0.55	0.000
2.30E-08	5.61E-07	9.34E-08	0.68	0.000
2.19E-08	5.36E-07	8.93E-08	0.65	0.000
2.10E-08	5.13E-07	8.54E-08	0.62	0.000
2.01E-08	4.91E-07	8.17E-08	0.59	0.000
1.92E-08	4.69E-07	7.81E-08	0.57	0.000
1.84E-08	4.50E-07	7.49E-08	0.54	0.000
1.77E-08	4.33E-07	7.21E-08	0.52	0.000
1.70E-08	4.16E-07	6.92E-08	0.50	0.000
1.64E-08	4.01E-07	6.67E-08	0.48	0.000
1.58E-08	3.87E-07	6.45E-08	0.47	0.000

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
FC02CF 4C	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568265.16 568285.16	4149110.16 4149110.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568305.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568325.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568345.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568385.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568425.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568445.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568465.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568485.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568505.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568525.16 568545.16	4149110.16 4149110.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568565.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568585.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568605.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149110.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16 567365.16	4149130.16 4149130.16	0.000 0.000	0.000	0.000 0.000	0.000 0.000						
567385.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16 567665.16	4149130.16 4149130.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567685.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567905.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567965.16 567985.16	4149130.16 4149130.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002	0.002 0.002	0.002 0.002
568005.16 568005.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002 0.002	0.002	0.002
568025.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568045.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568065.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568105.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568345.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568385.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568405.16 568425.16	4149130.16 4149130.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.001 0.001	0.001 0.001	0.001	0.001 0.001	0.001 0.001
568425.16 568445.16	4149130.16 4149130.16	0.000	0.000	0.000	0.000	0.000 0.000	0.001	0.001	0.001 0.001	0.001	0.001
568465.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568485.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568505.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568525.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568545.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568565.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568585.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001

	Califel Kisk - 2K1	CDPM		п
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
			'	
1.54E-08	3.76E-07	6.25E-08	0.45	0.000
1.49E-08	3.64E-07	6.06E-08	0.44	0.000
1.44E-08	3.53E-07	5.87E-08	0.43	0.000
1.41E-08		5.75E-08		
	3.45E-07		0.42	0.000
1.38E-08	3.38E-07	5.63E-08	0.41	0.000
1.36E-08	3.32E-07	5.52E-08	0.40	0.000
1.33E-08	3.25E-07	5.42E-08	0.39	0.000
1.30E-08	3.18E-07	5.30E-08	0.38	0.000
1.36E-08	3.31E-07	5.52E-08	0.40	0.000
1.33E-08	3.25E-07	5.41E-08	0.39	0.000
1.23E-08	3.01E-07	5.00E-08	0.36	0.000
1.21E-08	2.95E-07	4.91E-08	0.36	0.000
1.18E-08	2.89E-07	4.81E-08	0.35	0.000
1.16E-08	2.83E-07	4.72E-08	0.34	0.000
1.14E-08	2.78E-07	4.62E-08	0.34	0.000
1.11E-08	2.72E-07	4.53E-08	0.33	0.000
1.09E-08	2.67E-07	4.45E-08	0.32	0.000
1.07E-08	2.62E-07	4.36E-08	0.32	0.000
1.05E-08	2.56E-07	4.26E-08	0.31	0.000
1.03E-08	2.51E-07	4.17E-08	0.30	0.000
1.00E-08				
	2.45E-07	4.08E-08	0.30	0.000
9.81E-09	2.40E-07	3.99E-08	0.29	0.000
9.58E-09	2.34E-07	3.90E-08	0.28	0.000
1.74E-09	4.25E-08	7.08E-09	0.05	0.000
1.86E-09	4.55E-08	7.58E-09	0.05	0.000
2.00E-09	4.88E-08	8.12E-09	0.06	0.000
2.14E-09	5.22E-08	8.69E-09	0.06	0.000
2.32E-09	5.66E-08	9.42E-09	0.07	0.000
2.51E-09	6.13E-08	1.02E-08	0.07	0.000
2.73E-09	6.67E-08	1.11E-08	0.08	0.000
3.60E-09	8.80E-08	1.46E-08	0.11	0.000
3.97E-09	9.70E-08	1.61E-08	0.12	0.000
4.43E-09	1.08E-07	1.80E-08	0.13	0.000
4.97E-09	1.21E-07	2.02E-08	0.15	0.000
7.11E-09	1.74E-07	2.89E-08	0.21	0.000
8.07E-09	1.97E-07	3.28E-08	0.24	0.000
9.20E-09	2.25E-07	3.74E-08	0.27	0.000
1.04E-08	2.53E-07	4.21E-08		0.000
			0.31	
1.17E-08	2.85E-07	4.74E-08	0.34	0.000
1.30E-08	3.18E-07	5.30E-08	0.38	0.000
1.45E-08	3.55E-07	5.90E-08	0.43	0.000
1.60E-08	3.91E-07	6.51E-08	0.47	0.000
2.38E-08	5.81E-07	9.67E-08	0.70	0.000
2.44E-08	5.96E-07	9.93E-08	0.72	0.000
2.48E-08	6.06E-07	1.01E-07	0.73	0.000
2.47E-08	6.04E-07	1.01E-07	0.73	0.000
2.45E-08	5.98E-07	9.95E-08	0.72	0.000
2.40E-08	5.86E-07	9.76E-08	0.71	0.000
2.30E-08	5.61E-07	9.35E-08	0.68	0.000
2.21E-08	5.40E-07	9.00E-08	0.65	0.000
2.13E-08	5.21E-07	8.68E-08	0.63	0.000
2.03E-08	4.95E-07	8.25E-08	0.60	0.000
1.91E-08	4.67E-07	7.77E-08	0.56	0.000
1.83E-08	4.48E-07	7.45E-08	0.54	0.000
1.21E-08	2.96E-07	4.93E-08	0.36	0.000
1.19E-08	2.91E-07	4.85E-08	0.35	0.000
1.17E-08	2.86E-07	4.76E-08	0.35	0.000
1.17E-08 1.16E-08	2.82E-07	4.70E-08	0.34	0.000
		4.70E-08 4.66E-08		0.000
1.14E-08	2.80E-07		0.34	
1.13E-08	2.76E-07	4.60E-08	0.33	0.000
1.12E-08	2.73E-07	4.54E-08	0.33	0.000
1.10E-08	2.69E-07	4.47E-08	0.32	0.000
1.08E-08	2.64E-07	4.40E-08	0.32	0.000
1.06E-08	2.60E-07	4.33E-08	0.31	0.000
1.05E-08	2.56E-07	4.26E-08	0.31	0.000
1.03E-08	2.52E-07	4.19E-08	0.30	0.000
1.01E-08	2.47E-07	4.11E-08	0.30	0.000

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568605.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149130.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4149150.16	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000
567345.16 567365.16	4149150.16 4149150.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000
567385.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567625.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567845.16 567865.16	4149150.16 4149150.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567905.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567965.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567985.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568005.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568025.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568045.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568065.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568085.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16 568205.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4149150.16 4149150.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568245.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568265.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568285.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568305.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568325.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568345.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568385.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568405.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149150.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16 567445.16	4149170.16 4149170.16	0.000 0.000									
567445.16 567465.16	4149170.16 4149170.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16 567485.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
567605.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567625.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
		<b>.</b>	*:***								-:

	Califel Kisk - 2K1	CDPM		п
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
			'	
9.90E-09	2.42E-07	4.03E-08	0.29	0.000
9.57E-09	2.34E-07	3.90E-08	0.28	0.000
9.40E-09	2.30E-07	3.82E-08	0.28	0.000
9.22E-09	2.25E-07	3.75E-08	0.27	0.000
9.04E-09	2.21E-07	3.68E-08	0.27	0.000
8.87E-09	2.17E-07	3.61E-08	0.26	0.000
1.78E-09	4.36E-08	7.25E-09	0.05	0.000
1.91E-09	4.67E-08	7.77E-09	0.06	0.000
2.06E-09	5.03E-08	8.37E-09	0.06	0.000
2.21E-09	5.41E-08	9.00E-09	0.07	0.000
2.40E-09	5.86E-08	9.75E-09	0.07	0.000
2.60E-09	6.36E-08	1.06E-08	0.08	0.000
2.83E-09	6.92E-08	1.15E-08	0.08	0.000
3.08E-09	7.53E-08	1.25E-08	0.09	0.000
4.15E-09	1.01E-07	1.69E-08	0.12	0.000
4.61E-09	1.13E-07	1.87E-08	0.14	0.000
6.48E-09				
	1.58E-07	2.64E-08	0.19	0.000
7.32E-09	1.79E-07	2.98E-08	0.22	0.000
8.29E-09	2.03E-07	3.37E-08	0.24	0.000
9.25E-09	2.26E-07	3.76E-08	0.27	0.000
1.03E-08	2.52E-07	4.20E-08	0.30	0.000
1.15E-08	2.81E-07	4.68E-08	0.34	0.000
1.27E-08	3.11E-07	5.17E-08	0.38	0.000
1.88E-08	4.60E-07	7.65E-08	0.56	0.000
1.98E-08	4.83E-07	8.04E-08	0.58	0.000
2.04E-08	4.99E-07	8.32E-08	0.60	0.000
2.16E-08	5.28E-07	8.79E-08	0.64	0.000
2.18E-08	5.33E-07	8.87E-08	0.64	0.000
2.18E-08	5.32E-07	8.86E-08	0.64	0.000
2.17E-08	5.29E-07	8.81E-08	0.64	0.000
2.12E-08	5.19E-07	8.63E-08	0.63	0.000
2.05E-08	5.01E-07	8.35E-08	0.61	0.000
1.99E-08	4.87E-07	8.10E-08	0.59	0.000
1.92E-08	4.69E-07	7.81E-08	0.57	0.000
1.83E-08	4.46E-07	7.43E-08	0.54	0.000
1.72E-08	4.20E-07	6.99E-08	0.51	0.000
1.63E-08	3.99E-07	6.65E-08	0.48	0.000
1.55E-08	3.80E-07	6.32E-08	0.46	0.000
1.51E-08	3.68E-07	6.13E-08	0.44	0.000
1.44E-08	3.52E-07	5.85E-08	0.42	0.000
1.38E-08	3.37E-07	5.61E-08	0.41	0.000
1.32E-08	3.22E-07	5.36E-08	0.39	0.000
1.27E-08	3.10E-07	5.16E-08	0.37	0.000
1.22E-08	2.98E-07	4.97E-08	0.36	0.000
1.18E-08	2.88E-07	4.80E-08	0.35	0.000
1.15E-08	2.80E-07	4.66E-08	0.34	0.000
1.11E-08	2.71E-07	4.51E-08	0.33	0.000
1.08E-08	2.64E-07	4.40E-08	0.32	0.000
1.06E-08	2.59E-07	4.32E-08	0.31	0.000
1.04E-08	2.55E-07	4.25E-08	0.31	0.000
1.03E-08	2.52E-07	4.20E-08	0.30	0.000
1.02E-08	2.49E-07	4.14E-08	0.30	0.000
8.18E-09	2.00E-07	3.33E-08	0.24	0.000
1.83E-09	4.47E-08	7.44E-09	0.05	0.000
1.96E-09	4.79E-08	7.97E-09	0.06	0.000
2.13E-09	5.20E-08	8.66E-09	0.06	0.000
2.28E-09	5.58E-08	9.29E-09	0.07	0.000
2.48E-09	6.05E-08	1.01E-08	0.07	0.000
2.69E-09	6.57E-08	1.09E-08	0.08	0.000
2.93E-09	7.15E-08	1.19E-08	0.09	0.000
3.20E-09	7.82E-08	1.30E-08	0.09	0.000
3.51E-09	8.58E-08	1.43E-08	0.10	0.000
5.96E-09	1.46E-07	2.42E-08	0.18	0.000
6.65E-09				
	1.62E-07	2.70E-08	0.20	0.000
7.51E-09	1.84E-07	3.06E-08	0.22	0.000
8.33E-09	2.04E-07	3.39E-08	0.25	0.000
9.25E-09	2.26E-07	3.76E-08	0.27	0.000

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567685.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16 567845.16	4149170.16 4149170.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
567865.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567885.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567925.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567965.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567985.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568005.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
568025.16	4149170.16	0.000 0.000	0.000	0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002	0.002	0.002 0.002
568045.16 568065.16	4149170.16 4149170.16	0.000	0.000 0.000	0.000 0.000	0.000	0.000	0.002	0.002	0.002 0.001	0.002 0.001	0.002
568085.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16 568245.16	4149170.16 4149170.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568265.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568285.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568305.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568325.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568345.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568385.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568405.16 568425.16	4149170.16 4149170.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568445.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568465.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568485.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568505.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568525.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568585.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568605.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16 568665.16	4149170.16 4149170.16	0.000	0.000	0.000 0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001 0.001
568685.16	4149170.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001
568705.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149170.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16 567425.16	4149190.16 4149190.16	0.000 0.000									
567445.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567605.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567625.16 567645.16	4149190.16 4149190.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567665.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001

	Califer Kisk = 5K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
				-
4 025 00	2 505 07	4.465.00	0.20	0.000
1.02E-08	2.50E-07	4.16E-08	0.30	0.000
1.13E-08	2.76E-07	4.60E-08	0.33	0.000
1.64E-08	4.00E-07	6.66E-08	0.48	0.000
1.72E-08	4.20E-07	6.99E-08	0.51	0.000
1.78E-08	4.35E-07	7.24E-08	0.53	0.000
1.82E-08	4.46E-07	7.42E-08	0.54	0.000
1.87E-08	4.57E-07	7.61E-08	0.55	0.000
1.94E-08	4.74E-07	7.88E-08	0.57	0.000
1.94E-08	4.74E-07	7.89E-08	0.57	0.000
1.93E-08	4.72E-07	7.85E-08	0.57	0.000
1.90E-08	4.64E-07	7.72E-08	0.56	0.000
1.86E-08	4.54E-07	7.55E-08	0.55	0.000
1.80E-08	4.41E-07	7.34E-08	0.53	0.000
1.74E-08	4.25E-07	7.07E-08	0.51	0.000
1.66E-08	4.06E-07	6.77E-08	0.49	0.000
1.57E-08	3.83E-07	6.38E-08	0.46	0.000
1.49E-08	3.65E-07	6.07E-08	0.44	0.000
1.43E-08	3.48E-07	5.80E-08	0.42	0.000
1.37E-08	3.35E-07	5.58E-08	0.40	0.000
1.30E-08	3.17E-07	5.28E-08	0.38	0.000
1.24E-08	3.04E-07	5.06E-08	0.37	0.000
1.19E-08	2.92E-07	4.85E-08	0.35	0.000
1.14E-08	2.79E-07	4.64E-08	0.34	0.000
1.10E-08	2.69E-07	4.48E-08	0.33	0.000
1.06E-08	2.59E-07	4.31E-08	0.31	0.000
1.01E-08	2.48E-07	4.13E-08	0.30	0.000
9.83E-09	2.40E-07	4.00E-08		0.000
			0.29	
9.61E-09	2.35E-07	3.91E-08	0.28	0.000
9.42E-09	2.30E-07	3.83E-08	0.28	0.000
9.29E-09	2.27E-07	3.78E-08	0.27	0.000
9.17E-09	2.24E-07	3.73E-08	0.27	0.000
9.05E-09	2.21E-07	3.68E-08	0.27	0.000
8.98E-09	2.19E-07	3.65E-08	0.27	0.000
8.84E-09	2.16E-07	3.59E-08	0.26	0.000
8.77E-09				
	2.14E-07	3.57E-08	0.26	0.000
8.72E-09	2.13E-07	3.55E-08	0.26	0.000
8.63E-09	2.11E-07	3.51E-08	0.25	0.000
8.54E-09	2.09E-07	3.48E-08	0.25	0.000
8.24E-09	2.01E-07	3.35E-08	0.24	0.000
8.13E-09	1.99E-07	3.31E-08	0.24	0.000
8.05E-09	1.97E-07	3.28E-08	0.24	0.000
7.87E-09	1.92E-07	3.20E-08	0.23	0.000
7.76E-09	1.90E-07	3.16E-08	0.23	0.000
7.65E-09	1.87E-07	3.11E-08	0.23	0.000
7.54E-09	1.84E-07	3.07E-08	0.22	0.000
1.88E-09	4.60E-08	7.66E-09	0.06	0.000
2.02E-09	4.93E-08	8.20E-09	0.06	0.000
2.22E-09	5.42E-08	9.03E-09	0.07	0.000
2.36E-09	5.77E-08	9.61E-09	0.07	0.000
2.56E-09	6.25E-08	1.04E-08		0.000
			0.08	
2.78E-09	6.80E-08	1.13E-08	0.08	0.000
3.03E-09	7.40E-08	1.23E-08	0.09	0.000
3.32E-09	8.12E-08	1.35E-08	0.10	0.000
3.64E-09	8.89E-08	1.48E-08	0.11	0.000
4.00E-09	9.79E-08	1.63E-08	0.12	0.000
5.50E-09	1.34E-07	2.24E-08	0.16	0.000
6.11E-09	1.49E-07	2.48E-08		0.000
			0.18	
6.86E-09	1.68E-07	2.79E-08	0.20	0.000
7.58E-09	1.85E-07	3.09E-08	0.22	0.000
8.36E-09	2.04E-07	3.40E-08	0.25	0.000
9.20E-09	2.25E-07	3.74E-08	0.27	0.000
1.01E-08	2.47E-07	4.12E-08	0.30	0.000
1.44E-08	3.52E-07	5.86E-08	0.42	0.000
1.51E-08	3.70E-07	6.16E-08	0.45	0.000
1.57E-08	3.85E-07	6.40E-08	0.46	0.000
1.61E-08	3.93E-07	6.54E-08	0.47	0.000
1.65E-08	4.04E-07	6.72E-08	0.49	0.000

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567885.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
567945.16 567985.16	4149190.16 4149190.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.001	0.002 0.001	0.002 0.001	0.002 0.001	0.002 0.001
568005.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568025.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568045.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568065.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568085.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16 568245.16	4149190.16 4149190.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568265.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568285.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568305.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568325.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568345.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568385.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568405.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568425.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568445.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568465.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568485.16 568505.16	4149190.16 4149190.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568525.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568545.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568565.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568585.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568605.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568665.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4149190.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16 567325.16	4149190.16 4149210.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.000	0.001 0.000	0.001 0.000	0.001 0.000	0.001 0.000
567345.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16 567605.16	4149210.16 4149210.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567625.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16 567925.16	4149210.16 4149210.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567925.16 567985.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
307303.10	71-75210.10	3.000	0.000	3.000	0.000	3.000	5.001	5.001	5.001	0.001	0.001

	Calicel Kisk = 2K1	. C <sub>DPM</sub>		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
			'	
1.69E-08	4.12E-07	6.86E-08	0.50	0.000
1.72E-08	4.21E-07	7.02E-08	0.51	0.000
1.74E-08	4.25E-07	7.07E-08	0.51	0.000
1.71E-08	4.18E-07	6.95E-08	0.50	0.000
1.67E-08	4.08E-07	6.80E-08	0.49	0.000
1.63E-08	3.99E-07	6.64E-08	0.48	0.000
1.58E-08	3.87E-07	6.44E-08	0.47	0.000
1.52E-08	3.71E-07	6.18E-08	0.45	0.000
1.44E-08	3.51E-07	5.85E-08	0.42	0.000
1.37E-08	3.35E-07	5.58E-08	0.40	0.000
1.31E-08	3.20E-07	5.34E-08	0.39	0.000
1.26E-08	3.08E-07	5.12E-08	0.37	0.000
1.20E-08	2.92E-07	4.87E-08	0.35	0.000
1.14E-08	2.79E-07	4.64E-08	0.34	0.000
1.09E-08	2.66E-07	4.43E-08	0.32	0.000
1.04E-08	2.54E-07	4.23E-08	0.31	0.000
1.00E-08	2.45E-07	4.07E-08	0.30	0.000
9.59E-09	2.34E-07	3.90E-08	0.28	0.000
9.19E-09	2.25E-07	3.74E-08	0.27	0.000
8.89E-09	2.17E-07	3.62E-08	0.26	0.000
8.65E-09	2.11E-07	3.52E-08	0.26	0.000
8.46E-09	2.07E-07	3.44E-08	0.25	0.000
		3.38E-08		0.000
8.31E-09	2.03E-07		0.25	
8.21E-09	2.01E-07	3.34E-08	0.24	0.000
8.10E-09	1.98E-07	3.29E-08	0.24	0.000
8.00E-09	1.96E-07	3.26E-08	0.24	0.000
7.88E-09	1.93E-07	3.21E-08	0.23	0.000
7.85E-09	1.92E-07	3.19E-08	0.23	0.000
7.82E-09	1.91E-07	3.18E-08	0.23	0.000
7.75E-09	1.89E-07	3.15E-08	0.23	0.000
7.68E-09	1.88E-07	3.12E-08	0.23	0.000
7.62E-09	1.86E-07	3.10E-08	0.22	0.000
7.55E-09	1.85E-07	3.07E-08	0.22	0.000
7.49E-09	1.83E-07	3.05E-08	0.22	0.000
7.43E-09	1.82E-07	3.02E-08	0.22	0.000
7.35E-09	1.80E-07	2.99E-08	0.22	0.000
7.29E-09	1.78E-07	2.97E-08	0.22	0.000
7.20E-09	1.76E-07	2.93E-08	0.21	0.000
7.10E-09	1.74E-07	2.89E-08	0.21	0.000
7.01E-09	1.71E-07	2.85E-08	0.21	0.000
6.93E-09	1.69E-07	2.82E-08	0.20	0.000
1.93E-09	4.73E-08	7.87E-09	0.06	0.000
		8.47E-09		
2.08E-09	5.09E-08		0.06	0.000
2.25E-09	5.51E-08	9.17E-09	0.07	0.000
2.43E-09	5.95E-08	9.91E-09	0.07	0.000
2.64E-09	6.46E-08	1.07E-08	0.08	0.000
2.88E-09	7.04E-08	1.17E-08	0.08	0.000
3.15E-09	7.69E-08	1.28E-08	0.09	0.000
3.43E-09	8.39E-08	1.40E-08	0.10	0.000
3.77E-09	9.22E-08	1.53E-08	0.11	0.000
4.17E-09	1.02E-07	1.69E-08	0.12	0.000
6.26E-09	1.53E-07	2.55E-08	0.18	0.000
6.92E-09	1.69E-07	2.81E-08	0.20	0.000
7.62E-09	1.86E-07	3.10E-08	0.22	0.000
8.35E-09	2.04E-07	3.40E-08	0.25	0.000
9.13E-09	2.23E-07	3.72E-08	0.27	0.000
1.21E-08	2.97E-07	4.94E-08	0.36	0.000
1.28E-08	3.13E-07	5.21E-08	0.38	0.000
1.34E-08	3.27E-07	5.45E-08	0.39	0.000
1.39E-08	3.40E-07	5.66E-08	0.41	0.000
1.45E-08	3.53E-07	5.88E-08	0.43	0.000
1.48E-08	3.61E-07	6.02E-08	0.44	0.000
1.51E-08	3.69E-07	6.15E-08	0.45	0.000
1.54E-08	3.77E-07	6.27E-08	0.45	0.000
1.56E-08	3.81E-07	6.34E-08	0.46	0.000
1.57E-08	3.84E-07	6.39E-08	0.46	0.000
1.55E-08	3.78E-07	6.29E-08	0.46	0.000

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
, , , , , , , , , , , , , , , , , , ,	,	2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568005.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568025.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568045.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568065.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568085.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16 568185.16	4149210.16 4149210.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568205.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568245.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568265.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568285.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568305.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568325.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568345.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568385.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568405.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568425.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568445.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568465.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568505.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568525.16 568545.16	4149210.16 4149210.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568565.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568585.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568605.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568645.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568685.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568705.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568725.16	4149210.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149230.16 4149230.16	0.000 0.000									
567485.16 567525.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567625.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16 E6704E 16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16 568125.16	4149230.16 4149230.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568125.16 568145.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16 568165.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
			<del>-</del>		<del>-</del>	<del>-</del>			<del>-</del>	<del>-</del>	

	Califer Kisk - 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
1.52E-08	3.72E-07	6.19E-08	0.45	0.000
1.49E-08	3.63E-07	6.05E-08	0.44	0.000
1.44E-08	3.53E-07	5.88E-08	0.43	0.000
1.39E-08	3.40E-07	5.66E-08	0.41	0.000
1.33E-08	3.25E-07	5.42E-08	0.39	0.000
1.27E-08	3.11E-07	5.17E-08	0.37	0.000
1.22E-08	2.97E-07	4.95E-08	0.36	0.000
1.16E-08	2.84E-07	4.73E-08	0.34	0.000
1.11E-08	2.71E-07	4.51E-08	0.33	0.000
1.05E-08	2.57E-07	4.28E-08	0.31	0.000
1.01E-08	2.46E-07	4.09E-08	0.30	0.000
9.57E-09	2.34E-07	3.89E-08	0.28	0.000
9.17E-09	2.24E-07	3.73E-08	0.27	0.000
8.77E-09	2.14E-07	3.57E-08	0.26	0.000
8.41E-09	2.06E-07	3.42E-08	0.25	0.000
8.12E-09	1.98E-07	3.30E-08	0.24	0.000
7.87E-09	1.92E-07	3.20E-08	0.23	0.000
7.67E-09	1.87E-07	3.12E-08	0.23	0.000
7.50E-09	1.83E-07	3.05E-08	0.22	0.000
7.42E-09	1.81E-07	3.02E-08	0.22	0.000
7.29E-09	1.78E-07	2.97E-08	0.22	0.000
7.19E-09	1.76E-07	2.93E-08	0.21	0.000
7.12E-09				0.000
	1.74E-07	2.90E-08	0.21	
7.08E-09	1.73E-07	2.88E-08	0.21	0.000
6.95E-09	1.70E-07	2.83E-08	0.21	0.000
6.90E-09	1.69E-07	2.81E-08	0.20	0.000
6.87E-09	1.68E-07	2.80E-08	0.20	0.000
6.84E-09	1.67E-07	2.78E-08	0.20	0.000
6.78E-09	1.66E-07	2.76E-08	0.20	0.000
6.74E-09	1.65E-07	2.74E-08	0.20	0.000
6.69E-09	1.64E-07	2.72E-08	0.20	0.000
6.95E-09	1.70E-07	2.83E-08	0.21	0.000
6.50E-09	1.59E-07	2.65E-08	0.19	0.000
6.43E-09	1.57E-07	2.62E-08	0.19	0.000
6.38E-09	1.56E-07	2.59E-08	0.19	0.000
1.99E-09	4.86E-08	8.10E-09	0.06	0.000
2.15E-09	5.25E-08	8.75E-09	0.06	0.000
2.32E-09	5.68E-08	9.45E-09	0.07	0.000
2.51E-09	6.12E-08	1.02E-08	0.07	0.000
2.73E-09	6.68E-08	1.11E-08	0.08	0.000
2.98E-09	7.28E-08	1.21E-08	0.09	0.000
3.24E-09	7.93E-08	1.32E-08	0.10	0.000
3.55E-09	8.69E-08	1.45E-08	0.10	0.000
3.91E-09	9.56E-08	1.59E-08	0.12	0.000
4.72E-09	1.15E-07	1.92E-08	0.14	0.000
5.17E-09	1.26E-07	2.10E-08	0.15	0.000
6.96E-09	1.70E-07	2.83E-08	0.21	0.000
7.63E-09	1.86E-07	3.10E-08	0.23	0.000
1.09E-08	2.66E-07	4.43E-08	0.32	0.000
1.15E-08	2.80E-07	4.66E-08	0.34	0.000
1.19E-08	2.92E-07	4.85E-08	0.35	0.000
1.24E-08	3.03E-07	5.04E-08	0.37	0.000
1.28E-08	3.12E-07	5.20E-08	0.38	0.000
1.32E-08	3.22E-07	5.37E-08	0.39	0.000
1.36E-08	3.32E-07	5.53E-08	0.40	0.000
1.38E-08	3.38E-07	5.63E-08	0.41	0.000
1.40E-08	3.43E-07	5.70E-08	0.41	0.000
1.41E-08	3.46E-07	5.75E-08	0.42	0.000
1.42E-08	3.47E-07	5.78E-08	0.42	0.000
1.42E-08	3.48E-07	5.79E-08	0.42	0.000
1.18E-08	2.88E-07	4.80E-08	0.35	0.000
1.13E-08	2.76E-07	4.59E-08	0.33	0.000
1.08E-08	2.63E-07	4.37E-08	0.32	0.000
1.03E-08	2.51E-07	4.17E-08	0.30	0.000
9.79E-09	2.31E-07 2.39E-07	3.98E-08	0.30	0.000
9.35E-09	2.29E-07	3.81E-08	0.28	0.000
8.88E-09	2.17E-07	3.61E-08	0.26	0.000

							Project Construction					
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	
568245.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568265.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568285.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568305.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568325.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568345.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568365.16 568385.16	4149230.16 4149230.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	
568405.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568425.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568465.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568485.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568505.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568525.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568545.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568565.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568585.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568605.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568625.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568645.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568665.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568685.16	4149230.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568705.16	4149230.16 4149230.16	0.000 0.000	0.000	0.000	0.000	0.000	0.001 0.001	0.001 0.001	0.001	0.001	0.001	
568725.16 567325.16	4149230.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001	0.001	0.001 0.000	0.001 0.000	0.001 0.000	
567345.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567365.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567385.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567405.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567425.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567445.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567465.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567505.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567525.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567545.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567565.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567705.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567725.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567745.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567765.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567785.16 567805.16	4149250.16 4149250.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	
567825.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567845.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567865.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567885.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567905.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567925.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567945.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567985.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568005.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568025.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568045.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568065.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568085.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568105.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568125.16 568145.16	4149250.16 4149250.16	0.000	0.000	0.000	0.000 0.000	0.000	0.001	0.001 0.001	0.001	0.001	0.001	
568145.16 568165.16	4149250.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.001 0.001	0.001	0.001	0.001	0.001 0.001	
568165.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001 0.001	0.001 0.001	0.001	
568205.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568225.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568245.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568265.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568285.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568305.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568425.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	

	Califer Kisk - 2K1	CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
8.50E-09	2.08E-07	3.46E-08	0.25	0.000
8.14E-09	1.99E-07	3.31E-08	0.24	0.000
7.80E-09	1.91E-07	3.17E-08	0.23	0.000
7.51E-09	1.83E-07	3.05E-08	0.22	0.000
7.24E-09	1.77E-07	2.95E-08	0.21	0.000
7.02E-09	1.72E-07	2.86E-08	0.21	0.000
6.85E-09	1.67E-07	2.79E-08	0.20	0.000
6.72E-09	1.64E-07	2.73E-08	0.20	0.000
6.59E-09	1.61E-07	2.68E-08	0.19	0.000
6.50E-09	1.59E-07	2.65E-08	0.19	0.000
6.35E-09	1.55E-07	2.58E-08	0.19	0.000
6.34E-09	1.55E-07	2.58E-08	0.19	0.000
6.28E-09	1.54E-07	2.56E-08	0.19	0.000
6.25E-09	1.53E-07	2.54E-08	0.18	0.000
6.22E-09	1.52E-07	2.53E-08	0.18	0.000
6.20E-09	1.52E-07	2.52E-08	0.18	0.000
6.49E-09	1.59E-07	2.64E-08	0.19	0.000
6.45E-09	1.58E-07	2.62E-08	0.19	0.000
6.40E-09	1.56E-07	2.60E-08		0.000
			0.19	
6.34E-09	1.55E-07	2.58E-08	0.19	0.000
6.01E-09	1.47E-07	2.44E-08	0.18	0.000
5.96E-09	1.46E-07	2.43E-08	0.18	0.000
5.92E-09	1.45E-07	2.41E-08	0.17	0.000
6.11E-09	1.49E-07	2.49E-08	0.18	0.000
2.06E-09	5.04E-08	8.39E-09	0.06	0.000
2.22E-09	5.43E-08	9.03E-09	0.07	0.000
2.39E-09	5.83E-08	9.71E-09	0.07	0.000
2.59E-09	6.34E-08	1.05E-08	0.08	0.000
2.83E-09	6.92E-08	1.15E-08	0.08	0.000
3.09E-09	7.55E-08	1.26E-08	0.09	0.000
3.36E-09	8.22E-08	1.37E-08	0.10	0.000
3.68E-09	9.00E-08	1.50E-08	0.11	0.000
4.41E-09	1.08E-07	1.79E-08	0.13	0.000
4.80E-09	1.17E-07	1.95E-08	0.14	0.000
5.29E-09	1.29E-07	2.15E-08	0.14	0.000
5.84E-09	1.43E-07	2.38E-08	0.17	0.000
9.82E-09	2.40E-07	4.00E-08	0.29	0.000
1.03E-08	2.53E-07	4.20E-08	0.30	0.000
1.08E-08	2.64E-07	4.39E-08	0.32	0.000
1.12E-08	2.73E-07	4.54E-08	0.33	0.000
1.15E-08	2.82E-07	4.69E-08	0.34	0.000
1.19E-08	2.90E-07	4.83E-08	0.35	0.000
1.22E-08	2.99E-07	4.98E-08	0.36	0.000
1.25E-08	3.06E-07	5.09E-08	0.37	0.000
1.27E-08	3.09E-07	5.15E-08	0.37	0.000
1.28E-08	3.14E-07	5.22E-08	0.38	0.000
1.29E-08	3.15E-07	5.25E-08	0.38	0.000
1.29E-08	3.16E-07	5.27E-08	0.38	0.000
1.30E-08	3.17E-07	5.27E-08	0.38	0.000
1.28E-08	3.14E-07	5.23E-08	0.38	0.000
1.27E-08	3.10E-07	5.16E-08	0.37	0.000
1.24E-08	3.04E-07	5.06E-08	0.37	0.000
1.22E-08	2.98E-07	4.95E-08	0.36	0.000
1.18E-08	2.89E-07	4.80E-08	0.35	0.000
1.14E-08	2.78E-07	4.63E-08	0.34	0.000
1.10E-08	2.68E-07	4.46E-08	0.32	0.000
1.05E-08	2.58E-07	4.29E-08	0.31	0.000
1.01E-08	2.46E-07	4.10E-08	0.30	0.000
9.60E-09	2.35E-07	3.91E-08	0.28	0.000
9.17E-09	2.24E-07	3.73E-08	0.27	0.000
8.75E-09	2.14E-07	3.56E-08	0.26	0.000
8.33E-09	2.04E-07	3.39E-08	0.25	0.000
7.94E-09	1.94E-07	3.23E-08	0.23	0.000
7.58E-09	1.85E-07	3.08E-08	0.22	0.000
7.26E-09	1.77E-07	2.95E-08	0.21	0.000
6.95E-09	1.70E-07	2.83E-08	0.21	0.000
5.92E-09	1.45E-07	2.41E-08	0.17	0.000
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						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568445.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568465.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568485.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568505.16 568525.16	4149250.16 4149250.16	0.000 0.000									
568545.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
568565.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568585.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568605.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568625.16	4149250.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567325.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16 567445.16	4149270.16 4149270.16	0.000 0.000									
567485.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567585.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567605.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16 567745.16	4149270.16 4149270.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567745.16 567765.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16 568005.16	4149270.16 4149270.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568025.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568045.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568065.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568085.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16 568225.16	4149270.16 4149270.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568245.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568265.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568285.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568305.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568325.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568345.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568405.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568425.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568445.16 568465.16	4149270.16 4149270.16	0.000	0.000 0.000								
568465.16 568485.16	4149270.16 4149270.16	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568505.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568525.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568545.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568565.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Cancer Risk = ∑R1	L*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
F 84F 00	1 425 07	2 205 00	0.17	0.000
5.84E-09 5.79E-09	1.43E-07 1.41E-07	2.38E-08 2.35E-08	0.17 0.17	0.000
5.74E-09	1.41E-07 1.40E-07	2.34E-08	0.17	0.000
5.70E-09	1.39E-07	2.32E-08	0.17	0.000
5.68E-09	1.39E-07	2.31E-08	0.17	0.000
5.98E-09	1.46E-07	2.43E-08	0.18	0.000
5.95E-09	1.45E-07	2.42E-08	0.18	0.000
5.91E-09	1.44E-07	2.40E-08	0.17	0.000
5.87E-09	1.44E-07	2.39E-08	0.17	0.000
5.84E-09	1.43E-07	2.37E-08	0.17	0.000
2.13E-09	5.20E-08	8.65E-09	0.06	0.000
2.28E-09 2.47E-09	5.58E-08 6.04E-08	9.30E-09 1.00E-08	0.07 0.07	0.000
2.69E-09	6.57E-08	1.00E 08	0.07	0.000
2.93E-09	7.15E-08	1.19E-08	0.09	0.000
3.19E-09	7.79E-08	1.30E-08	0.09	0.000
3.48E-09	8.50E-08	1.42E-08	0.10	0.000
4.13E-09	1.01E-07	1.68E-08	0.12	0.000
4.51E-09	1.10E-07	1.83E-08	0.13	0.000
4.93E-09	1.21E-07	2.01E-08	0.15	0.000
5.40E-09	1.32E-07	2.20E-08	0.16	0.000
5.89E-09	1.44E-07	2.39E-08 2.60E-08	0.17	0.000
6.40E-09 6.92E-09	1.56E-07 1.69E-07	2.81E-08	0.19 0.20	0.000
8.91E-09	2.18E-07	3.62E-08	0.26	0.000
9.36E-09	2.29E-07	3.81E-08	0.28	0.000
9.70E-09	2.37E-07	3.94E-08	0.29	0.000
1.01E-08	2.47E-07	4.11E-08	0.30	0.000
1.04E-08	2.55E-07	4.25E-08	0.31	0.000
1.08E-08	2.63E-07	4.37E-08	0.32	0.000
1.11E-08	2.70E-07	4.50E-08	0.33	0.000
1.14E-08 1.15E-08	2.78E-07 2.81E-07	4.62E-08 4.67E-08	0.34 0.34	0.000
1.16E-08	2.84E-07	4.07E-08 4.73E-08	0.34	0.000
1.17E-08	2.87E-07	4.78E-08	0.35	0.000
1.18E-08	2.89E-07	4.82E-08	0.35	0.000
1.19E-08	2.90E-07	4.82E-08	0.35	0.000
1.18E-08	2.89E-07	4.82E-08	0.35	0.000
1.18E-08	2.88E-07	4.80E-08	0.35	0.000
1.17E-08	2.85E-07	4.74E-08	0.34	0.000
1.15E-08	2.80E-07	4.66E-08	0.34	0.000
1.12E-08 1.09E-08	2.75E-07 2.67E-07	4.58E-08 4.45E-08	0.33 0.32	0.000
1.06E-08	2.59E-07	4.43E-08 4.31E-08	0.32	0.000
1.02E-08	2.49E-07	4.15E-08	0.30	0.000
9.86E-09	2.41E-07	4.01E-08	0.29	0.000
9.43E-09	2.31E-07	3.84E-08	0.28	0.000
8.99E-09	2.20E-07	3.66E-08	0.27	0.000
8.61E-09	2.10E-07	3.50E-08	0.25	0.000
8.24E-09	2.01E-07	3.35E-08	0.24	0.000
7.84E-09	1.92E-07	3.19E-08	0.23	0.000
7.45E-09 7.10E-09	1.82E-07 1.74E-07	3.03E-08 2.89E-08	0.22 0.21	0.000
6.80E-09	1.74L-07 1.66E-07	2.77E-08	0.21	0.000
6.49E-09	1.59E-07	2.64E-08	0.19	0.000
6.24E-09	1.53E-07	2.54E-08	0.18	0.000
6.03E-09	1.47E-07	2.45E-08	0.18	0.000
5.85E-09	1.43E-07	2.38E-08	0.17	0.000
5.56E-09	1.36E-07	2.26E-08	0.16	0.000
5.43E-09	1.33E-07	2.21E-08	0.16	0.000
5.36E-09	1.31E-07	2.18E-08	0.16	0.000
5.30E-09 5.24E-09	1.30E-07 1.28E-07	2.16E-08 2.13E-08	0.16 0.15	0.000
5.18E-09	1.27E-07	2.11E-08	0.15	0.000
5.14E-09	1.26E-07	2.09E-08	0.15	0.000
5.13E-09	1.25E-07	2.09E-08	0.15	0.000
5.11E-09	1.25E-07	2.08E-08	0.15	0.000

						Proiect	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568585.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568605.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568625.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568645.16 568665.16	4149270.16 4149270.16	0.000 0.000									
568685.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568705.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568725.16	4149270.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567325.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16 567525.16	4149290.16 4149290.16	0.000 0.000									
567545.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567605.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16 567805.16	4149290.16 4149290.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567825.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568005.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568025.16 568045.16	4149290.16 4149290.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568065.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568085.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568245.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568265.16 568285.16	4149290.16 4149290.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568305.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568325.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568345.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568365.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568405.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568425.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568445.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568465.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568485.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568505.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568525.16 568545.16	4149290.16 4149290.16	0.000 0.000									
568545.16 568565.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568585.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568605.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Cancer Risk = ∑R1	L*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
5.09E-09	1.25E-07	2.07E-08	0.15	0.000
5.08E-09	1.23E-07 1.24E-07	2.07E-08	0.15	0.000
5.04E-09	1.23E-07	2.05E-08	0.15	0.000
5.04E-09	1.23E-07	2.05E-08	0.15	0.000
5.00E-09	1.22E-07	2.04E-08	0.15	0.000
4.99E-09	1.22E-07	2.03E-08	0.15	0.000
5.21E-09	1.27E-07	2.12E-08	0.15	0.000
4.94E-09	1.21E-07	2.01E-08	0.15	0.000
2.19E-09	5.36E-08	8.91E-09	0.06	0.000
2.37E-09	5.79E-08	9.64E-09	0.07	0.000
2.56E-09	6.25E-08	1.04E-08	0.08	0.000
2.77E-09 3.02E-09	6.78E-08 7.38E-08	1.13E-08 1.23E-08	0.08 0.09	0.000
3.29E-09	8.04E-08	1.34E-08	0.10	0.000
4.22E-09	1.03E-07	1.72E-08	0.12	0.000
4.59E-09	1.12E-07	1.87E-08	0.14	0.000
5.01E-09	1.22E-07	2.04E-08	0.15	0.000
5.44E-09	1.33E-07	2.21E-08	0.16	0.000
5.89E-09	1.44E-07	2.39E-08	0.17	0.000
6.35E-09	1.55E-07	2.58E-08	0.19	0.000
6.82E-09	1.67E-07	2.77E-08	0.20	0.000
8.13E-09	1.99E-07	3.31E-08	0.24	0.000
8.52E-09	2.08E-07	3.47E-08	0.25	0.000
8.81E-09	2.15E-07	3.59E-08	0.26	0.000
9.13E-09 9.37E-09	2.23E-07 2.29E-07	3.71E-08 3.81E-08	0.27 0.28	0.000 0.000
9.72E-09	2.29E-07 2.37E-07	3.95E-08	0.29	0.000
1.00E-08	2.45E-07	4.08E-08	0.30	0.000
1.03E-08	2.52E-07	4.20E-08	0.30	0.000
1.05E-08	2.55E-07	4.25E-08	0.31	0.000
1.06E-08	2.60E-07	4.33E-08	0.31	0.000
1.08E-08	2.63E-07	4.38E-08	0.32	0.000
1.08E-08	2.64E-07	4.40E-08	0.32	0.000
1.09E-08	2.67E-07	4.44E-08	0.32	0.000
1.10E-08	2.68E-07	4.46E-08	0.32	0.000
1.09E-08	2.67E-07	4.45E-08	0.32	0.000
1.09E-08 1.07E-08	2.65E-07 2.63E-07	4.42E-08 4.37E-08	0.32 0.32	0.000
1.06E-08	2.59E-07	4.31E-08	0.32	0.000
1.04E-08	2.55E-07	4.24E-08	0.31	0.000
1.01E-08	2.48E-07	4.13E-08	0.30	0.000
9.85E-09	2.41E-07	4.01E-08	0.29	0.000
9.57E-09	2.34E-07	3.89E-08	0.28	0.000
9.22E-09	2.25E-07	3.75E-08	0.27	0.000
8.87E-09	2.17E-07	3.61E-08	0.26	0.000
8.48E-09	2.07E-07	3.45E-08	0.25	0.000
8.13E-09	1.99E-07	3.31E-08	0.24	0.000
7.78E-09	1.90E-07	3.17E-08	0.23	0.000
7.42E-09 7.06E-09	1.81E-07 1.73E-07	3.02E-08 2.87E-08	0.22	0.000
6.73E-09	1.75E-07 1.65E-07	2.74E-08	0.21 0.20	0.000
6.42E-09	1.57E-07	2.61E-08	0.19	0.000
6.14E-09	1.50E-07	2.50E-08	0.18	0.000
5.88E-09	1.44E-07	2.39E-08	0.17	0.000
6.03E-09	1.47E-07	2.45E-08	0.18	0.000
5.50E-09	1.34E-07	2.24E-08	0.16	0.000
5.16E-09	1.26E-07	2.10E-08	0.15	0.000
5.03E-09	1.23E-07	2.05E-08	0.15	0.000
4.95E-09	1.21E-07	2.01E-08	0.15	0.000
4.89E-09	1.19E-07	1.99E-08	0.14	0.000
4.81E-09	1.18E-07	1.96E-08	0.14	0.000
4.75E-09 4.71E-09	1.16E-07 1.15E-07	1.93E-08	0.14	0.000
4.71E-09 4.70E-09	1.15E-07 1.15E-07	1.92E-08 1.91E-08	0.14 0.14	0.000
4.67E-09	1.13E-07 1.14E-07	1.91E-08 1.90E-08	0.14	0.000
4.66E-09	1.14E-07	1.89E-08	0.14	0.000
4.65E-09	1.14E-07	1.89E-08	0.14	0.000

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
55052F AC	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
568625.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568645.16 568665.16	4149290.16 4149290.16	0.000 0.000									
568685.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568725.16	4149290.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567325.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16 567565.16	4149310.16 4149310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001
567585.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567625.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16 567845.16	4149310.16 4149310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567865.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568005.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568025.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568045.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568065.16 568085.16	4149310.16 4149310.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568105.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568245.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568265.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568285.16 568305.16	4149310.16 4149310.16	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.000	0.001 0.000	0.001	0.001	0.001 0.000
568325.16	4149310.16	0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000 0.000	0.000
568345.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568365.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568405.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568425.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568445.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568465.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568485.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568505.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568525.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568545.16 568565.16	4149310.16 4149310.16	0.000 0.000									
568585.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568605.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568625.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568645.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568665.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	0 0:1 50	1 * 0		
3rd Trimester	Cancer Risk = $\sum R$ 0<2	1*C <sub>DPM</sub>	Total	HI C <sub>DPM</sub> /REL
ora minester	0.2	1 2 3	10101	unitless
4.62E-09	1.13E-07	1.88E-08	0.14	0.000
4.61E-09	1.13E-07	1.88E-08	0.14	0.000
4.60E-09	1.12E-07	1.87E-08	0.14	0.000
4.59E-09	1.12E-07	1.87E-08	0.14	0.000
4.56E-09 2.27E-09	1.11E-07	1.85E-08	0.13	0.000
2.27E-09 2.44E-09	5.54E-08 5.97E-08	9.22E-09 9.94E-09	0.07 0.07	0.000 0.000
2.64E-09	6.45E-08	1.07E-08	0.07	0.000
2.85E-09	6.97E-08	1.16E-08	0.08	0.000
3.11E-09	7.60E-08	1.26E-08	0.09	0.000
3.96E-09	9.69E-08	1.61E-08	0.12	0.000
4.31E-09	1.05E-07	1.75E-08	0.13	0.000
4.66E-09	1.14E-07	1.90E-08	0.14	0.000
5.06E-09	1.24E-07	2.06E-08	0.15	0.000
5.45E-09	1.33E-07	2.22E-08	0.16	0.000
5.85E-09	1.43E-07	2.38E-08	0.17	0.000
6.29E-09	1.54E-07	2.56E-08	0.19	0.000
7.11E-09	1.74E-07	2.89E-08	0.21	0.000
7.46E-09	1.82E-07	3.04E-08	0.22	0.000
8.13E-09	1.99E-07	3.31E-08	0.24	0.000
8.39E-09	2.05E-07	3.42E-08	0.25	0.000
8.59E-09	2.10E-07	3.50E-08	0.25	0.000
8.82E-09	2.16E-07	3.59E-08	0.26 0.27	0.000
9.01E-09 9.29E-09	2.20E-07 2.27E-07	3.67E-08 3.78E-08		0.000
9.58E-09	2.27E-07 2.34E-07	3.78E-08 3.90E-08	0.27 0.28	0.000 0.000
9.72E-09	2.38E-07	3.95E-08	0.29	0.000
9.81E-09	2.40E-07	3.99E-08	0.29	0.000
9.91E-09	2.42E-07	4.03E-08	0.29	0.000
1.00E-08	2.45E-07	4.09E-08	0.30	0.000
1.00E-08	2.45E-07	4.08E-08	0.30	0.000
1.02E-08	2.48E-07	4.13E-08	0.30	0.000
1.01E-08	2.48E-07	4.12E-08	0.30	0.000
1.00E-08	2.45E-07	4.09E-08	0.30	0.000
9.94E-09	2.43E-07	4.04E-08	0.29	0.000
9.83E-09	2.40E-07	4.00E-08	0.29	0.000
9.68E-09	2.37E-07	3.94E-08	0.29	0.000
9.46E-09	2.31E-07	3.85E-08	0.28	0.000
9.20E-09	2.25E-07	3.74E-08	0.27	0.000
8.95E-09	2.19E-07	3.64E-08	0.26	0.000
8.67E-09	2.12E-07	3.53E-08	0.26	0.000
8.36E-09	2.04E-07	3.40E-08	0.25	0.000
8.02E-09	1.96E-07	3.26E-08	0.24	0.000
7.69E-09 7.36E-09	1.88E-07 1.80E-07	3.13E-08 3.00E-08	0.23 0.22	0.000 0.000
7.03E-09	1.72E-07	2.86E-08	0.22	0.000
6.70E-09	1.64E-07	2.73E-08	0.21	0.000
6.41E-09	1.57E-07	2.61E-08	0.19	0.000
6.10E-09	1.49E-07	2.48E-08	0.18	0.000
5.82E-09	1.42E-07	2.37E-08	0.17	0.000
5.56E-09	1.36E-07	2.26E-08	0.16	0.000
5.35E-09	1.31E-07	2.18E-08	0.16	0.000
5.15E-09	1.26E-07	2.10E-08	0.15	0.000
4.82E-09	1.18E-07	1.96E-08	0.14	0.000
4.70E-09	1.15E-07	1.91E-08	0.14	0.000
4.61E-09	1.13E-07	1.88E-08	0.14	0.000
4.53E-09	1.11E-07	1.84E-08	0.13	0.000
4.46E-09	1.09E-07	1.81E-08	0.13	0.000
4.39E-09	1.07E-07	1.79E-08	0.13	0.000
4.36E-09	1.06E-07	1.77E-08	0.13	0.000
4.33E-09	1.06E-07	1.76E-08	0.13	0.000
4.29E-09	1.05E-07	1.75E-08	0.13	0.000
4.27E-09	1.04E-07	1.74E-08	0.13	0.000
4.26E-09 4.24E-09	1.04E-07 1.04E-07	1.73E-08 1.73E-08	0.13 0.13	0.000 0.000
4.24E-09 4.24E-09	1.04E-07 1.04E-07	1.73E-08 1.72E-08	0.13	0.000
4.24E-09 4.22E-09	1.03E-07	1.72E-08 1.72E-08	0.13	0.000
33	1.002 07	, 00	0.22	5.550

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
568685.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568705.16	4149310.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567345.16 567365.16	4149330.16 4149330.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000
567385.16	4149330.16	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000
567445.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567625.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16 567665.16	4149330.16 4149330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567705.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16 567905.16	4149330.16 4149330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567925.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568005.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568025.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568045.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568065.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568085.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16 568125.16	4149330.16 4149330.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568145.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568245.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568265.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568285.16 568305.16	4149330.16 4149330.16	0.000 0.000									
568325.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568345.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568365.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568405.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568425.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568445.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568465.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568485.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568505.16 568525.16	4149330.16 4149330.16	0.000 0.000									
568545.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568565.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568585.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568605.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568625.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568645.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568665.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568685.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568705.16 568725.16	4149330.16 4149330.16	0.000 0.000									
568725.16 567365.16	4149330.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		<del>-</del>			<del>-</del>		<del>-</del>	· <del>-</del>		*	

	Cancer Risk = ∑R1	.*C <sub>DPM</sub>		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
4.22E-09	1.03E-07	1.72E-08	0.12	0.000
4.42E-09	1.08E-07	1.80E-08	0.13	0.000
2.53E-09	6.18E-08	1.03E-08	0.07	0.000
2.72E-09	6.65E-08	1.11E-08	0.08	0.000
2.96E-09	7.23E-08	1.20E-08	0.09	0.000
3.74E-09	9.13E-08	1.52E-08	0.11	0.000
4.05E-09	9.90E-08	1.65E-08	0.12	0.000
4.37E-09	1.07E-07	1.78E-08	0.13	0.000
4.72E-09	1.15E-07 1.25E-07	1.92E-08 2.07E-08	0.14	0.000
5.10E-09 5.45E-09	1.23E-07 1.33E-07	2.07E-08 2.22E-08	0.15 0.16	0.000 0.000
6.55E-09	1.60E-07	2.66E-08	0.19	0.000
6.89E-09	1.68E-07	2.80E-08	0.20	0.000
7.20E-09	1.76E-07	2.93E-08	0.21	0.000
7.51E-09	1.83E-07	3.05E-08	0.22	0.000
7.99E-09	1.95E-07	3.25E-08	0.24	0.000
8.19E-09	2.00E-07	3.33E-08	0.24	0.000
8.36E-09	2.04E-07	3.40E-08	0.25	0.000
8.56E-09	2.09E-07	3.48E-08	0.25	0.000
8.76E-09	2.14E-07	3.56E-08	0.26	0.000
8.91E-09 9.04E-09	2.18E-07 2.21E-07	3.63E-08 3.68E-08	0.26 0.27	0.000 0.000
9.14E-09	2.21E-07 2.23E-07	3.72E-08	0.27	0.000
9.14E-09	2.23E-07	3.72E-08	0.27	0.000
9.18E-09	2.24E-07	3.73E-08	0.27	0.000
9.24E-09	2.26E-07	3.76E-08	0.27	0.000
9.32E-09	2.28E-07	3.79E-08	0.28	0.000
9.40E-09	2.30E-07	3.82E-08	0.28	0.000
9.33E-09	2.28E-07	3.80E-08	0.28	0.000
9.27E-09	2.27E-07	3.77E-08	0.27	0.000
9.16E-09	2.24E-07	3.73E-08	0.27	0.000
9.03E-09 8.87E-09	2.21E-07 2.17E-07	3.67E-08 3.61E-08	0.27 0.26	0.000 0.000
8.65E-09	2.17E-07 2.12E-07	3.52E-08	0.26	0.000
8.42E-09	2.06E-07	3.43E-08	0.25	0.000
8.15E-09	1.99E-07	3.32E-08	0.24	0.000
7.88E-09	1.93E-07	3.21E-08	0.23	0.000
7.60E-09	1.86E-07	3.09E-08	0.22	0.000
7.29E-09	1.78E-07	2.97E-08	0.22	0.000
6.99E-09	1.71E-07	2.84E-08	0.21	0.000
6.69E-09	1.63E-07	2.72E-08	0.20	0.000
6.39E-09	1.56E-07	2.60E-08	0.19	0.000 0.000
6.34E-09 5.79E-09	1.55E-07 1.41E-07	2.58E-08 2.35E-08	0.19 0.17	0.000
5.52E-09	1.35E-07	2.25E-08	0.16	0.000
5.27E-09	1.29E-07	2.15E-08	0.16	0.000
5.06E-09	1.24E-07	2.06E-08	0.15	0.000
4.87E-09	1.19E-07	1.98E-08	0.14	0.000
4.54E-09	1.11E-07	1.85E-08	0.13	0.000
4.41E-09	1.08E-07	1.80E-08	0.13	0.000
4.32E-09	1.06E-07	1.76E-08	0.13	0.000
4.23E-09	1.03E-07	1.72E-08	0.12	0.000
4.15E-09 4.08E-09	1.02E-07 9.98E-08	1.69E-08 1.66E-08	0.12 0.12	0.000 0.000
4.04E-09	9.88E-08	1.64E-08	0.12	0.000
4.00E-09	9.79E-08	1.63E-08	0.12	0.000
3.96E-09	9.67E-08	1.61E-08	0.12	0.000
3.94E-09	9.62E-08	1.60E-08	0.12	0.000
3.93E-09	9.60E-08	1.60E-08	0.12	0.000
3.91E-09	9.55E-08	1.59E-08	0.12	0.000
3.89E-09	9.52E-08	1.58E-08	0.11	0.000
4.11E-09	1.00E-07	1.67E-08	0.12	0.000
4.10E-09 4.08E-09	1.00E-07	1.67E-08	0.12 0.12	0.000 0.000
4.08E-09 4.07E-09	9.97E-08 9.95E-08	1.66E-08 1.66E-08	0.12	0.000
2.81E-09	6.86E-08	1.14E-08	0.08	0.000
3.53E-09	8.62E-08	1.44E-08	0.10	0.000

						Proiect	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE		2	3	4	5	6	7	8	9	10
567445.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16 567525.16	4149350.16 4149350.16	0.000 0.000									
567565.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
567585.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567605.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567625.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149350.16 4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16 567825.16	4149350.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567825.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568005.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568025.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568045.16 568065.16	4149350.16 4149350.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568085.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568245.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568265.16	4149350.16	0.000 0.000									
568285.16 568305.16	4149350.16 4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568325.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568345.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568365.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568405.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568425.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568445.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568465.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568485.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568505.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568525.16 568545.16	4149350.16 4149350.16	0.000 0.000									
568545.16 568565.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568585.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568605.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568625.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568645.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568665.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568685.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568705.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568725.16	4149350.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567325.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16 567425.16	4149370.16 4149370.16	0.000 0.000									
567425.16 567445.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	HI			
3rd Trimester	Cancer Risk = $\sum R1$ 0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
3.81E-09	9.30E-08	1.55E-08	0.11	0.000
4.11E-09	1.00E-07	1.67E-08	0.12	0.000
4.40E-09	1.07E-07	1.79E-08	0.13	0.000
4.75E-09	1.16E-07	1.93E-08	0.14	0.000
5.09E-09	1.24E-07	2.07E-08	0.15	0.000
5.76E-09	1.41E-07	2.34E-08	0.17	0.000
6.07E-09	1.48E-07	2.47E-08	0.18	0.000
6.39E-09	1.56E-07	2.60E-08	0.19	0.000
6.65E-09	1.62E-07	2.70E-08	0.20	0.000
7.00E-09	1.71E-07	2.85E-08	0.21	0.000
7.26E-09	1.77E-07	2.95E-08	0.21	0.000
7.39E-09	1.81E-07	3.01E-08	0.22	0.000
7.74E-09	1.89E-07	3.15E-08	0.23	0.000
7.89E-09 8.06E-09	1.93E-07 1.97E-07	3.21E-08 3.28E-08	0.23 0.24	0.000 0.000
8.21E-09	2.01E-07	3.34E-08	0.24	0.000
8.32E-09	2.01E-07 2.03E-07	3.34E-08 3.39E-08	0.25	0.000
8.45E-09	2.07E-07	3.44E-08	0.25	0.000
8.54E-09	2.09E-07	3.48E-08	0.25	0.000
8.59E-09	2.10E-07	3.50E-08	0.25	0.000
8.59E-09	2.10E-07	3.50E-08	0.25	0.000
8.60E-09	2.10E-07	3.50E-08	0.25	0.000
8.75E-09	2.14E-07	3.56E-08	0.26	0.000
8.75E-09	2.14E-07	3.56E-08	0.26	0.000
8.67E-09	2.12E-07	3.53E-08	0.26	0.000
8.60E-09	2.10E-07	3.50E-08	0.25	0.000
8.51E-09	2.08E-07	3.46E-08	0.25	0.000
8.41E-09	2.06E-07	3.42E-08	0.25	0.000
8.26E-09	2.02E-07	3.36E-08	0.24	0.000
8.10E-09 7.91E-09	1.98E-07 1.93E-07	3.30E-08 3.22E-08	0.24 0.23	0.000 0.000
7.68E-09	1.93E-07 1.88E-07	3.12E-08	0.23	0.000
7.45E-09	1.82E-07	3.12L-08 3.03E-08	0.23	0.000
7.20E-09	1.76E-07	2.93E-08	0.21	0.000
6.93E-09	1.69E-07	2.82E-08	0.20	0.000
6.65E-09	1.63E-07	2.71E-08	0.20	0.000
6.37E-09	1.56E-07	2.59E-08	0.19	0.000
6.09E-09	1.49E-07	2.48E-08	0.18	0.000
5.81E-09	1.42E-07	2.37E-08	0.17	0.000
5.54E-09	1.35E-07	2.25E-08	0.16	0.000
5.28E-09	1.29E-07	2.15E-08	0.16	0.000
5.04E-09	1.23E-07	2.05E-08	0.15	0.000
4.83E-09	1.18E-07	1.97E-08	0.14	0.000
4.65E-09	1.14E-07	1.89E-08	0.14	0.000
4.32E-09	1.05E-07	1.76E-08	0.13	0.000
4.19E-09	1.02E-07	1.70E-08	0.12 0.12	0.000
4.07E-09 4.21E-09	9.96E-08 1.03E-07	1.66E-08 1.71E-08	0.12	0.000
4.21E-09 4.13E-09	1.01E-07	1.68E-08	0.12	0.000
3.81E-09	9.32E-08	1.55E-08	0.11	0.000
3.76E-09	9.19E-08	1.53E-08	0.11	0.000
3.72E-09	9.08E-08	1.51E-08	0.11	0.000
3.68E-09	8.99E-08	1.50E-08	0.11	0.000
3.66E-09	8.95E-08	1.49E-08	0.11	0.000
3.85E-09	9.41E-08	1.57E-08	0.11	0.000
3.85E-09	9.41E-08	1.57E-08	0.11	0.000
3.83E-09	9.37E-08	1.56E-08	0.11	0.000
3.82E-09	9.32E-08	1.55E-08	0.11	0.000
3.79E-09	9.26E-08	1.54E-08	0.11	0.000
3.55E-09	8.68E-08	1.45E-08	0.10	0.000
3.56E-09	8.69E-08	1.45E-08	0.10	0.000
2.48E-09	6.06E-08	1.01E-08	0.07	0.000
3.33E-09	8.14E-08	1.36E-08	0.10	0.000
3.59E-09 3.85E-09	8.77E-08 9.41E-08	1.46E-08 1.57E-08	0.11 0.11	0.000 0.000
4.16E-09	9.41E-08 1.02E-07	1.69E-08	0.11	0.000
4.45E-09	1.02E-07 1.09E-07	1.81E-08	0.12	0.000
<del>-</del>				

						Project	Construction				
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567505.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16 567585.16	4149370.16 4149370.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.001	0.000 0.001	0.000 0.001	0.000 0.001	0.000
567605.16 567605.16	4149370.16	0.000	0.000	0.000 0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001 0.001
567625.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567645.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567665.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16 567825.16	4149370.16 4149370.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567845.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568005.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568025.16 568045.16	4149370.16 4149370.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568065.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568085.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568145.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16 568245.16	4149370.16 4149370.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.000	0.001 0.000	0.001 0.000	0.001 0.000	0.001 0.000
568265.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568285.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568305.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568325.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568345.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568365.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568405.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568425.16	4149370.16 4149370.16	0.000	0.000	0.000 0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000 0.000
568445.16 568465.16	4149370.16	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000
568485.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568505.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568525.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568545.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568565.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568585.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568605.16 568625.16	4149370.16 4149370.16	0.000 0.000									
568645.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568665.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568685.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568705.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568725.16	4149370.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567325.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567445.16 567465.16	4149390.16 4149390.16	0.000 0.000									
567485.16 567485.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Cancer Risk = ∑R1	L*CDPM		HI
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
. === 00				
4.77E-09 5.34E-09	1.16E-07 1.31E-07	1.94E-08 2.17E-08	0.14	0.000
5.34E-09 5.65E-09	1.31E-07 1.38E-07	2.17E-08 2.30E-08	0.16 0.17	0.000 0.000
5.93E-09	1.45E-07	2.41E-08	0.17	0.000
6.17E-09	1.51E-07	2.51E-08	0.18	0.000
6.42E-09	1.57E-07	2.61E-08	0.19	0.000
6.68E-09	1.63E-07	2.72E-08	0.20	0.000
6.89E-09	1.68E-07	2.80E-08	0.20	0.000
7.00E-09	1.71E-07	2.85E-08	0.21	0.000
7.17E-09	1.75E-07	2.92E-08	0.21	0.000
7.42E-09	1.81E-07	3.02E-08	0.22	0.000
7.57E-09	1.85E-07	3.08E-08	0.22	0.000
7.67E-09	1.87E-07	3.12E-08	0.23	0.000
7.80E-09 7.92E-09	1.91E-07 1.94E-07	3.17E-08 3.22E-08	0.23 0.23	0.000 0.000
8.00E-09	1.94E-07 1.95E-07	3.25E-08	0.23	0.000
8.07E-09	1.97E-07	3.29E-08	0.24	0.000
8.13E-09	1.99E-07	3.31E-08	0.24	0.000
8.17E-09	2.00E-07	3.32E-08	0.24	0.000
8.19E-09	2.00E-07	3.33E-08	0.24	0.000
8.17E-09	2.00E-07	3.32E-08	0.24	0.000
8.06E-09	1.97E-07	3.28E-08	0.24	0.000
8.01E-09	1.96E-07	3.26E-08	0.24	0.000
7.94E-09	1.94E-07	3.23E-08	0.23	0.000
7.86E-09	1.92E-07	3.20E-08	0.23	0.000
7.69E-09	1.88E-07	3.13E-08	0.23	0.000
7.55E-09	1.84E-07	3.07E-08	0.22	0.000
7.42E-09 7.25E-09	1.81E-07 1.77E-07	3.02E-08 2.95E-08	0.22 0.21	0.000 0.000
7.23E-09 7.03E-09	1.77E-07 1.72E-07	2.86E-08	0.21	0.000
6.80E-09	1.66E-07	2.77E-08	0.21	0.000
6.57E-09	1.61E-07	2.67E-08	0.19	0.000
6.34E-09	1.55E-07	2.58E-08	0.19	0.000
6.07E-09	1.48E-07	2.47E-08	0.18	0.000
5.78E-09	1.41E-07	2.35E-08	0.17	0.000
5.54E-09	1.35E-07	2.26E-08	0.16	0.000
5.31E-09	1.30E-07	2.16E-08	0.16	0.000
5.06E-09	1.24E-07	2.06E-08	0.15	0.000
4.83E-09	1.18E-07	1.97E-08	0.14	0.000
4.63E-09	1.13E-07	1.88E-08	0.14	0.000
4.45E-09	1.09E-07	1.81E-08	0.13	0.000
4.12E-09	1.01E-07	1.67E-08	0.12	0.000 0.000
3.98E-09 4.08E-09	9.73E-08 9.96E-08	1.62E-08 1.66E-08	0.12 0.12	0.000
3.97E-09	9.70E-08	1.62E-08	0.12	0.000
3.88E-09	9.48E-08	1.58E-08	0.11	0.000
3.57E-09	8.73E-08	1.45E-08	0.11	0.000
3.51E-09	8.58E-08	1.43E-08	0.10	0.000
3.47E-09	8.48E-08	1.41E-08	0.10	0.000
3.44E-09	8.40E-08	1.40E-08	0.10	0.000
3.40E-09	8.30E-08	1.38E-08	0.10	0.000
3.37E-09	8.24E-08	1.37E-08	0.10	0.000
3.57E-09	8.73E-08	1.45E-08	0.11	0.000
3.54E-09	8.66E-08	1.44E-08	0.10	0.000
3.34E-09 3.27E-09	8.15E-08 8.00E-08	1.36E-08 1.33E-08	0.10	0.000
3.27E-09 3.28E-09	8.00E-08 8.02E-08	1.33E-08	0.10 0.10	0.000 0.000
3.29E-09	8.02E-08 8.03E-08	1.34E-08	0.10	0.000
2.56E-09	6.25E-08	1.04E-08	0.08	0.000
3.39E-09	8.29E-08	1.38E-08	0.10	0.000
3.63E-09	8.87E-08	1.48E-08	0.11	0.000
3.89E-09	9.51E-08	1.58E-08	0.11	0.000
4.18E-09	1.02E-07	1.70E-08	0.12	0.000
4.45E-09	1.09E-07	1.81E-08	0.13	0.000
5.00E-09	1.22E-07	2.03E-08	0.15	0.000
5.26E-09	1.29E-07	2.14E-08	0.16	0.000
5.53E-09	1.35E-07	2.25E-08	0.16	0.000

Project Construction											
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10
567585.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567605.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567625.16 567645.16	4149390.16 4149390.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567665.16 567665.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567765.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567865.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567885.16 567905.16	4149390.16 4149390.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567905.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568005.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568025.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568045.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568065.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568085.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568105.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568125.16 568145.16	4149390.16 4149390.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
568145.16 568165.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568225.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568245.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568265.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568285.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568305.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568325.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568345.16 568365.16	4149390.16 4149390.16	0.000 0.000									
568385.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568405.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568425.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568445.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568465.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568485.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568505.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568525.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568545.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568565.16 568585.16	4149390.16 4149390.16	0.000 0.000									
568605.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568625.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568645.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568665.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568685.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568705.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568725.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16 567445.16	4149410.16 4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000
567445.16 567465.16	4149410.16 4149410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000	0.000
567505.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567545.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567565.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567585.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567625.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001

	Calicel Risk = 2K1	- CDPM		П
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
5.75E-09	1.40E-07	2.34E-08	0.17	0.000
5.96E-09	1.46E-07	2.43E-08	0.18	0.000
6.18E-09	1.51E-07	2.51E-08	0.18	0.000
6.36E-09	1.55E-07	2.59E-08	0.19	0.000
6.50E-09	1.59E-07	2.65E-08	0.19	0.000
6.67E-09	1.63E-07	2.71E-08	0.20	0.000
6.79E-09	1.66E-07	2.76E-08	0.20	0.000
6.92E-09	1.69E-07	2.81E-08	0.20	0.000
7.12E-09	1.74E-07	2.89E-08	0.21	0.000
7.22E-09	1.77E-07	2.94E-08	0.21	0.000
7.32E-09	1.79E-07	2.98E-08	0.22	0.000
7.42E-09	1.81E-07	3.02E-08	0.22	0.000
7.50E-09				
	1.83E-07	3.05E-08	0.22	0.000
7.57E-09	1.85E-07	3.08E-08	0.22	0.000
7.62E-09	1.86E-07	3.10E-08	0.22	0.000
7.65E-09	1.87E-07	3.11E-08	0.23	0.000
7.66E-09	1.87E-07	3.12E-08	0.23	0.000
7.64E-09	1.87E-07	3.11E-08	0.23	0.000
7.55E-09	1.85E-07	3.07E-08	0.22	0.000
7.49E-09	1.83E-07	3.05E-08	0.22	0.000
7.44E-09	1.82E-07	3.03E-08	0.22	0.000
7.35E-09	1.80E-07	2.99E-08	0.22	0.000
7.22E-09	1.76E-07	2.94E-08	0.21	0.000
7.10E-09	1.73E-07	2.89E-08	0.21	0.000
6.98E-09	1.71E-07	2.84E-08	0.21	0.000
6.85E-09	1.67E-07	2.79E-08	0.20	0.000
6.66E-09	1.63E-07	2.71E-08	0.20	0.000
6.46E-09	1.58E-07	2.63E-08	0.19	0.000
6.25E-09	1.53E-07	2.54E-08	0.18	0.000
6.04E-09	1.48E-07	2.46E-08	0.18	0.000
5.80E-09	1.42E-07	2.36E-08	0.17	0.000
5.51E-09	1.35E-07	2.24E-08	0.16	0.000
5.29E-09	1.29E-07	2.15E-08		0.000
			0.16	
5.07E-09	1.24E-07	2.06E-08	0.15	0.000
4.85E-09	1.18E-07	1.97E-08	0.14	0.000
4.88E-09	1.19E-07	1.98E-08	0.14	0.000
4.43E-09	1.08E-07	1.80E-08	0.13	0.000
4.24E-09	1.04E-07	1.73E-08	0.13	0.000
4.08E-09	9.97E-08	1.66E-08	0.12	0.000
3.93E-09	9.61E-08	1.60E-08	0.12	0.000
3.79E-09	9.27E-08	1.54E-08	0.11	0.000
3.68E-09	8.98E-08	1.50E-08	0.11	0.000
3.57E-09	8.71E-08	1.45E-08	0.11	0.000
3.47E-09	8.48E-08	1.41E-08	0.10	0.000
3.39E-09	8.27E-08	1.38E-08	0.10	0.000
3.32E-09	8.12E-08	1.35E-08	0.10	0.000
3.27E-09	7.98E-08	1.33E-08	0.10	0.000
3.21E-09	7.86E-08	1.31E-08	0.09	0.000
3.17E-09	7.75E-08	1.29E-08	0.09	0.000
3.15E-09	7.69E-08	1.28E-08	0.09	0.000
3.32E-09	8.11E-08	1.35E-08	0.10	0.000
3.09E-09	7.56E-08	1.26E-08	0.09	0.000
3.08E-09	7.52E-08	1.25E-08	0.09	0.000
3.09E-09	7.54E-08	1.26E-08	0.09	0.000
3.05E-09	7.45E-08	1.24E-08	0.09	0.000
3.04E-09	7.44E-08	1.24E-08	0.09	0.000
3.00E-09	7.32E-08	1.22E-08	0.09	0.000
3.68E-09	8.99E-08	1.50E-08	0.11	0.000
3.93E-09	9.61E-08	1.60E-08	0.12	0.000
4.18E-09	1.02E-07	1.70E-08	0.12	0.000
4.68E-09	1.14E-07	1.91E-08	0.14	0.000
4.91E-09	1.20E-07	2.00E-08	0.15	0.000
5.17E-09	1.26E-07	2.10E-08	0.15	0.000
5.36E-09	1.31E-07	2.18E-08	0.16	0.000
5.57E-09	1.36E-07	2.27E-08	0.16	0.000
5.75E-09	1.40E-07	2.34E-08	0.17	0.000
5.92E-09	1.45E-07	2.41E-08	0.17	0.000
3.522 03	1.432 07	+1_ 00	0.17	0.000

	Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
567645.16	Index Lookup HIDE 4149410.16	0.000	0.000	0.000	0.000	5 0.000	6 0.001	7 0.001	0.001	9 0.001	10 0.001
567665.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567685.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567705.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567725.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567745.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567785.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567805.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567825.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567845.16 567865.16	4149410.16 4149410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001
567885.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567905.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567925.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567945.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
567985.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568005.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568025.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568045.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568065.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568085.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001 0.001	0.001	0.001 0.001
568105.16 568125.16	4149410.16 4149410.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001	0.001 0.001	0.001
568145.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568165.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568185.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
568205.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568225.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568245.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568265.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568285.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568305.16 568325.16	4149410.16 4149410.16	0.000 0.000									
568345.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568365.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568385.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568405.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568425.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568445.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568465.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568485.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568505.16 568525.16	4149410.16 4149410.16	0.000 0.000									
568545.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568565.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568585.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568605.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568625.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568645.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568665.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568685.16	4149410.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
568705.16 568725.16	4149410.16 4149410.16	0.000 0.000									
567345.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567365.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567385.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567405.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567425.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567465.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567485.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567505.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567525.16 567545.16	4149430.16 4149430.16	0.000 0.000	0.000	0.000	0.000 0.000	0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000
567545.16 567565.16	4149430.16	0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000	0.000 0.000	0.000	0.000	0.000
567585.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567605.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
567625.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Cancer Risk = ∑R1*C <sub>DPM</sub>										
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL							
				unitless							
6.07E-09	1.48E-07	2.47E-08	0.18	0.000							
6.21E-09	1.52E-07	2.53E-08	0.18	0.000							
6.31E-09	1.54E-07	2.57E-08	0.19	0.000							
6.43E-09	1.57E-07	2.62E-08	0.19	0.000							
6.54E-09	1.60E-07	2.66E-08	0.19	0.000							
6.63E-09	1.62E-07	2.70E-08	0.20	0.000							
6.81E-09	1.66E-07	2.77E-08	0.20	0.000							
6.92E-09	1.69E-07	2.81E-08	0.20	0.000							
6.98E-09	1.71E-07	2.84E-08	0.21	0.000							
7.06E-09	1.72E-07	2.87E-08	0.21	0.000							
7.13E-09	1.74E-07	2.90E-08	0.21	0.000							
7.16E-09	1.75E-07	2.91E-08	0.21	0.000							
7.18E-09 7.20E-09	1.76E-07 1.76E-07	2.92E-08 2.93E-08	0.21 0.21	0.000							
7.20E-09 7.17E-09	1.75E-07	2.93E-08 2.92E-08	0.21	0.000							
7.10E-09	1.74E-07	2.89E-08	0.21	0.000							
7.05E-09	1.72E-07	2.87E-08	0.21	0.000							
7.00E-09	1.71E-07	2.85E-08	0.21	0.000							
6.91E-09	1.69E-07	2.81E-08	0.20	0.000							
6.80E-09	1.66E-07	2.77E-08	0.20	0.000							
6.69E-09	1.63E-07	2.72E-08	0.20	0.000							
6.58E-09	1.61E-07	2.68E-08	0.19	0.000							
6.48E-09	1.58E-07	2.64E-08	0.19	0.000							
6.31E-09	1.54E-07	2.57E-08	0.19	0.000							
6.14E-09	1.50E-07	2.50E-08	0.18	0.000							
5.96E-09	1.46E-07	2.42E-08	0.18	0.000							
5.77E-09	1.41E-07	2.35E-08	0.17	0.000							
5.55E-09 5.31E-09	1.36E-07 1.30E-07	2.26E-08 2.16E-08	0.16 0.16	0.000							
5.31E-09 5.08E-09	1.30E-07 1.24E-07	2.16E-08 2.07E-08	0.15	0.000							
4.85E-09	1.19E-07	1.97E-08	0.14	0.000							
4.64E-09	1.13E-07	1.89E-08	0.14	0.000							
4.68E-09	1.14E-07	1.91E-08	0.14	0.000							
4.25E-09	1.04E-07	1.73E-08	0.13	0.000							
4.06E-09	9.92E-08	1.65E-08	0.12	0.000							
3.90E-09	9.52E-08	1.58E-08	0.11	0.000							
3.76E-09	9.20E-08	1.53E-08	0.11	0.000							
3.63E-09	8.86E-08	1.48E-08	0.11	0.000							
3.50E-09	8.56E-08	1.42E-08	0.10	0.000							
3.39E-09	8.29E-08	1.38E-08	0.10	0.000							
3.30E-09	8.06E-08	1.34E-08	0.10	0.000							
3.21E-09 3.13E-09	7.85E-08 7.65E-08	1.31E-08	0.09 0.09	0.000 0.000							
3.08E-09	7.63E-08 7.52E-08	1.27E-08 1.25E-08	0.09	0.000							
3.03E-09	7.40E-08	1.23E-08	0.09	0.000							
2.99E-09	7.30E-08	1.22E-08	0.09	0.000							
2.95E-09	7.21E-08	1.20E-08	0.09	0.000							
2.91E-09	7.12E-08	1.19E-08	0.09	0.000							
2.84E-09	6.94E-08	1.15E-08	0.08	0.000							
2.83E-09	6.93E-08	1.15E-08	0.08	0.000							
2.85E-09	6.97E-08	1.16E-08	0.08	0.000							
2.85E-09	6.96E-08	1.16E-08	0.08	0.000							
2.84E-09	6.93E-08	1.15E-08	0.08	0.000							
2.84E-09	6.94E-08	1.15E-08	0.08	0.000							
3.04E-09	7.42E-08	1.24E-08	0.09	0.000							
3.26E-09	7.97E-08	1.33E-08	0.10	0.000							
3.48E-09 3.70E-09	8.51E-08 9.04E-08	1.42E-08 1.50E-08	0.10 0.11	0.000 0.000							
4.18E-09	1.02E-07	1.70E-08	0.11	0.000							
4.41E-09	1.02E-07 1.08E-07	1.80E-08	0.12	0.000							
4.63E-09	1.13E-07	1.88E-08	0.14	0.000							
4.84E-09	1.18E-07	1.97E-08	0.14	0.000							
5.02E-09	1.23E-07	2.04E-08	0.15	0.000							
5.22E-09	1.28E-07	2.12E-08	0.15	0.000							
5.38E-09	1.31E-07	2.19E-08	0.16	0.000							
5.51E-09	1.35E-07	2.24E-08	0.16	0.000							
5.68E-09	1.39E-07	2.31E-08	0.17	0.000							

		Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	
, ,		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	
567645.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567665.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567685.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567705.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567725.16 567745.16	4149430.16 4149430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	
567765.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567825.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567845.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567865.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567885.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567905.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567925.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567945.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567985.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568005.16 568025.16	4149430.16 4149430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	0.001 0.001	
568045.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568065.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568085.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568105.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568125.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568145.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568165.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568185.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568205.16	4149430.16	0.000 0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000	
568225.16 568245.16	4149430.16 4149430.16	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	
568265.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568285.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568305.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568325.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568345.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568365.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568385.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568405.16 568425.16	4149430.16 4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568425.16 568445.16	4149430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	
568465.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568485.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568505.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568525.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568545.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568565.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568585.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568605.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568625.16 568645.16	4149430.16 4149430.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	
568665.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568685.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568705.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568725.16	4149430.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567325.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567345.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567365.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567385.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567405.16 567445.16	4149450.16 4149450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	
567445.16 567465.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567485.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567505.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567525.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567545.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567565.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567585.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567605.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567625.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

	Califei Kisk - 5K1	CDPM		п
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL
				unitless
5.045.00	4 425 07	2.265.00	0.47	0.000
5.81E-09	1.42E-07	2.36E-08	0.17	0.000
5.91E-09	1.45E-07	2.41E-08	0.17	0.000
6.01E-09	1.47E-07	2.44E-08	0.18	0.000
6.10E-09	1.49E-07	2.48E-08	0.18	0.000
6.18E-09	1.51E-07	2.52E-08	0.18	0.000
6.26E-09	1.53E-07	2.55E-08	0.18	0.000
6.35E-09	1.55E-07	2.58E-08	0.19	0.000
6.60E-09	1.61E-07	2.69E-08	0.19	0.000
6.67E-09	1.63E-07	2.72E-08	0.20	0.000
6.72E-09	1.64E-07	2.73E-08	0.20	0.000
6.73E-09	1.64E-07	2.74E-08	0.20	0.000
6.75E-09	1.65E-07	2.75E-08	0.20	0.000
6.77E-09	1.65E-07	2.75E-08	0.20	0.000
6.75E-09	1.65E-07	2.75E-08	0.20	0.000
6.70E-09	1.64E-07	2.73E-08	0.20	0.000
6.65E-09	1.63E-07	2.71E-08	0.20	0.000
6.59E-09	1.61E-07	2.68E-08	0.19	0.000
6.52E-09	1.59E-07	2.65E-08	0.19	0.000
6.49E-09	1.59E-07	2.64E-08	0.19	0.000
6.38E-09	1.56E-07	2.60E-08	0.19	0.000
6.24E-09	1.52E-07	2.54E-08	0.18	0.000
6.13E-09	1.50E-07	2.50E-08	0.18	0.000
5.99E-09	1.46E-07	2.44E-08	0.18	0.000
5.84E-09	1.43E-07	2.37E-08	0.17	0.000
5.68E-09	1.39E-07	2.31E-08	0.17	0.000
5.51E-09	1.35E-07	2.24E-08	0.16	0.000
5.31E-09	1.30E-07			
		2.16E-08	0.16	0.000
5.09E-09	1.25E-07	2.07E-08	0.15	0.000
4.89E-09	1.20E-07	1.99E-08	0.14	0.000
4.66E-09	1.14E-07	1.90E-08	0.14	0.000
4.45E-09	1.09E-07	1.81E-08	0.13	0.000
4.47E-09	1.09E-07	1.82E-08	0.13	0.000
4.30E-09	1.05E-07	1.75E-08	0.13	0.000
3.95E-09	9.66E-08	1.61E-08	0.12	0.000
3.77E-09	9.22E-08	1.53E-08	0.11	0.000
3.62E-09	8.86E-08	1.47E-08	0.11	0.000
3.48E-09	8.51E-08	1.42E-08	0.10	0.000
3.35E-09	8.19E-08	1.36E-08	0.10	0.000
3.24E-09	7.92E-08	1.32E-08	0.10	0.000
3.14E-09	7.68E-08	1.28E-08	0.09	0.000
3.05E-09	7.46E-08	1.24E-08	0.09	0.000
		1.21E-08		
2.98E-09	7.27E-08		0.09	0.000
2.91E-09	7.12E-08	1.19E-08	0.09	0.000
2.86E-09	7.00E-08	1.16E-08	0.08	0.000
2.82E-09	6.89E-08	1.15E-08	0.08	0.000
2.79E-09	6.81E-08	1.13E-08	0.08	0.000
2.74E-09	6.71E-08	1.12E-08	0.08	0.000
2.72E-09	6.64E-08	1.11E-08	0.08	0.000
2.71E-09	6.61E-08	1.11E 08	0.08	0.000
2.69E-09	6.57E-08	1.09E-08	0.08	0.000
2.68E-09	6.55E-08	1.09E-08	0.08	0.000
2.66E-09	6.50E-08	1.08E-08	0.08	0.000
2.71E-09	6.61E-08	1.10E-08	0.08	0.000
2.89E-09	7.06E-08	1.18E-08	0.09	0.000
3.07E-09	7.49E-08	1.25E-08	0.09	0.000
3.28E-09	8.02E-08	1.34E-08	0.10	0.000
3.50E-09	8.56E-08	1.42E-08	0.10	0.000
3.93E-09	9.61E-08	1.60E-08	0.12	0.000
4.15E-09	1.01E-07	1.69E-08	0.12	0.000
4.36E-09	1.06E-07	1.77E-08	0.13	0.000
4.56E-09	1.11E-07	1.85E-08	0.13	0.000
4.72E-09	1.15E-07	1.92E-08	0.14	0.000
4.89E-09	1.20E-07	1.99E-08	0.14	0.000
5.05E-09	1.24E-07	2.06E-08	0.15	0.000
5.20E-09	1.27E-07	2.11E-08	0.15	0.000
5.31E-09	1.30E-07	2.16E-08	0.16	0.000
5.44E-09	1.33E-07	2.21E-08	0.16	0.000

		Project Construction										
X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	
		2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	
	Index Lookup HIDE	1	2	3	4	5	6	7	8	9	10	
567645.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567665.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567685.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
567705.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567725.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567745.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567765.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567785.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567845.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567865.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567885.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567905.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567925.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
567985.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568005.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568025.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568045.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568065.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568085.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568105.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568125.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	
568145.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568165.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568185.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568205.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568225.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568245.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568265.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568285.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	
568305.16	4149450.16	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000	
568325.16	4149450.16	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	
568345.16 568365.16	4149450.16 4149450.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	
568385.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568405.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568425.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568445.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568465.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568485.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568505.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568525.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568545.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568565.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568585.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568605.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568625.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568645.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568665.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568685.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568705.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
568725.16	4149450.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

	Cancer Risk = ∑R1*C <sub>DPM</sub>								
3rd Trimester	0<2	2<9	Total	C <sub>DPM</sub> /REL					
				unitless					
			·						
5.54E-09	1.35E-07	2.25E-08	0.16	0.000					
5.62E-09	1.37E-07	2.29E-08	0.17	0.000					
5.72E-09	1.40E-07	2.33E-08	0.17	0.000					
5.79E-09	1.41E-07	2.36E-08	0.17	0.000					
5.87E-09	1.44E-07	2.39E-08	0.17	0.000					
5.94E-09	1.45E-07	2.42E-08	0.18	0.000					
6.01E-09	1.47E-07	2.44E-08	0.18	0.000					
6.11E-09	1.49E-07	2.48E-08	0.18	0.000					
6.30E-09	1.54E-07	2.56E-08	0.19	0.000					
6.32E-09	1.54E-07	2.57E-08	0.19	0.000					
6.36E-09	1.55E-07	2.59E-08	0.19	0.000					
6.38E-09	1.56E-07	2.59E-08	0.19	0.000					
6.38E-09	1.56E-07	2.59E-08	0.19	0.000					
6.32E-09	1.54E-07	2.57E-08	0.19	0.000					
6.29E-09	1.54E-07	2.56E-08	0.19	0.000					
6.23E-09	1.52E-07	2.53E-08	0.18	0.000					
6.37E-09	1.56E-07	2.59E-08	0.19	0.000					
6.30E-09	1.54E-07	2.56E-08	0.19	0.000					
6.19E-09	1.51E-07	2.52E-08	0.18	0.000					
6.08E-09	1.49E-07	2.47E-08	0.18	0.000					
5.82E-09	1.42E-07	2.37E-08	0.17	0.000					
5.69E-09	1.39E-07	2.32E-08	0.17	0.000					
5.57E-09	1.36E-07	2.26E-08	0.17	0.000					
5.42E-09	1.32E-07	2.20E-08	0.16	0.000					
5.26E-09	1.32E 07 1.29E-07	2.14E-08	0.16	0.000					
5.08E-09	1.24E-07	2.07E-08	0.15	0.000					
4.90E-09	1.20E-07	1.99E-08	0.14	0.000					
4.70E-09	1.15E-07	1.91E-08	0.14	0.000					
4.48E-09	1.10E-07	1.82E-08	0.13	0.000					
4.26E-09	1.04E-07	1.73E-08	0.13	0.000					
4.10E-09	1.00E-07	1.67E-08	0.12	0.000					
4.00E-09	9.77E-08	1.63E-08	0.12	0.000					
3.97E-09	9.71E-08	1.62E-08	0.12	0.000					
3.83E-09	9.37E-08	1.56E-08		0.000					
3.68E-09	8.99E-08	1.50E-08	0.11 0.11	0.000					
3.54E-09	8.64E-08	1.44E-08	0.11	0.000					
3.23E-09	7.89E-08	1.31E-08	0.10	0.000					
3.11E-09	7.60E-08	1.27E-08	0.10	0.000					
3.01E-09	7.36E-08	1.27E-08	0.09	0.000					
2.92E-09	7.30E-08 7.13E-08	1.19E-08	0.09	0.000					
2.84E-09	6.94E-08	1.15E-08	0.03	0.000					
2.77E-09	6.78E-08	1.13E-08	0.08	0.000					
2.72E-09	6.65E-08	1.11E-08	0.08	0.000					
2.68E-09									
2.63E-09	6.54E-08 6.43E-08	1.09E-08	0.08	0.000					
2.63E-09 2.61E-09		1.07E-08	0.08 0.08	0.000					
	6.37E-08	1.06E-08		0.000					
2.58E-09	6.31E-08	1.05E-08	0.08	0.000					
2.56E-09	6.26E-08	1.04E-08	0.08	0.000					
2.54E-09	6.21E-08	1.03E-08	0.08	0.000					
2.53E-09	6.17E-08	1.03E-08	0.07	0.000					
2.51E-09	6.14E-08	1.02E-08	0.07	0.000					

#### Sequoia Station - Construction Health Risk Assessment Modeled for receptor height of 1.5 m

#### Schools and daycare centers within 1,000 feet

Footsteps Child Care	715 Bradford Street	6 weeks - 6 years
Little Treasures Daycare	1500 El Camino Real	3 months - 4 years
Little Steps Daycare	213 Jackson Avenue	3 months - 6 years
Sequoia Childrens Center	1234 Brewster Avenue	5 months - 6 years
Our Lady of Mount Carmel School		Grades K to 8
North Star Academy/ Newcomer Academy/McKinley Institute of Technology		Grades 3 to 8
Sequoia High School		Grades 8 to 12

#### Cancer Risk, Hazard Index and PM<sub>2.5</sub> Concentration Calculations - Schools & Daycares

					Start Date	7/3/2023	4/4/2025	7/3/2023	7/3/2023	7/3/2025								
					Stop Date	4/3/2025	12/31/2027	12/31/2027	7/2/2025	12/31/2027								
						Day	care	Elementary School	High S	School	DPM Emis	ssions (tons)	DPM Emissi	on Rate (g/s)	PM <sub>2,5</sub> Emis	ssions (tons)	PM <sub>2.5</sub> Emission	Rate (g/s)
Source Description	Source ID	Year	Start Date	End Date	Calendar Days	0<2	2<9	2<16	2<16	16<30	Uncontrolled	Mitigated	Uncontrolled	Mitigated	Uncontrolled	Mitigated	Uncontrolled	Mitigated
Truck route 1 (and 3) - primary route	ARLN1	2023	7/3/2023	12/31/2023	181	181	0	181	181	0	0.00	0.00	0.000	1.95E-05	0.00	0.00	0.000	2.30E-05
Truck route 1 (and 3) - primary route	ARLN1	2024	1/1/2024	12/31/2024	365	365	0	365	365	365	0.00	0.00	0.000	1.95E-05	0.00	0.00	0.000	2.29E-05
Truck route 1 (and 3) - primary route	ARLN1	2025	1/1/2025	12/31/2025	364	92	272	364	182	364	0.00	0.00	0.000	1.95E-05	0.00	0.00	0.000	2.29E-05
Truck route 1 (and 3) - primary route	ARLN1	2026	1/1/2026	12/31/2026	364	0	364	364	0	364	0.00	0.00	0.000	1.95E-05	0.00	0.00	0.000	2.29E-05
Truck route 1 (and 3) - primary route	ARLN1	2027	1/1/2027	12/31/2027	364	0	364	364	0	364	0.00	0.00	0.000	1.95E-05	0.00	0.00	0.000	2.29E-05
Onsite construction	PAREA1	2023	7/3/2023	12/31/2023	181	181	0	181	181	181	0.10	0.01	0.012	1.06E-03	0.10	0.01	0.012	1.06E-03
Onsite construction	PAREA1	2024	1/1/2024	12/31/2024	365	365	0	365	365	365	0.20	0.02	0.012	1.06E-03	0.19	0.02	0.012	1.06E-03
Onsite construction	PAREA1	2025	1/1/2025	12/31/2025	364	92	272	364	182	364	0.20	0.02	0.012	1.06E-03	0.19	0.02	0.012	1.06E-03
Onsite construction	PAREA1	2026	1/1/2026	12/31/2026	364	0	364	364	0	364	0.20	0.02	0.012	1.06E-03	0.19	0.02	0.012	1.06E-03
Onsite construction	PAREA1	2027	1/1/2027	12/31/2027	364	0	364	364	0	364	0.20	0.02	0.012	1.06E-03	0.19	0.02	0.012	1.06E-03
Truck route 1 (and 3) - primary route	ARLN3	2023	7/3/2023	12/31/2023	181	181	0	181	181	181				_	0.00	0.00	0.000	4.54E-04
Truck route 1 (and 3) - primary route	ARLN3	2024	1/1/2024	12/31/2024	365	365	0	365	365	365					0.01	0.01	0.000	4.53E-04

182

0

364

364

0.01

0.01

0.01

0.01

0.000

4.53E-04

4.53E-04

4.53E-04

Exposure Duration (Days)

364

364

#### **Cancer Risk Factors**

Truck route 1 (and 3) - primary route

Truck route 1 (and 3) - primary route

Truck route 1 (and 3) - primary route

	Abbreviation	UOM	0<2	2<9	2<16	16<30
Daily Breathing Rate (8-hour)	DBR	L/kg-8 hour	1200	640	520	240
Fraction Of Time At Home	FAH	unitless	1	1	1	1
Exposure Frequency	EF	days/year	0.68	0.68	0.49	0.49
Age Sensitivity Factor	ASF	unitless	10	3	3	1
Inhalation Absorption Factor	Α	unitless	1	1	1	1
Conversion Factor	CF <sub>1</sub>	m³/L	0.001	0.001	0.001	0.001
Conversion Factor	CF <sub>2</sub>	$\mu g/m^3$	0.001	0.001	0.001	0.001
Cancer Potency Factor (diesel exhaust)	CPF	mg/kg-day <sup>-1</sup>	1.1	1.1	1.1	1.1
Averaging Time (for residential exposure)	AT	years	70	70	70	70

1/1/2025

1/1/2026

1/1/2027

12/31/2025

12/31/2026

12/31/2027

#### Hazard Index

Chronic Inhalation	REL	μg/m³	5

ARLN3

ARLN3

ARLN3

2025

2026

2027

## Intake Factor for Inhalation, IF (m³/kg-day) = DBR\*FAH\*EF\*ED\*ASF\*A\*CF/AT

	Daycare		Elementary	High	School
Source ID	0<2	2<9	2<16	2<16	16<30
ARLN1	0.058	0.000	0.005	0.005	0.000
ARLN1	0.117	0.000	0.011	0.011	0.002
ARLN1	0.029	0.014	0.005	0.005	0.002
ARLN1	0.000	0.019	0.000	0.000	0.002
ARLN1	0.000	0.019	0.000	0.000	0.002
PAREA1	0.058	0.000	0.005	0.005	0.001
PAREA1	0.117	0.000	0.011	0.011	0.002
PAREA1	0.029	0.014	0.005	0.005	0.002
PAREA1	0.000	0.019	0.000	0.000	0.002
PAREA1	0.000	0.019	0.000	0.000	0.002

#### Risk Calculation Part 1 R1 = IF\*CPF\*CF

Risk Calculation Part 1, R1 = IF*CPF*CF						
Dayo	Daycare Elementary		High S	School		
0<2	2<9	2<16	2<16	16<30		
6.36E-05	0.00E+00	5.96E-06	5.96E-06	0.00E+00		
1.28E-04	0.00E+00	1.20E-05	1.20E-05	0.00E+00		
3.23E-05	1.53E-05	5.99E-06	5.99E-06	0.00E+00		
0.00E+00	2.05E-05	0.00E+00	0.00E+00	0.00E+00		
0.00E+00	2.05E-05	0.00E+00	0.00E+00	0.00E+00		
6.36E-05	0.00E+00	5.96E-06	5.96E-06	0.00E+00		
1.28E-04	0.00E+00	1.20E-05	1.20E-05	0.00E+00		
3.23E-05	1.53E-05	5.99E-06	5.99E-06	0.00E+00		
0.00E+00	2.05E-05	0.00E+00	0.00E+00	0.00E+00		
0.00E+00	2.05E-05	0.00E+00	0.00E+00	0.00E+00		

Max Unmitigated	Cancer Risk	UTM X	UTM Y
Footsteps Child Care	1.53	568285.16	4149390.16
Little Treasures Daycare	8.72	568305.16	4148430.16
Little Steps Daycare	11.03	568005.16	4148490.16
Sequoia Childrens Center	0.49	567325.16	4149010.16
Our Lady of Mount Carmel School	0.04	567325.16	4148570.16
North Star Academy/ Newcomer Academy/McKinle	0.17	567645.16	4148510.16
Sequoia High School	0.13	567605.16	4148790.16

HI	UTM X	UTM Y
0.001	568285.16	4149390.16
0.006	568305.16	4148430.16
0.008	568005.16	4148490.16
0.000	567325.16	4149010.16
0.000	567325.16	4148570.16
0.001	567645.16	4148510.16
0.001	567605.16	4148790.16

364

364

364

92

0

272

364

PM <sub>2.5</sub> Conc.	UTM X	UTM Y
0.01	568285.16	4149390.16
0.03	568305.16	4148430.16
0.04	568005.16	4148490.16
0.00	567325.16	4149010.16
0.00	567325.16	4148570.16
0.01	567645.16	4148510.16
0.01	567605.16	4148790.16

Max Mitigated	Cancer Risk	UTM X	UTM Y
Footsteps Child Care	0.13	568285.16	4149390.16
Little Treasures Daycare	0.76	568305.16	4148430.16
Little Steps Daycare	0.95	568005.16	4148490.16
Sequoia Childrens Center	0.04	567325.16	4149010.16
Our Lady of Mount Carmel School	0.00	567325.16	4148570.16
North Star Academy/ Newcomer Academy/McKinl	0.01	567645.16	4148510.16
Sequoia High School	0.01	567605.16	4148790.16
-			-

		_
HI	UTM X	UTM Y
0.000	568285.16	4149390.16
0.001	568305.16	4148430.16
0.001	568005.16	4148490.16
0.000	567325.16	4149010.16
0.000	567325.16	4148570.16
0.0001	567645.16	4148510.16
0.000	567605.16	4148790.16

PM <sub>2.5</sub> Conc.	UTM X	UTM Y
0.001	568285.16	4149390.16
0.004	568305.16	4148430.16
0.004	568005.16	4148490.16
0.000	567325.16	4149010.16
0.000	567325.16	4148570.16
0.001	567645.16	4148510.16
0.001	567605.16	4148790.16

DA 4		, 3, .	
PM <sub>2.5</sub> concentration,	CDM2 5 (LIG)	m) - at max	. Hi receptor

										Projec	t Construction						
Receptor	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1	ARLN3	ARLN3	ARLN3	ARLN3	ARLN3
			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
Unmitigated																	
Footsteps Child Care	568285.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	0.001	0.001	0.001	0.001	0.001
Little Treasures Daycare	568305.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030	0.030	0.030	0.001	0.001	0.001	0.001	0.001
Little Steps Daycare	568005.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038	0.000	0.000	0.000	0.000	0.000
Sequoia Childrens Center	567325.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000
Our Lady of Mount Carmel School	567325.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000
North Star Academy/ Newcomer Academy/McKinl	567645.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567605.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	0.000	0.000	0.000	0.000	0.000
Mitigated																	
Footsteps Child Care	568285.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
Little Treasures Daycare	568305.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	0.001	0.001	0.001	0.001	0.001
Little Steps Daycare	568005.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.000
Sequoia Childrens Center	567325.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Our Lady of Mount Carmel School	567325.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
North Star Academy/ Newcomer Academy/McKinl	567645.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567605.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

## Risk Calculation Part 2

	HI		
	C <sub>DPM</sub> /REL		
0<2	2<9	Total	unitless
1.23E-06	3.07E-07	1.53E+00	0.001
6.98E-06	1.75E-06	8.72E+00	0.006
8.82E-06	2.21E-06	1.10E+01	0.008
3.88E-07	9.73E-08	4.86E-01	0.000

∑R1	н				
Element	C <sub>DPM</sub> /REL				
2<16	Total	unitless			
4.01E-08	4.01E-02	0.000			
1.46E-07	1.46E-01	0.001			
1.47E-07	1.47E-01	0.001			
1.65E-07	1.65E-01	0.001			
1.67E-07	1.67E-01	0.001			
	2<16 4.01E-08 1.46E-07 1.47E-07 1.65E-07	4.01E-08 4.01E-02  1.46E-07 1.46E-01 1.47E-07 1.47E-01 1.65E-07 1.65E-01			

C<sub>DPM</sub>/REL

0.001 0.001 0.001 0.001 0.000 0.001 0.001 0.001 0.000 0.000 0.001 0.001 0.001 0.001 0.001 0.000

Max. Annual

0.006 0.032 0.039 0.002 0.002 0.007 0.006

0.001 0.004 0.004 0.000 0.000 0.001

	∑R1*C <sub>DPM</sub>		
	High School		
2<16	16<30	Total	
6.70E-08	0.00E+00	6.70E-02	
6.20E-08	0.00E+00	6.20E-02	
6.72E-08	0.00E+00	6.72E-02	
7.29E-08	0.00E+00	7.29E-02	
5.74E-08	0.00E+00	5.74E-02	
6.20E-08	0.00E+00	6.20E-02	
6.71E-08	0.00E+00	6.71E-02	
7.29E-08	0.00E+00	7.29E-02	
5.33E-08	0.00E+00	5.33E-02	
5.73E-08	0.00E+00	5.73E-02	
6.19E-08	0.00E+00	6.19E-02	
6.69E-08	0.00E+00	6.69E-02	
7.27E-08	0.00E+00	7.27E-02	
1.18E-07	0.00E+00	1.18E-01	
1.33E-07	0.00E+00	1.33E-01	
4.94E-08	0.00E+00	4.94E-02	

# Diesel Particulate Matter concentration, $C_{DPM} \, (\mu g/m^3)$ - Unmitigated

			Project Construction											
Receptor	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1		
			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027		
Unmitigated														
Footsteps Child Care	568285.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005		
Little Treasures Daycare	568305.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.031	0.031	0.031	0.031	0.031		
Little Steps Daycare	568005.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.039	0.039	0.039		
Sequoia Childrens Center	567325.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002		

							Project Construc	tion				
Receptor	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
Unmitigated												
Our Lady of Mount Carmel School	567325.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
North Star Academy/ Newcomer Academy/McKinl	567625.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
North Star Academy/ Newcomer Academy/McKinl	567625.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
North Star Academy/ Newcomer Academy/McKinl	567645.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007
North Star Academy/ Newcomer Academy/McKinl	567645.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007

							Project Constru	ction				
Receptor	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
Unmitigated												
Sequoia High School	567465.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567445.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567465.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567485.16	4148750.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567425.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567445.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567465.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567485.16	4148770.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567405.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567425.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567445.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567465.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567485.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567585.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
Sequoia High School	567605.16	4148790.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
Sequoia High School	567385.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002

							Project Construc	rtion				
Receptor	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
Unmitigated	567405.46	44 40040 46	0.000	0.000	0.000	0.000	2.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School Sequoia High School	567405.16 567425.16	4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
Sequoia High School	567445.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567465.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567485.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567505.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567565.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
Sequoia High School	567585.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
Sequoia High School	567605.16	4148810.16	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.006
Sequoia High School	567405.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567425.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567445.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567465.16 567485.16	4148830.16 4148830.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003	0.003 0.003
Sequoia High School Sequoia High School	567505.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567525.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567545.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
Sequoia High School	567565.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
Sequoia High School	567585.16	4148830.16	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005
Sequoia High School	567325.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567405.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567425.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567445.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567465.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567485.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
equoia High School	567505.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
equoia High School	567525.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
equoia High School	567545.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
equoia High School	567565.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004 0.002
iequoia High School iequoia High School	567325.16 567345.16	4148870.16 4148870.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002
Sequola High School	567405.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567425.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567445.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.002	0.003	0.003
Sequoia High School	567465.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
equoia High School	567485.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Sequoia High School	567505.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
equoia High School	567525.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
equoia High School	567545.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004
equoia High School	567325.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567345.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567365.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567385.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567405.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Sequoia High School	567425.16 567445.16	4148890.16 4148890.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002
equoia High School equoia High School	567445.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567485.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
equoia High School	567505.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
equoia High School	567325.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567345.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567365.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567385.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567405.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567425.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567445.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.002	0.002	0.002
equoia High School	567465.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
equoia High School	567485.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
equoia High School	567325.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567345.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
equoia High School	567365.16 567385.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002 0.002
equoia High School equoia High School	567385.16 567405.16	4148930.16 4148930.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.002
Sequoia High School	567425.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
-	567445.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
Seguoja High School	55 45.10	0000.10										
	567465.16	4148930.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Gequoia High School Gequoia High School Gequoia High School	567465.16 567345.16	4148930.16 4148950.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000	0.003 0.002	0.003	0.003	0.003	0.003
equoia High School												

	High School		C <sub>DPM</sub> /REL
2<16	16<30	Total	unitless
5.31E-08	0.00E+00	5.31E-02	0.000
5.71E-08	0.00E+00	5.71E-02	0.000
6.15E-08	0.00E+00	6.15E-02	0.001
6.66E-08	0.00E+00	6.66E-02	0.001
7.23E-08	0.00E+00	7.23E-02	0.001
7.90E-08	0.00E+00	7.90E-02	0.001
1.06E-07	0.00E+00	1.06E-01	0.001
1.18E-07	0.00E+00	1.18E-01	0.001
1.32E-07	0.00E+00	1.32E-01	0.001
5.28E-08	0.00E+00	5.28E-02	0.000
5.67E-08	0.00E+00 0.00E+00	5.67E-02	0.000
6.11E-08 6.62E-08	0.00E+00	6.11E-02 6.62E-02	0.001 0.001
7.20E-08	0.00E+00	7.20E-02	0.001
7.85E-08	0.00E+00	7.20E-02 7.85E-02	0.001
8.60E-08	0.00E+00	8.60E-02	0.001
9.47E-08	0.00E+00	9.47E-02	0.001
1.05E-07	0.00E+00	1.05E-01	0.001
1.18E-07	0.00E+00	1.18E-01	0.001
4.00E-08	0.00E+00	4.00E-02	0.000
5.24E-08	0.00E+00	5.24E-02	0.000
5.62E-08	0.00E+00	5.62E-02	0.000
6.07E-08	0.00E+00	6.07E-02	0.001
6.59E-08	0.00E+00	6.59E-02	0.001
7.17E-08	0.00E+00	7.17E-02	0.001
7.81E-08	0.00E+00	7.81E-02	0.001
8.56E-08	0.00E+00	8.56E-02	0.001
9.43E-08	0.00E+00	9.43E-02	0.001
1.05E-07	0.00E+00	1.05E-01	0.001
3.98E-08	0.00E+00	3.98E-02	0.000
4.24E-08	0.00E+00	4.24E-02	0.000
5.19E-08	0.00E+00	5.19E-02	0.000
5.58E-08	0.00E+00	5.58E-02	0.000
6.03E-08	0.00E+00	6.03E-02	0.001
6.55E-08	0.00E+00	6.55E-02	0.001
7.13E-08	0.00E+00	7.13E-02	0.001
7.77E-08	0.00E+00	7.77E-02	0.001
8.53E-08	0.00E+00	8.53E-02	0.001
9.39E-08 3.96E-08	0.00E+00 0.00E+00	9.39E-02 3.96E-02	0.001 0.000
4.21E-08	0.00E+00	4.21E-02	0.000
4.50E-08	0.00E+00	4.50E-02	0.000
4.82E-08	0.00E+00	4.82E-02	0.000
5.16E-08	0.00E+00	5.16E-02	0.000
5.55E-08	0.00E+00	5.55E-02	0.000
5.98E-08	0.00E+00	5.98E-02	0.000
6.52E-08	0.00E+00	6.52E-02	0.001
7.10E-08	0.00E+00	7.10E-02	0.001
7.76E-08	0.00E+00	7.76E-02	0.001
3.95E-08	0.00E+00	3.95E-02	0.000
4.21E-08	0.00E+00	4.21E-02	0.000
4.50E-08	0.00E+00	4.50E-02	0.000
4.81E-08	0.00E+00	4.81E-02	0.000
5.17E-08	0.00E+00	5.17E-02	0.000
5.55E-08	0.00E+00	5.55E-02	0.000
5.99E-08	0.00E+00	5.99E-02	0.001
6.52E-08	0.00E+00	6.52E-02	0.001
7.10E-08	0.00E+00	7.10E-02	0.001
3.95E-08	0.00E+00	3.95E-02	0.000
4.22E-08	0.00E+00	4.22E-02	0.000
4.51E-08	0.00E+00	4.51E-02	0.000
4.83E-08	0.00E+00	4.83E-02	0.000
5.18E-08	0.00E+00	5.18E-02	0.000
5.58E-08 6.02E-08	0.00E+00 0.00E+00	5.58E-02 6.02E-02	0.000 0.001
6.53E-08	0.00E+00	6.53E-02	0.001
4.25E-08	0.00E+00	4.25E-02	0.001
4.54E-08	0.00E+00	4.54E-02	0.000
4.85E-08	0.00E+00	4.85E-02	0.000
			0.000

∑R1\*C<sub>DPM</sub>

Receptor							Project Constru	ction				
	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
Unmitigated												
uoia High School	567405.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
uoia High School	567425.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
uoia High School	567445.16	4148950.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
uoia High School	567365.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
uoia High School	567385.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
uoia High School	567405.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
uoia High School	567425.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
uoia High School	567385.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
uoia High School	567405.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
ŭ	567385.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
uoia High School uoia High School	567405.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
ola High School	307403.10	4149010.10	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002
el Particulate Matter concentration, C <sub>DPM</sub> (μg/	/m³) - Mitigated											
							Project Constru					
Receptor	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
Mitigated												
steps Child Care	568285.16	4149390.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
e Treasures Daycare	568305.16	4148430.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
e Steps Daycare	568005.16	4148490.16	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
uoia Childrens Center	567325.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
							Project Constru					
Receptor	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
****			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
Mitigated  Lady of Mount Carmel School	567325.16	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ady of Mount Carmer School	50/325.10	4148570.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
h Star Academy/ Newcomer Academy/McKin	ol 567625.16	4148470.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
th Star Academy/ Newcomer Academy/McKin		4148490.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
Star Academy/ Newcomer Academy/McKin		4148490.16	0.000 0.000	0.000 0.000	0.000	0.000	0.000 0.000	0.001	0.001	0.001	0.001	0.001 0.001
th Star Academy/ Newcomer Academy/McKin	ol 567645.16	4148510.16	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
							Project Constru	ction				
Receptor	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
			2020	2024	2025	2026						2027
Mitigated					2025	2026						
Mitigated uoia High School	567465.16	4148730.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ioia High School	567465.16 567445.16	4148730.16 4148750.16						0.000 0.000	0.000 0.000			
oia High School oia High School			0.000	0.000	0.000	0.000	0.000			0.000	0.000	0.000
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-	567445.16 567465.16 567485.16	4148750.16 4148750.16 4148750.16	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000
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Joia High School	567445.16 56745.16 56745.16 56745.16 56745.16 56745.16 567405.16 56745.16 56745.16 56745.16 56745.16 56755.16 567605.16 56735.16 56745.16 56745.16 56745.16 56745.16	4148750.16 4148750.16 4148770.16 4148770.16 4148770.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
Joia High School	567445.16 567465.16 56745.16 56745.16 56745.16 567405.16 567405.16 56745.16 56745.16 56745.16 56745.16 56755.16 567605.16 56745.16 56745.16 56745.16 56745.16 56745.16	4148750.16 4148750.16 4148770.16 4148770.16 4148770.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.00	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
Joia High School	567445.16 567465.16 567425.16 567445.16 567465.16 567405.16 567405.16 567445.16 567485.16 567485.16 567585.16 567605.16 567485.16 567485.16 567585.16 56745.16 56745.16 56745.16 56745.16	4148750.16 4148750.16 4148770.16 4148770.16 4148770.16 4148770.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0
Joia High School	567445.16 567465.16 567425.16 567445.16 567465.16 567405.16 567405.16 567445.16 56745.16 56745.16 567585.16 567605.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16	4148750.16 4148750.16 4148770.16 4148770.16 4148770.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.0000 0.000 0.00000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
Joia High School	567445.16 567465.16 567425.16 567445.16 567465.16 567405.16 567425.16 567445.16 56745.16 56745.16 56765.16 56765.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16	4148750.16 4148750.16 4148770.16 4148770.16 4148770.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
Joia High School	567445.16 567485.16 567425.16 567445.16 567465.16 567405.16 567425.16 567445.16 56745.16 56745.16 56745.16 56765.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16	4148750.16 4148750.16 4148770.16 4148770.16 4148770.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148890.16 4148810.16 4148830.16 4148830.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.00	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.00
toia High School	567445.16 567465.16 567425.16 567445.16 567465.16 567405.16 567425.16 567445.16 56745.16 56745.16 56765.16 56765.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16 56745.16	4148750.16 4148750.16 4148770.16 4148770.16 4148770.16 4148790.16 4148790.16 4148790.16 4148790.16 4148790.16 4148810.16	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.00

	∑R1*C <sub>DPM</sub>		HI
	High School		C <sub>DPM</sub> /REL
2<16	16<30	Total	unitless
5.22E-08	0.00E+00	5.22E-02	0.000
5.62E-08	0.00E+00	5.62E-02	0.000
6.08E-08	0.00E+00	6.08E-02	0.001
4.59E-08	0.00E+00	4.59E-02	0.000
4.92E-08	0.00E+00	4.92E-02	0.000
5.28E-08	0.00E+00	5.28E-02	0.000
5.69E-08	0.00E+00	5.69E-02	0.000
5.00E-08	0.00E+00	5.00E-02	0.000
5.38E-08	0.00E+00	5.38E-02	0.000
5.10E-08	0.00E+00	5.10E-02	0.000
5.49E-08	0.00E+00	5.49E-02	0.000

## Risk Calculation Part 2

	∑R1*C <sub>DPM</sub>		HI
	C <sub>DPM</sub> /REL		
0<2	2<9	Total	unitless
1.08E-07	2.70E-08	1.35E-01	0.000
6.06E-07	1.52E-07	7.57E-01	0.001
7.60E-07	1.90E-07	9.51E-01	0.001
3.36E-08	8.41E-09	4.20E-02	0.000

∑R1*C <sub>DPM</sub>				
Elementary School				
Total	unitless			
3.46E-03	0.000			
1.26E-02	0.000			
1.27E-02	0.000			
1.43E-02	0.000			
1.44E-02	0.000			
	3.46E-03 1.26E-02 1.27E-02 1.43E-02			

	∑R1*C <sub>DPM</sub>		HI
	High School		C <sub>DPM</sub> /REL
2<16	16<30	Total	unitless
5.79E-09	0.00E+00	5.79E-03	0.000
5.35E-09	0.00E+00	5.35E-03	0.000
5.80E-09	0.00E+00	5.80E-03	0.000
6.30E-09	0.00E+00	6.30E-03	0.000
4.96E-09	0.00E+00	4.96E-03	0.000
5.35E-09	0.00E+00	5.35E-03	0.000
5.80E-09	0.00E+00	5.80E-03	0.000
6.30E-09	0.00E+00	6.30E-03	0.000
4.60E-09	0.00E+00	4.60E-03	0.000
4.95E-09	0.00E+00	4.95E-03	0.000
5.34E-09	0.00E+00	5.34E-03	0.000
5.77E-09	0.00E+00	5.77E-03	0.000
6.28E-09	0.00E+00	6.28E-03	0.000
1.02E-08	0.00E+00	1.02E-02	0.000
1.15E-08	0.00E+00	1.15E-02	0.000
4.27E-09	0.00E+00	4.27E-03	0.000
4.58E-09	0.00E+00	4.58E-03	0.000
4.93E-09	0.00E+00	4.93E-03	0.000
5.31E-09	0.00E+00	5.31E-03	0.000
5.75E-09	0.00E+00	5.75E-03	0.000
6.24E-09	0.00E+00	6.24E-03	0.000
6.81E-09	0.00E+00	6.81E-03	0.000
9.12E-09	0.00E+00	9.12E-03	0.000
1.01E-08	0.00E+00	1.01E-02	0.000
1.14E-08	0.00E+00	1.14E-02	0.000
4.56E-09	0.00E+00	4.56E-03	0.000
4.90E-09	0.00E+00	4.90E-03	0.000
5.27E-09	0.00E+00	5.27E-03	0.000
5.72E-09	0.00E+00	5.72E-03	0.000
6.21E-09	0.00E+00	6.21E-03	0.000

			Project Construction									
Receptor	X (UTM)	Y (UTM)	ARLN1	ARLN1	ARLN1	ARLN1	ARLN1	PAREA1	PAREA1	PAREA1	PAREA1	PAREA1
			2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
Mitigated												
Sequoia High School	567505.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567525.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567545.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567565.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567585.16 567325.16		0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
Sequoia High School Sequoia High School	567405.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567425.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567445.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567465.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567485.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567505.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567525.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567545.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567565.16	4148850.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567325.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567345.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567405.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567425.16	4148870.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567445.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567465.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567485.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567505.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567525.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567545.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567325.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567345.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567365.16 567385.16		0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
Sequoia High School Sequoia High School	567405.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567425.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567445.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567465.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567485.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567505.16	4148890.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567325.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567345.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567365.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567385.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567405.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567425.16	4148910.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567445.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567465.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567485.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567325.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567345.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567365.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567385.16 567405.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567405.16 567425.16		0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
Sequoia High School Sequoia High School	567445.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567465.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567345.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567365.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567385.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567405.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567425.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567445.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567365.16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567385.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567405.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567425.16	4148970.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567385.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567405.16	4148990.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567385.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sequoia High School	567405.16	4149010.16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	∑R1*C <sub>DPM</sub>	HI		
	High School			
2<16	16<30	Total	unitless	
6.77E-09	0.00E+00	6.77E-03	0.000	
7.42E-09	0.00E+00	7.42E-03	0.000	
8.17E-09	0.00E+00	8.17E-03	0.000	
9.07E-09 1.01E-08	0.00E+00 0.00E+00	9.07E-03 1.01E-02	0.000 0.000	
3.46E-09	0.00E+00 0.00E+00	3.46E-03	0.000	
4.52E-09	0.00E+00	4.52E-03	0.000	
4.85E-09	0.00E+00	4.85E-03	0.000	
5.24E-09	0.00E+00	5.24E-03	0.000	
5.69E-09	0.00E+00	5.69E-03	0.000	
6.18E-09	0.00E+00	6.18E-03	0.000	
6.74E-09	0.00E+00	6.74E-03	0.000	
7.38E-09	0.00E+00	7.38E-03	0.000	
8.13E-09	0.00E+00	8.13E-03	0.000	
9.01E-09	0.00E+00	9.01E-03	0.000	
3.44E-09	0.00E+00	3.44E-03	0.000	
3.66E-09	0.00E+00	3.66E-03	0.000	
4.49E-09	0.00E+00	4.49E-03	0.000	
4.82E-09	0.00E+00	4.82E-03	0.000	
5.21E-09	0.00E+00	5.21E-03	0.000	
5.65E-09	0.00E+00	5.65E-03	0.000	
6.15E-09	0.00E+00	6.15E-03	0.000	
6.70E-09	0.00E+00	6.70E-03	0.000	
7.35E-09	0.00E+00	7.35E-03	0.000	
8.10E-09	0.00E+00	8.10E-03	0.000	
3.42E-09	0.00E+00	3.42E-03	0.000	
3.64E-09	0.00E+00	3.64E-03	0.000	
3.89E-09	0.00E+00	3.89E-03	0.000	
4.16E-09	0.00E+00	4.16E-03	0.000	
4.46E-09	0.00E+00	4.46E-03	0.000	
4.79E-09	0.00E+00	4.79E-03	0.000	
5.16E-09	0.00E+00	5.16E-03	0.000	
5.62E-09	0.00E+00	5.62E-03	0.000	
6.12E-09	0.00E+00	6.12E-03	0.000	
6.69E-09	0.00E+00	6.69E-03	0.000	
3.41E-09	0.00E+00	3.41E-03	0.000	
3.64E-09	0.00E+00	3.64E-03	0.000	
3.88E-09	0.00E+00	3.88E-03	0.000	
4.16E-09	0.00E+00	4.16E-03	0.000	
4.46E-09	0.00E+00	4.46E-03	0.000	
4.79E-09	0.00E+00	4.79E-03	0.000	
5.17E-09	0.00E+00	5.17E-03	0.000	
5.62E-09	0.00E+00	5.62E-03	0.000	
6.13E-09	0.00E+00	6.13E-03	0.000	
3.42E-09	0.00E+00	3.42E-03	0.000	
3.65E-09	0.00E+00	3.65E-03	0.000	
3.89E-09	0.00E+00	3.89E-03	0.000	
4.17E-09	0.00E+00	4.17E-03	0.000	
4.47E-09	0.00E+00	4.47E-03	0.000	
4.81E-09	0.00E+00 0.00E+00	4.81E-03	0.000	
5.20E-09		5.20E-03	0.000	
5.64E-09 3.67E-09	0.00E+00 0.00E+00	5.64E-03 3.67E-03	0.000 0.000	
3.92E-09	0.00E+00	3.92E-03	0.000	
4.19E-09	0.00E+00	4.19E-03	0.000	
4.50E-09	0.00E+00	4.19E-03 4.50E-03	0.000	
4.85E-09	0.00E+00	4.85E-03	0.000	
5.25E-09	0.00E+00	4.85E-03 5.25E-03	0.000	
3.96E-09	0.00E+00	3.96E-03	0.000	
4.25E-09	0.00E+00	4.25E-03	0.000	
4.56E-09	0.00E+00	4.56E-03	0.000	
4.91E-09	0.00E+00	4.91E-03	0.000	
4.31E-09 4.32E-09	0.00E+00	4.32E-03	0.000	
	0.00E+00	4.64E-03	0.000	
4.64E-09				
4.64E-09 4.41E-09	0.00E+00	4.41E-03	0.000	



# **CUMULATIVE HEALTH RISK ANALYSIS - MEIR for Sequoia Station at 1, Franklin Street**

				Screening Risk			Exposure to	Nearest	Recepto	ors
BAAQMD Plant #	Name of Source	Address	Source	Cancer Risk	н	PM <sub>2.5</sub>	Distance to MEIR (feet)	Cancer Risk	Adj. HI	Adj. PM <sub>2.5</sub>
BAAQMD	Permitted Stationary Sources withi	n 1,000 feet <sup>1,2</sup>								
4796	Caliber Collision Center	1104 Main St	Contact BAAQMD	0	0	0		0.00	0.000	0.000
13509 14877	Pacific Bell County of San Mateo	1121 Jefferson Avenue 400 County Ctr, 5th Floor	Generators Contact BAAQMD	26.74 25.69	0.04	0.03	100 1600	19.52	0.029	0.022
14878	County of San Mateo	455 County Center	Contact BAAQMD	10.43	0.02	0.7	1900			
17462	City of Redwood City #5546	1017 Middlefield Road	Generators	10.68	0.01	0.01	530	1.07	0.001	0.001
22365	Crossing 900	900 Middlefield Road	Generators	0.02	0	0	500	0.00	0.000	0.000
23287	Safeway Inc, #305	1071 El Camino Real	Generators	0.01	0	0	450	0.00	0.000	0.000
	Project Sources <sup>3</sup>									
	Sequoia Station	Construction - Mitigated						9.2	0.005	0.03
	Background Risks from Mobile Sou	rrces <sup>4</sup>								
	Rail							15.31		2.9E-02
	Highway							11.14		2.5E-01
	Major Streets							0.1		3.0E-03
		Cumulative Health						36.8	0.006	0.317
		City of Oakland Significand	e Thresholds					100	10	0.8

#### NOTES:

<sup>1.</sup> Health risk screening values obtained from BAAQMD's Permitted Stationary Sources Risk and Hazards web tool.

<sup>2.</sup> Health risks for diesel generators adjusted for distance using the BAAQMD's distance multiplier.

<sup>3.</sup> From construction HRA for Sequoia Station

<sup>4.</sup> From BAAQMD GIS data for background health risks for mobile sources

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#### RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# RWC Transit District Sequoia Station Construction HRA San Mateo County, Annual

## 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	631.00	Dwelling Unit	3.28	629,100.00	1805
General Office Building	1,230.00	1000sqft	8.82	1,230,000.00	0
Strip Mall	173.10	1000sqft	3.97	173,100.00	0
Enclosed Parking with Elevator	2,710.00	Space	0.00	1,084,000.00	0

## 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2029
Utility Company	Peninsula Clean Energy				
CO2 Intensity (lb/MWhr)	99.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

# 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project data

Construction Phase - Based on data from Applicant

Off-road Equipment - From Applicant

Off-road Equipment - Phase not used

Off-road Equipment - From Applicant

#### RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - From Applicant

Grading - From Applicant

Demolition - As approximated using Google earth

Trips and VMT - Provided by applicant with some assumptions by ESA where data was insufficient

Vehicle Trips - Operational emissions ot estimated

Woodstoves -

Construction Off-road Equipment Mitigation - Tier 4F equipment usd as mitigation of construction equipment

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	33.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	20.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	19.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	25.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	16.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	19.00
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstructionPhase	NumDays	20.00	176.00
tblConstructionPhase	NumDays	300.00	418.00
tblConstructionPhase	NumDays	20.00	54.00
tblConstructionPhase	NumDays	30.00	125.00
tblConstructionPhase	NumDays	20.00	110.00

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

tblConstructionPhase	NumDays	30.00	180.00
tblConstructionPhase	NumDays	300.00	462.00
tblConstructionPhase	NumDays	20.00	264.00
tblConstructionPhase	NumDays	20.00	140.00
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tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
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tblConstructionPhase	NumDaysWeek	5.00	6.00
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tblConstructionPhase	NumDaysWeek	5.00	6.00
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tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	PhaseEndDate	1/10/2025	1/3/2026
tblConstructionPhase	PhaseEndDate	11/15/2024	6/12/2025
tblConstructionPhase	PhaseEndDate	7/28/2023	9/2/2023
tblConstructionPhase	PhaseEndDate	9/22/2023	1/26/2024

RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

tblConstructionPhase	PhaseEndDate	12/13/2024	5/12/2026
tblConstructionPhase	PhaseEndDate	8/11/2023	7/28/2023
tblConstructionPhase	PhaseStartDate	12/14/2024	6/13/2025
tblConstructionPhase	PhaseStartDate	9/23/2023	2/11/2024
tblConstructionPhase	PhaseStartDate	8/12/2023	9/3/2023
tblConstructionPhase	PhaseStartDate	11/16/2024	1/4/2026
tblGrading	MaterialExported	0.00	186,058.00
tblGrading	MaterialExported	0.00	290,152.00
tblLandUse	LandUseSquareFeet	631,000.00	629,100.00
tblLandUse	LotAcreage	16.61	3.28
tblLandUse	LotAcreage	28.24	8.82
tblLandUse	LotAcreage	24.39	0.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	158.00	55.00
tblOffRoadEquipment	HorsePower	221.00	205.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	HorsePower	65.00	60.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	124.00	97.00
tblOffRoadEquipment	HorsePower	158.00	55.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	HorsePower	65.00	60.00

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.37	0.37
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tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
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tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
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tblOffRoadEquipment	LoadFactor	0.41	0.41
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tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

<u></u>		
tblOffRoadEquipment	OffRoadEquipmentType	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Graders
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType	Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Off-Highway Tractors
tblOffRoadEquipment	OffRoadEquipmentType	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType	Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Graders
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType	Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes

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tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pavers
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	3	Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pavers
tblOffRoadEquipment	OffRoadEquipmentType	3	Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

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tblOffRoadEquipment         UsageHours         7.00         0.00           tblOffRoadEquipment         UsageHours         8.00         0.00           tblOffRoadEquipment         UsageHours         6.00         4.00           tblOffRoadEquipment         UsageHours         8.00         0.00           tblOffRoadEquipment         UsageHours         7.00         0.00           tblOffRoadEquipment         UsageHours         7.00         0.00	
tblOffRoadEquipment         UsageHours         8.00         0.00           tblOffRoadEquipment         UsageHours         6.00         4.00           tblOffRoadEquipment         UsageHours         8.00         0.00           tblOffRoadEquipment         UsageHours         7.00         0.00           tblOffRoadEquipment         UsageHours         7.00         0.00	
tblOffRoadEquipment         UsageHours         6.00         4.00           tblOffRoadEquipment         UsageHours         8.00         0.00           tblOffRoadEquipment         UsageHours         7.00         0.00           tblOffRoadEquipment         UsageHours         7.00         0.00	
tblOffRoadEquipment         UsageHours         8.00         0.00           tblOffRoadEquipment         UsageHours         7.00         0.00           tblOffRoadEquipment         UsageHours         7.00         0.00	
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tblOffRoadEquipment	UsageHours	0.00	0.00
	•	8.00	0.00
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tblOffRoadEquipment	UsageHours	7.00	8.00
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tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
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tblTripsAndVMT	HaulingTripNumber	23,257.00	36,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	20,482.00
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tblTripsAndVMT	HaulingTripNumber	0.00	38,280.00
tblTripsAndVMT	HaulingTripNumber	0.00	33,726.00
tblTripsAndVMT	HaulingTripNumber	682.00	500.00
tblTripsAndVMT	HaulingTripNumber	36,269.00	28,440.00
tblTripsAndVMT	HaulingTripNumber	0.00	5,040.00
tblTripsAndVMT	HaulingTripNumber	0.00	132.00
tblTripsAndVMT	HaulingTripNumber	0.00	78.00
tblTripsAndVMT	HaulingVehicleClass	HHDT	HDT_Mix
tblTripsAndVMT	HaulingVehicleClass	HHDT	HDT_Mix
tblTripsAndVMT	HaulingVehicleClass	HHDT	HDT_Mix
tblTripsAndVMT	HaulingVehicleClass	HHDT	HDT_Mix

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# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

HaulingVehicleClass	HHDT	HDT Mix
		HDT Mix
		_
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	HDT_Mix
HaulingVehicleClass	HHDT	HDT_Mix
PhaseName		Phase 2 Trenching
PhaseName		Phase 1 Nightwork Utilities
PhaseName		Phase 2 Nightwork Utilties
PhaseName		Phase 1 Trenching
VendorTripNumber	475.00	0.00
WorkerTripNumber	28.00	30.00
WorkerTripNumber	35.00	100.00
WorkerTripNumber	1,359.00	400.00
WorkerTripNumber	40.00	80.00
Morkor Triphlymbor	272.00	800.00
WorkerTripNumber	272.00	000.00
	HaulingVehicleClass PhaseName PhaseName PhaseName PhaseName VendorTripNumber VendorTripNumber VendorTripNumber VendorTripNumber VendorTripNumber VendorTripNumber WorkerTripNumber WorkerTripNumber WorkerTripNumber WorkerTripNumber WorkerTripNumber WorkerTripNumber	HaulingVehicleClass HHDT PhaseName PhaseName PhaseName PhaseName PhaseName  PhaseName  VendorTripNumber 475.00  WorkerTripNumber 35.00  WorkerTripNumber 35.00  WorkerTripNumber 1,359.00  WorkerTripNumber 1,359.00

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblTripsAndVMT	WorkerTripNumber	1,359.00	500.00
tblTripsAndVMT	WorkerTripNumber	1,359.00	8.00
tblTripsAndVMT	WorkerTripNumber	1,359.00	12.00
tblTripsAndVMT		1,359.00	8.00
tblTripsAndVMT	WorkerTripNumber	1,359.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	20.00	150.00
tblTripsAndVMT		23.00	120.00
tblTripsAndVMT	WorkerTripNumber	43.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	48.00	12.00
tblVehicleTrips	ST_TR	4.91	0.00
tblVehicleTrips	ST_TR	2.21	0.00
	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	4.09	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	5.44	0.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	44.32	0.00

# 2.0 Emissions Summary

# 2.1 Overall Construction

**Unmitigated Construction** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					to	ns/yr							MT/	yr		

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2023	0.2688	3.6361	3.423	0.014	0.3591	0.1019	0.461	0.0984	0.0964	0.1948	0	1,344.51	1,344.51	0.166	0.1289	1,387.05
2024	0.9915	8.0555	10.7034	0.025	0.64	0.2801	0.9201	0.1733	0.275	0.4482	0	2,225.42	2,225.42	0.2119	0.0903	2,257.62
2025	12.5749	7.0268	9.2181	0.0296	1.3527	0.1921	1.5449	0.359	0.1867	0.5457	0	2,774.57	2,774.57	0.2286	0.196	2,838.71
2026	0.9745	6.6967	9.4051	0.024	0.8261	0.2108	1.0369	0.2237	0.2042	0.4279	0	2,201.62	2,201.62	0.2227	0.1175	2,242.21
2027	5.1251	4.6984	6.6325	0.021	1.081	0.1222	1.2031	0.2938	0.1206	0.4144	0	1,967.14	1,967.14	0.1265	0.1265	2,008.00
2028	7.7531	2.699	3.6128	0.0148	0.9689	0.0627	1.0316	0.2637	0.0595	0.3232	0	1,446.27	1,446.27	0.1162	0.1177	1,484.24
Maximum	12.5749	8.0555	10.7034	0.0296	1.3527	0.2801	1.5449	0.359	0.275	0.5457	Ö	2,774.57	2,774.57	0.2286	0.196	2,838.71

# **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					to	ns/yr							MT	/yr		
2023	0.1086	2.1521	3.8478	0.014	0.3425	0.0181	0.3606	0.0959	0.0177	0.1136	0	1,344.51	1,344.51	0.166	0.1289	1,387.05
2024	0.3311	3.1914	11.357	0.025	0.6342	0.0305	0.6648	0.1724	0.0301	0.2025	0	2,225.42	2,225.42	0.2119	0.0903	2,257.62
2025	12.1549	3.8418	9.6514	0.0296	1.3031	0.0341	1.3372	0.3515	0.0331	0.3846	0	2,774.57	2,774.57	0.2286	0.196	2,838.70
2026	0.5193	3.0596	9.9841	0.024	0.8171	0.0293	0.8463	0.2223	0.0287	0.251	0	2,201.62	2,201.62	0.2227	0.1175	2,242.20
2027	4.8378	2.5704	6.8962	0.021	1.081	0.023	1.1039	0.2938	0.0223	0.3161	0	1,967.14	1,967.14	0.1265	0.1265	2,008.00
2028	7.6534	1.8293	3.7554	0.0148	0.9689	0.0159	0.9848	0.2637	0.0153	0.279	0	1,446.27	1,446.27	0.1162	0.1177	1,484.24
Maximum	12.1549	3.8418	11.357	0.0296	1.3031	0.0341	1.3372	0.3515	0.0331	0.3846	0	2,774.57	2,774.57	0.2286	0.196	2,838.70

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	7.52	49.27	-5.81	0.00	1.55	84.44	14.52	0.87	84.38	34.29	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-3-2023	10-2-2023	1.6441	0.6794
2	10-3-2023	1-2-2024	2.3237	1.6373
3	1-3-2024	4-2-2024	2.0603	0.9361
4	4-3-2024	7-2-2024	2.3062	0.8418
5	7-3-2024	10-2-2024	2.3320	0.8515
6	10-3-2024	1-2-2025	2.3474	0.8693
7	1-3-2025	4-2-2025	2.1858	0.8440
8	4-3-2025	7-2-2025	3.0369	1.9343
9	7-3-2025	10-2-2025	7.2085	6.5717
10	10-3-2025	1-2-2026	7.2690	6.7706
11	1-3-2026	4-2-2026	2.2941	1.0656
12	4-3-2026	7-2-2026	2.0567	0.8858
13	7-3-2026	10-2-2026	1.5690	0.7177
14	10-3-2026	1-2-2027	1.5928	0.7414
15	1-3-2027	4-2-2027	1.5502	0.7174
16	4-3-2027	7-2-2027	1.5443	0.7022
17	7-3-2027	10-2-2027	2.3553	1.7188
18	10-3-2027	1-2-2028	4.4148	4.3235
19	1-3-2028	4-2-2028	4.3533	4.2630
20	4-3-2028	7-2-2028	4.3080	4.2176
21	7-3-2028	9-30-2028	1.0469	0.6477
		Highest	7.2690	6.7706

2.2 Overall Operational Unmitigated Operational

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ins/yr							MT	/yr		
Area	10.8038	0.0878	6.7233	4.2400e-003		0.3127	0.3127		0.3127	0.3127	28.7671	19.5428	48.3099	0.0538	1.8900e-003	50.2159
Energy	0.1600	1.4388	1.1069	8.7300e-003		0.1105	0.1105		0.1105	0.1105	0.0000	2,714.0027	2,714.0027	0.4035	0.0743	2,746.2212
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	328.0151	0.0000	328.0151	19.3851	0.0000	812.6436
Water						0.0000	0.0000		0.0000	0.0000	86.4665	93.5088	179.9753	8.9118	0.2134	466.3752
Total	10.9638	1.5266	7.8302	0.0130	0.0000	0.4233	0.4233	0.0000	0.4233	0.4233	443.2487	2,827.0543	3,270.3031	28.7542	0.2896	4,075.4560

# **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							МТ	/yr		
Area	10.8038	0.0878	6.7233	4.2400e-003		0.3127	0.3127		0.3127	0.3127	28.7671	19.5428	48.3099	0.0538	1.8900e-003	50.2159
Energy	0.1600	1.4388	1.1069	8.7300e-003		0.1105	0.1105		0.1105	0.1105	0.0000	2,714.0027	2,714.0027	0.4035	0.0743	2,746.2212
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	328.0151	0.0000	328.0151	19.3851	0.0000	812.6436
Water						0.0000	0.0000		0.0000	0.0000	86.4665	93.5088	179.9753	8.9118	0.2134	466.3752
Total	10.9638	1.5266	7.8302	0.0130	0.0000	0.4233	0.4233	0.0000	0.4233	0.4233	443.2487	2,827.0543	3,270.3031	28.7542	0.2896	4,075.4560

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase 1 Demolition	Demolition	7/3/2023	9/2/2023	6	54	
2	Site Preparation	Site Preparation	7/29/2023	7/28/2023	6	10	
3	Phase 1 Excavation & Grading	Grading	9/3/2023	1/26/2024	6	125	
4	Phase 1 Core & Shell	Building Construction	2/11/2024	6/12/2025	6	418	
5	Phase 1 Sitework	Paving	1/4/2026	5/12/2026	6	110	
6	Phase 1 Interiors	Architectural Coating	6/13/2025	1/3/2026	6	176	
7	Phase 1 Trenching	Trenching	1/27/2024	2/10/2024	6	13	
8	Phase 2 Demolition	Demolition	7/1/2025	7/23/2025	6	20	
9	Phase 2 Excavation & Grading	Grading	7/24/2025	2/18/2026	6	180	
10	Phase 2 Trenching	Trenching	2/19/2026	3/16/2026	6	22	
11	Phase 2 Core & Shell	Building Construction	3/17/2026	9/6/2027	6	462	
12	Phase 2 Interiors	Architectural Coating	9/7/2027	7/10/2028	6	264	
13	Phase 2 Sitework	Paving	7/11/2028	12/20/2028	6	140	
14	Phase 1 Nightwork Unloading	Building Construction	7/3/2023	9/4/2023	6	55	
15	Phase 1 Nightwork Utilities	Trenching	9/5/2023	10/9/2023	6	30	
16	Phase 1 Nightwork Concrete Pour	Building Construction	10/10/2023	10/23/2023	6	12	
17	Phase 2 Nightwork Unloading	Building Construction	7/1/2025	8/4/2025	6	30	
18	Phase 2 Nightwork Utilties	Trenching	8/5/2025	9/8/2025	6	30	
19	Phase 2 Nightwork Concrete Pour	Building Construction	9/9/2025	9/15/2025	6	6	

Acres of Grading (Site Preparation Phase): 0

#### RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,273,928; Residential Outdoor: 424,643; Non-Residential Indoor: 2,104,650; Non-Residential Outdoor: 701,550; Striped Parking

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase 1 Nightwork Utilities	Rollers	1	1.30	80	0.38
Phase 1 Nightwork Concrete Pour	Off-Highway Trucks	1	12.00	402	0.38
Phase 1 Nightwork Concrete Pour	Pumps	1	12.00	84	0.74
Phase 1 Nightwork Concrete Pour	Other Construction Equipment	1	12.00	172	0.42
Phase 2 Nightwork Utilties	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Phase 2 Nightwork Utilties	Generator Sets	1	8.00	84	0.74
Phase 2 Nightwork Utilties	Plate Compactors	1	2.70	8	0.43
Phase 2 Nightwork Utilties	Pavers	1	1.30	125	0.42
Phase 2 Nightwork Utilties	Rollers	1	1.30	80	0.38
Phase 2 Nightwork Concrete Pour	Off-Highway Trucks	1	12.00	402	0.38
Phase 2 Nightwork Concrete Pour	Pumps	1	12.00	84	0.74
Phase 2 Nightwork Concrete Pour	Other Construction Equipment	1	12.00	172	0.42
Phase 1 Interiors	Air Compressors	5	4.00	78	0.48
Phase 1 Demolition	Concrete/Industrial Saws	4	6.00	81	0.73
Phase 1 Core & Shell	Cranes	1	8.00	226	0.29
Phase 1 Demolition	Excavators	2	8.00	162	0.38
Phase 1 Excavation & Grading	Excavators	4	8.00	162	0.38
Phase 1 Core & Shell	Forklifts	0	0.00	89	0.20
Phase 1 Core & Shell	Generator Sets	8	8.00	84	0.74
Phase 1 Excavation & Grading	Graders	0	0.00	187	0.41
Phase 1 Sitework	Pavers	2	8.00	125	0.42
Phase 1 Sitework	Paving Equipment	0	0.00	132	0.36
Phase 1 Sitework	Rollers	2	8.00	80	0.38
Phase 1 Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Phase 1 Excavation & Grading	Rubber Tired Dozers	0	0.00	247	0.40

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# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40
Phase 1 Excavation & Grading	Scrapers	0	0.00	367	0.48
Phase 1 Core & Shell	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Phase 1 Excavation & Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Phase 1 Core & Shell	Welders	10	8.00	46	0.45
Phase 2 Interiors	Air Compressors	3	4.00	78	0.48
Phase 2 Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Phase 2 Core & Shell	Cranes	0	0.00	231	0.29
Phase 1 Nightwork Unloading	Cranes	0	0.00	231	0.29
Phase 1 Nightwork Concrete Pour	Cranes	0	0.00	231	0.29
Phase 2 Nightwork Unloading	Cranes	0	0.00	231	0.29
Phase 2 Nightwork Concrete Pour	Cranes	0	0.00	231	0.29
Phase 2 Demolition	Excavators	1	8.00	162	0.38
Phase 2 Excavation & Grading	Excavators	2	8.00	162	0.38
Phase 2 Core & Shell	Forklifts	0	0.00	89	0.20
Phase 1 Nightwork Unloading	Forklifts	0	0.00	89	0.20
Phase 1 Nightwork Concrete Pour	Forklifts	0	0.00	89	0.20
Phase 2 Nightwork Unloading	Forklifts	0	0.00	89	0.20
Phase 2 Nightwork Concrete Pour	Forklifts	0	0.00	89	0.20
Phase 2 Core & Shell	Generator Sets	6	8.00	84	0.74
Phase 1 Nightwork Unloading	Generator Sets	0	0.00	84	0.74
Phase 1 Nightwork Concrete Pour	Generator Sets	0	0.00	84	0.74
Phase 2 Nightwork Unloading	Generator Sets	0	0.00	84	0.74
Phase 2 Nightwork Concrete Pour	Generator Sets	0	0.00	84	0.74
Phase 2 Excavation & Grading	Graders	0	0.00	187	0.41
Phase 2 Sitework	Pavers	1	8.00	125	0.42
Phase 2 Sitework	Paving Equipment	0	0.00	132	0.36
Phase 2 Sitework	Rollers	1	8.00	80	
Phase 2 Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Phase 2 Excavation & Grading	Rubber Tired Dozers	0	0.00	247	0.40

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase 2 Excavation & Grading	Scrapers	0	0.00	367	0.48
Phase 2 Core & Shell	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Phase 1 Nightwork Unloading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Phase 1 Nightwork Concrete Pour	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Phase 2 Nightwork Unloading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Phase 2 Nightwork Concrete Pour	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Phase 2 Excavation & Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Phase 2 Core & Shell	Welders	6	8.00	46	0.45
Phase 1 Nightwork Unloading	Welders	0	0.00	46	0.45
Phase 1 Nightwork Concrete Pour	Welders	0	0.00	46	0.45
Phase 2 Nightwork Unloading	Welders	0	0.00	46	0.45
Phase 2 Nightwork Concrete Pour	Welders	0	:	46	Ē
Phase 1 Demolition	Air Compressors	2	8.00		0.48
Phase 1 Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase 1 Excavation & Grading	Excavators	4	8.00	55	0.38
Phase 1 Excavation & Grading	Bore/Drill Rigs	2	8.00	205	0.50
Phase 1 Excavation & Grading	Air Compressors	2	8.00	78	0.48
Phase 1 Core & Shell	Air Compressors	6	2.00	78	0.48
Phase 1 Core & Shell	Rough Terrain Forklifts	10	4.00	100	<b>:</b>
Phase 1 Sitework	Air Compressors	2	<u> </u>	78	0.48
Phase 1 Sitework	Graders	2	8.00	174	0.41
Phase 1 Sitework	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase 1 Sitework	Rough Terrain Forklifts	2	8.00	100	0.40
Phase 1 Sitework	Skid Steer Loaders	4	8.00	60	0.37
Phase 1 Trenching	Tractors/Loaders/Backhoes	4	5.00	97	
Phase 1 Trenching	Excavators	2	4.00	162	0.38
Phase 1 Trenching	Air Compressors	2	8.00	78	
Phase 1 Trenching	Generator Sets	6	8.00	84	0.74
Phase 1 Trenching	Plate Compactors	5	2.00	8	<u> </u>
Phase 2 Demolition	Air Compressors	2	8.00	78	0.48
Phase 2 Demolition	Tractors/Loaders/Backhoes	1	8.00	97	

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# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase 2 Excavation & Grading	Air Compressors	2	8.00	78	0.48
Phase 2 Excavation & Grading	Off-Highway Tractors	2	8.00	97	0.44
Phase 2 Excavation & Grading	Excavators	2	8.00	55	0.38
Phase 2 Trenching	Tractors/Loaders/Backhoes	3	5.00	97	0.37
Phase 2 Trenching	Excavators	3	4.00	162	0.38
Phase 2 Trenching	Generator Sets	3	8.00	84	0.74
Phase 2 Trenching	Plate Compactors	6	2.00	8	0.43
Phase 2 Trenching	Air Compressors	2	8.00	78	:
Phase 2 Core & Shell	Air Compressors	3	2.00	78	0.48
Phase 2 Core & Shell	Rough Terrain Forklifts	6	4.00	100	0.40
Phase 2 Sitework	Graders	1	8.00	174	Ī I
Phase 2 Sitework	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Phase 2 Sitework	Skid Steer Loaders	2	8.00	60	
Phase 2 Sitework	Air Compressors	2	8.00	78	0.48
Phase 2 Sitework	Rough Terrain Forklifts	1	8.00	100	0.40
Phase 1 Nightwork Utilities	Tractors/Loaders/Backhoes	1	1.30	97	0.37
Phase 1 Nightwork Utilities	Generator Sets	1	8.00	84	0.74
Phase 1 Nightwork Utilities	Plate Compactors	1	2.70	8	0.43
Phase 1 Nightwork Utilities	Pavers	1	8.00	125	0.42

# **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase 1 Demolition	11.	30.00	0.00	1,350.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 1 Excavation &	14	100.00	0.00	36,500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Grading Phase 1 Core & Shell	35	400.00	0.00	20,482.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 1 Sitework	16	80.00	0.00	2,750.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 1 Interiors	5	800.00	0.00	17,072.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 2 Trenching	17	12.00	0.00	132.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 2 Demolition	5	30.00	0.00	500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix

#### RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase 2 Excavation &	8	150.00	0.00	28,440.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Grading Phase 1 Nightwork Utilities	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 2 Core & Shell	21	500.00	0.00	33,726.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 2 Interiors	3	1,000.00	0.00	38,280.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 2 Sitework	9	120.00	0.00	5,040.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 1 Nightwork	1	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 2 Nightwork Litilities	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 1 Nightwork	3	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 2 Nightwork	1	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 1 Trenching	19	12.00	0.00	78.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Phase 2 Nightwork	3	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix

#### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment Water Exposed Area

#### 3.2 Phase 1 Demolition - 2023

# **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Fugitive Dust					0.0197	0	0.0197	2.98E-03	0	2.98E-03	0	0	0	0	0	0
Off-Road	0.0811	0.6856	0.9061	1.41E-03		0.0336	0.0336		0.0321	0.0321	0	122.8941	122.8941	0.023	0	123.4681
Total	0.0811	0.6856	0.9061	1.41E-03	0.0197	0.0336	0.0532	2.98E-03	0.0321	0.0351	0	122.8941	122.8941	0.023	0	123.4681

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# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	1.38E-03	0.0738	0.0222	3.70E-04	0.012	4.40E-04	0.0125	3.48E-03	4.20E-04	3.90E-03	0	37.7591	37.7591		5.55E-03	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	1.75E-03	1.14E-03	0.0158	5.00E-05	6.38E-03	3.00E-05	6.41E-03	1.70E-03	3.00E-05	1.73E-03	0	4.7987	4.7987	1.20E-04	1.20E-04	4.8372
Total	3.13E-03	0.075	0.038	4.20E-04	0.0184	4.70E-04	0.0189	5.18E-03	4.50E-04	5.63E-03	0	42.5578	42.5578	2.46E-03	5.67E-03	44.3074

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Fugitive Dust					8.86E-03	0	8.86E-03	1.34E-03	0	1.34E-03	0	0	0	0	0	0
Off-Road	0.0157	0.068	0.8942	1.41E-03		2.09E-03	2.09E-03		2.09E-03	2.09E-03	0	122.8939	122.8939	0.023	0	123.468
Total	0.0157	0.068	0.8942	1.41E-03	8.86E-03	2.09E-03	0.011	1.34E-03	2.09E-03	3.43E-03	0	122.8939	122.8939	0.023	0	123.468

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#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	1.38E-03	0.0738	0.0222	3.70E-04	0.012	4.40E-04	0.0125	3.48E-03	4.20E-04	3.90E-03	0	37.7591	37.7591	2.34E-03	5.55E-03	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	1.75E-03	1.14E-03	0.0158	5.00E-05	6.38E-03	3.00E-05	6.41E-03	1.70E-03	3.00E-05	1.73E-03	0	4.7987	4.7987	1.20E-04	1.20E-04	4.8372
Total	3.13E-03	0.075	0.038	4.20E-04	0.0184	4.70E-04	0.0189	5.18E-03	4.50E-04	5.63E-03	0	42.5578	42.5578	2.46E-03	5.67E-03	44.3074

# 3.3 Site Preparation - 2023

Phase not used

# 3.4 Phase 1 Excavation & Grading - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Fugitive Dust					0.0105	0	0.0105	1.59E-03	0	1.59E-03	0	0	0	0	0	0
Off-Road	0.1188	1.0316	1.6096	3.07E-03		0.0483	0.0483		0.0452	0.0452	0	268.5184	268.5184	0.0777	0	270.4607
Total	0.1188	1.0316	1.6096	3.07E-03	0.0105	0.0483	0.0588	1.59E-03	0.0452	0.0468	0	268.5184	268.5184	0.0777	0	270.4607

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# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0.0304	1.629	0.4905	8.21E-03	0.2656	9.67E-03	0.2753	0.0768	9.25E-03	0.086	0	833.0493	833.0493	0.0517	0.1224	870.8006
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.011	7.18E-03	0.0991	3.30E-04	0.0402	1.90E-04	0.0403	0.0107	1.80E-04	0.0109	0	30.2141	30.2141	7.60E-04	7.50E-04	30.4563
Total	0.0414	1.6362	0.5897	8.54E-03	0.3058	9.86E-03	0.3156	0.0874	9.43E-03	0.0969	0	863.2633	863.2633	0.0524	0.1231	901.2569

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Fugitive Dust					4.73E-03	0	4.73E-03	7.20E-04	0	7.20E-04	0	0	0	0	0	0
Off-Road	0.0414	0.3471	1.9949	3.07E-03		4.91E-03	4.91E-03		4.91E-03	4.91E-03	0	268.5181	268.5181	0.0777	0	270.4604
Total	0.0414	0.3471	1.9949	3.07E-03	4.73E-03	4.91E-03	9.64E-03	7.20E-04	4.91E-03	5.63E-03	0	268.5181	268.5181	0.0777	0	270.4604

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		

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### RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Hauling	0.0304	1.629	0.4905	8.21E-03	0.2656	9.67E-03	0.2753	0.0768	9.25E-03	0.086	0	833.0493	833.0493	0.0517	0.1224	870.8006
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.011	7.18E-03	0.0991	3.30E-04	0.0402	1.90E-04	0.0403	0.0107	1.80E-04	0.0109	0	30.2141	30.2141	7.60E-04	7.50E-04	30.4563
Total	0.0414	1.6362	0.5897	8.54E-03	0.3058	9.86E-03	0.3156	0.0874	9.43E-03	0.0969	•	863.2633	863.2633	0.0524	0.1231	901.2569
Iotai	0.0414	1.0302	0.5697	0.34E-U3	0.3036	9.00E-03	0.3136	0.0674	9.43E-03	0.0969	U	003.2033	003.2033	0.0524	0.1231	901.2569

# 3.4 Phase 1 Excavation & Grading - 2024

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							МТ	/yr		
Fugitive Dust					0.0105	0	0.0105	1.59E-03	0	1.59E-03	0	0	0	0	0	0
Off-Road	0.0256	0.2159	0.3635	6.90E-04		9.74E-03	9.74E-03		9.11E-03	9.11E-03	0	60.6007	60.6007	0.0175	0	61.0384
Total	0.0256	0.2159	0.3635	6.90E-04	0.0105	9.74E-03	0.0203	1.59E-03	9.11E-03	0.0107	0	60.6007	60.6007	0.0175	0	61.0384

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr				MT.	/yr					
Hauling	6.56E-03	0.3636	0.1103	1.81E-03	0.0599	2.19E-03	0.0621	0.0173	2.10E-03	0.0194	0	184.4768	184.4768	0.0119	0.0271	192.86
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker		1.45E-03		7.00E-05		4.00E-05	9.10E-03	2.41E-03	4.00E-05	2.45E-03		6.6438	6.6438		1.60E-04	6.6948
Total	8.91E-03	0.365	0.1314	1.88E-03	0.069	2.23E-03	0.0712	0.0197	2.14E-03	0.0219	0	191.1207	191.1207	0.0121	0.0273	199.5547

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Fugitive Dust					4.73E-03	0	4.73E-03	7.20E-04	0	7.20E-04	0	0	0	0	0	0
Off-Road	9.33E-03	0.0783	0.4498	6.90E-04		1.11E-03	1.11E-03		1.11E-03	1.11E-03	0	60.6006	60.6006	0.0175	0	61.0383
Total	9.33E-03	0.0783	0.4498	6.90E-04	4.73E-03	1.11E-03	5.84E-03	7.20E-04	1.11E-03	1.83E-03	0	60.6006	60.6006	0.0175	0	61.0383

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	6.56E-03	0.3636	0.1103	1.81E-03	0.0599	2.19E-03	0.0621	0.0173	2.10E-03	0.0194	0		184.4768	0.0110	0.0271	192.86
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	2.35E-03						9.10E-03				0	6.6438	6.6438		1.60E-04	
Total	8.91E-03	0.365	0.1314	1.88E-03	0.069	2.23E-03	0.0712	0.0197	2.14E-03	0.0219	0	191.1207	191.1207	0.0121	0.0273	199.5547

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.5 Phase 1 Core & Shell - 2024 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT/	⁄yr		
Off-Road	0.8117	6.5073	8.7302	0.0149		0.2546	0.2546		0.2507	0.2507	0	1,241.53	1,241.53	0.1468	0	1,245.20
Total	0.8117	6.5073	8.7302	0.0149		0.2546	0.2546		0.2507	0.2507	0	1,241.53	1,241.53	0.1468	0	1,245.20

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0.0133	0.7375	0.2238	3.68E-03	0.1215	4.45E-03	0.126	0.0351	4.25E-03	0.0394	0	374.1727	374.1727	0.0242	0.055	391.1761
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.1137	0.0703	1.0178	3.43E-03	0.4377	2.02E-03	0.4397	0.1165	1.86E-03	0.1183	0	321.215	321.215	7.52E-03	7.63E-03	323.6773
Total	0.127	0.8077	1.2416	7.11E-03	0.5592	6.47E-03	0.5657	0.1516	6.11E-03	0.1577	0	695.3877	695.3877	0.0317	0.0627	714.8534

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Off-Road	0.1815	1.9182	9.2774	0.0149		0.0201	0.0201		0.0201	0.0201	0	1,241.53	1,241.53	0.1468	0	1,245.20
Total	0.1815	1.9182	9.2774	0.0149		0.0201	0.0201		0.0201	0.0201	Ó	1,241.53	1,241.53	0.1468	0	1,245.20

# **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Hauling	0.0133	0.7375	0.2238	3.68E-03	0.1215	4.45E-03	0.126	0.0351	4.25E-03	0.0394	0	374.1727	374.1727	0.0242	0.055	391.1761
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.1137	0.0703	1.0178	3.43E-03	0.4377	2.02E-03	0.4397	0.1165	1.86E-03	0.1183	0	321.215	321.215	7.52E-03	7.63E-03	323.6773
Total	0.127	0.8077	1.2416	7.11E-03	0.5592	6.47E-03	0.5657	0.1516	6.11E-03	0.1577	0	695.3877	695.3877	0.0317	0.0627	714.8534

# 3.5 Phase 1 Core & Shell - 2025 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category					tons/yr						MT/	ʻyr		
Off-Road	0.3825	3.11	4.3816	7.50E-03	0.1112	0.1112	0.1094	0.1094	0	625.2252	625.2252	0.0718	0	627.021
Total	0.3825	3.11	4.3816	7.50E-03	0.1112	0.1112	0.1094	0.1094	0	625.2252	625.2252	0.0718	0	627.021

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	6.46E-03	0.3668	0.1128	1.81E-03	0.0612	2.24E-03	0.0634	0.0177	2.14E-03	0.0198	0	184.6972	184.6972	0.0124	0.0272	193.1093
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0547	0.0321	0.4841	1.67E-03	0.2204	9.70E-04	0.2214	0.0587	9.00E-04	0.0596	0	157.9095	157.9095	3.44E-03	3.61E-03	159.0721
Total	0.0611	0.3989	0.5969	3.48E-03	0.2816	3.21E-03	0.2848	0.0764	3.04E-03	0.0794	0	342.6067	342.6067	0.0159	0.0308	352.1814

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0914	0.966	4.6721	7.50E-03		0.0101	0.0101		0.0101	0.0101	0	625.2244	625.2244	0.0718	0	627.0203
Total	0.0914	0.966	4.6721	7.50E-03		0.0101	0.0101		0.0101	0.0101	0	625.2244	625.2244	0.0718	0	627.0203

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	6.46E-03	0.3668	0.1128	1.81E-03	0.0612	2.24E-03	0.0634	0.0177	2.14E-03	0.0198	0	184.6972	184.6972	0.0124	0.0272	193.1093
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0547	0.0321	0.4841	1.67E-03	0.2204	9.70E-04	0.2214	0.0587	9.00E-04	0.0596	0	157.9095	157.9095	3.44E-03	3.61E-03	159.0721
Total	0.0611	0.3989	0.5969	3.48E-03	0.2816	3.21E-03	0.2848	0.0764	3.04E-03	0.0794	0	342.6067	342.6067	0.0159	0.0308	352.1814

# 3.6 Phase 1 Sitework - 2026 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT/	⁄yr		
Off-Road	0.1411	1.3253	2.0222	3.05E-03		0.0591	0.0591		0.055	0.055	0	266.6203	266.6203	0.0762	0	268.5243
Paving	0					0	0		0	0	0	0	0	0	0	0
Total	0.1411	1.3253	2.0222	3.05E-03		0.0591	0.0591		0.055	0.055	0	266.6203	266.6203	0.0762	0	268.5243

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Hauling	2.51E-03	0.145	0.0455	7.10E-04	0.0245	8.90E-04	0.0254	7.09E-03	8.50E-04	7.94E-03	0	72.5905	72.5905	5.10E-03	0.0107	75.904
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	8.26E-03	4.63E-03	0.0725	2.50E-04	0.0346	1.50E-04	0.0348	9.22E-03	1.30E-04	9.35E-03	0	24.2958	24.2958	5.00E-04	5.40E-04	24.4688
Total	0.0108	0.1496	0.118	9.60E-04	0.0592	1.04E-03	0.0602	0.0163	9.80E-04	0.0173	0	96.8863	96.8863	5.60E-03	0.0112	100.3728

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT/	⁄yr		
Off-Road	0.0414	0.3699	2.2369	3.05E-03		4.84E-03	4.84E-03		4.84E-03	4.84E-03	0	266.62	266.62	0.0762	0	268.524
Paving	0					0	0		0	0	0	0	0	0	0	0
Total	0.0414	0.3699	2.2369	3.05E-03		4.84E-03	4.84E-03		4.84E-03	4.84E-03	0	266.62	266.62	0.0762	0	268.524

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	2.51E-03	0.145	0.0455	7.10E-04	0.0245	8.90E-04	0.0254	7.09E-03	8.50E-04	7.94E-03	0	72.5905	72.5905	5.10E-03		75.904
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	8.26E-03	4.63E-03	0.0725	2.50E-04	0.0346	1.50E-04	0.0348	9.22E-03	1.30E-04	9.35E-03	0	24.2958	24.2958	5.00E-04	5.40E-04	24.4688
Total	0.0108	0.1496	0.118	9.60E-04	0.0592	1.04E-03	0.0602	0.0163	9.80E-04	0.0173	0	96.8863	96.8863	5.60E-03	0.0112	100.3728

#### 3.7 Phase 1 Interiors - 2025

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Archit. Coating	11.7668					0	0		0	0	0	0	0	0	0	0
Off-Road	0.0493	0.3303	0.5216	8.60E-04		0.0149	0.0149		0.0149	0.0149	0	73.6188	73.6188	4.02E-03		73.7192
Total	11.8161	0.3303	0.5216	8.60E-04		0.0149	0.0149		0.0149	0.0149	0	73.6188	73.6188	4.02E-03	0	73.7192

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT/	'yr		

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Hauling	0.0158	0.8972	0.276	4.43E-03	0.1497	5.48E-03	0.1552	0.0433	5.24E-03	0.0485	0	451.8082	451.8082	0.0304	0.0665	472.3859
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.1351	0.0793	1.1963	4.13E-03	0.5448	2.41E-03	0.5472	0.145	2.22E-03	0.1472	0	390.262	390.262	8.51E-03	8.93E-03	393.1353
Total	0.1509	0.9765	1.4723	8.56E-03	0.6945	7.89E-03	0.7024	0.1882	7.46E-03	0.1957	0	842.0702	842.0702	0.039	0.0754	865.5212

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Archit. Coating	11.7668					0	0		0	0	0	0	0	0	0	0
Off-Road	8.57E-03	0.0371	0.5283	8.60E-04		1.14E-03	1.14E-03		1.14E-03	1.14E-03	0	73.6187	73.6187	4.02E-03		73.7191
Total	11.7754	0.0371	0.5283	8.60E-04		1.14E-03	1.14E-03		1.14E-03	1.14E-03	0	73.6187	73.6187	4.02E-03	0	73.7191

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tc	ns/yr							MT	/yr		
Hauling	0.0158	0.8972	0.276	4.43E-03	0.1497	5.48E-03	0.1552	0.0433	5.24E-03	0.0485	0	451.8082	451.8082		0.0665	472.3859
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.1351	0.0793	1.1963	4.13E-03	0.5448	2.41E-03	0.5472	0.145	2.22E-03		0	390.262	390.262	8.51E-03		
Total	0.1509	0.9765	1.4723	8.56E-03	0.6945	7.89E-03	0.7024	0.1882	7.46E-03	0.1957	0	842.0702	842.0702	0.039	0.0754	865.5212

# **3.7 Phase 1 Interiors - 2026**

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Archit. Coating	0.2041					0	0		0	0	0	0	0	0	0	0
Off-Road	8.50E-04	5.73E-03	9.05E-03	1.00E-05		2.60E-04	2.60E-04		2.60E-04	2.60E-04	0	1.2766	1.2766	7.00E-05	0	1.2784
Total	0.2049	5.73E-03	9.05E-03	1.00E-05		2.60E-04	2.60E-04		2.60E-04	2.60E-04	0	1.2766	1.2766	7.00E-05	0	1.2784

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	2.70E-04	0.0153	4.81E-03				2.69E-03				0	7.6814	7.6814		1.13E-03	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	2.25E-03	1.26E-03			9.45E-03		9.49E-03			2.55E-03	0	6.6261	6.6261	1.40E-04		
Total	2.52E-03	0.0166	0.0246	1.50E-04	0.0121	1.30E-04	0.0122	3.26E-03	1.30E-04	3.39E-03	0	14.3075	14.3075	6.80E-04	1.28E-03	14.7053

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr				MT	/yr					
Archit. Coating	0.2041					0	0		0	0	0	0	0	0	0	0
Off-Road	1.50E-04	6.40E-04	9.16E-03	1.00E-05		2.00E-05	2.00E-05		2.00E-05	2.00E-05	0	1.2766	1.2766	7.00E-05	0	1.2784
Total	0.2042	6.40E-04	9.16E-03	1.00E-05		2.00E-05	2.00E-05		2.00E-05	2.00E-05	0	1.2766	1.2766	7.00E-05	0	1.2784

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	2.70E-04	0.0153	4.81E-03	8.00E-05	2.60E-03	9.00E-05	2.69E-03	7.50E-04	9.00E-05	8.40E-04	0	7.6814	7.6814	5.40E-04	1.13E-03	8.032
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	2.25E-03	1.26E-03	0.0198	7.00E-05	9.45E-03	4.00E-05	9.49E-03	2.51E-03	4.00E-05	2.55E-03	0	6.6261	6.6261	1.40E-04	1.50E-04	6.6733
Total	2.52E-03	0.0166	0.0246	1.50E-04	0.0121	1.30E-04	0.0122	3.26E-03	1.30E-04	3.39E-03	0	14.3075	14.3075	6.80E-04	1.28E-03	14.7053

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# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							МТ	/yr		
Off-Road	0.0181	0.1552	0.234	4.00E-04		6.99E-03	6.99E-03		6.87E-03	6.87E-03	0	34.1931	34.1931	3.58E-03	0	34.2827
Total	0.0181	0.1552	0.234	4.00E-04		6.99E-03	6.99E-03		6.87E-03	6.87E-03	Ö	34.1931	34.1931	3.58E-03	0	34.2827

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	8.00E-05	4.22E-03	1.28E-03	2.00E-05	7.00E-04	3.00E-05	7.20E-04	2.00E-04	2.00E-05	2.30E-04	0	2.1425	2.1425	1.40E-04	3.20E-04	2.2399
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	1.60E-04	1.00E-04	1.43E-03	0	6.10E-04	0	6.20E-04	1.60E-04	0	1.70E-04	0	0.4506	0.4506	1.00E-05	1.00E-05	0.4541
Total	2.40E-04	4.32E-03	2.71E-03	2.00E-05	1.31E-03	3.00E-05	1.34E-03	3.60E-04	2.00E-05	4.00E-04	0	2.5932	2.5932	1.50E-04	3.30E-04	2.694

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10 Total	Fugitive	Exhaust	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
					PM10	PM10		PM2.5	PM2.5							

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category					tons/y	r						MT	/yr		
Off-Road	4.12E-03	0.0179	0.2541	4.00E-04	5.	.50E-04	5.50E-04	5.50E-04	5.50E-04	0	34.1931	34.1931	3.58E-03	0	34.2827
Total	4.12E-03	0.0179	0.2541	4.00E-04	5.	.50E-04	5.50E-04	5.50E-04	5.50E-04	0	34.1931	34.1931	3.58E-03	0	34.2827

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Hauling	8.00E-05	4.22E-03	1.28E-03	2.00E-05	7.00E-04	3.00E-05	7.20E-04	2.00E-04	2.00E-05	2.30E-04	0	2.1425	2.1425	1.40E-04	3.20E-04	2.2399
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	1.60E-04	1.00E-04	1.43E-03	0	6.10E-04	0	6.20E-04	1.60E-04	0	1.70E-04	0	0.4506	0.4506	1.00E-05	1.00E-05	0.4541
Total	2.40E-04	4.32E-03	2.71E-03	2.00E-05	1.31E-03	3.00E-05	1.34E-03	3.60E-04	2.00E-05	4.00E-04	0	2.5932	2.5932	1.50E-04	3.30E-04	2.694

# 3.9 Phase 2 Demolition - 2025 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Fugitive Dust					0.0738	0	0.0738	0.0112	0	0.0112	0	0	0	0	0	0
Off-Road	0.0142	0.117		2.50E-04			5.24E-03			4.93E-03		22.0105		5.29E-03	0	22.1427

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

I	Total	0.0142	0.117	0.1571	2.50E-04	0.0738	5.24E-03	0.0791	0.0112	4.93E-03	0.0161	0	22.0105	22.0105	5.29E-03	0	22.1427
L																	

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	4.70E-04	0.0267	8.22E-03	1.30E-04	4.46E-03	1.60E-04	4.62E-03	1.29E-03	1.60E-04	1.45E-03	0	13.4619	13.4619	9.10E-04	1.98E-03	14.075
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	5.90E-04	3.40E-04	5.19E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.6919	1.6919	4.00E-05	4.00E-05	1.7043
Total	1.06E-03	0.0271	0.0134	1.50E-04	6.82E-03	1.70E-04	6.99E-03	1.92E-03	1.70E-04	2.09E-03	0	15.1538	15.1538	9.50E-04	2.02E-03	15.7794

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT/	⁄yr		
Fugitive Dust					0.0332	0	0.0332	0.002 00		5.03E-03		0	0	0	0	0
Off-Road	2.90E-03	0.0126	0.1519	2.50E-04		3.90E-04	3.90E-04		3.90E-04	3.90E-04	0	22.0104	22.0104	5.29E-03	0	22.1426
Total	2.90E-03	0.0126	0.1519	2.50E-04	0.0332	3.90E-04	0.0336	5.03E-03	3.90E-04	5.42E-03	0	22.0104	22.0104	5.29E-03	0	22.1426

# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	4.70E-04	0.0267	8.22E-03	1.30E-04	4.46E-03	1.60E-04	4.62E-03	1.29E-03	1.60E-04	1.45E-03	0	13.4619	13.4619	9.10E-04	1.98E-03	14.075
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	5.90E-04	3.40E-04	5.19E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.6919	1.6919	4.00E-05	4.00E-05	1.7043
Total	1.06E-03	0.0271	0.0134	1.50E-04	6.82E-03	1.70E-04	6.99E-03	1.92E-03	1.70E-04	2.09E-03	0	15.1538	15.1538	9.50E-04	2.02E-03	15.7794

# 3.10 Phase 2 Excavation & Grading - 2025

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT/	⁄yr		
Fugitive Dust					0.0164	0	0.0164	2.48E-03	0	2.48E-03	0	0	0	0	0	0
Off-Road	0.0937	0.7685	1.3471	2.03E-03		0.0371	0.0371		0.0349	0.0349	0	177.3342	177.3342		0	178.4522
Total	0.0937	0.7685	1.3471	2.03E-03	0.0164	0.0371	0.0535	2.48E-03	0.0349	0.0374	0	177.3342	177.3342	0.0447	0	178.4522

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ons/yr							MT.	/yr		
Hauling	0.0205	1.1658	0.3586	5.76E-03	0.1945	7.12E-03	0.2016	0.0562	6.81E-03	0.063	0	587.0464	587.0464	0.0396		613.7835
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0202	0.0119	0.1789	6.20E-04	0.0815	3.60E-04	0.0818	0.0217	3.30E-04	0.022	0	58.3701	58.3701	1.27E-03	1.34E-03	58.7999
Total	0.0407	1.1776	0.5375	6.38E-03	0.276	7.48E-03	0.2835	0.0779	7.14E-03	0.085	0	645.4165	645.4165	0.0408	0.0877	672.5834

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Fugitive Dust					7.38E-03	0	7.38E-03	1.12E-03	0	1.12E-03	0	0	0	0	0	0
Off-Road	0.0268	0.2295	1.4611	2.03E-03		3.16E-03	3.16E-03		3.16E-03	3.16E-03	0	177.334	177.334	0.0447	0	178.452
Total	0.0268	0.2295	1.4611	2.03E-03	7.38E-03	3.16E-03	0.0105	1.12E-03	3.16E-03	4.28E-03	0	177.334	177.334	0.0447	0	178.452

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0.0205	1.1658	0.3586	5.76E-03	0.1945	7.12E-03	0.2016	0.0562	6.81E-03	0.063	0	587.0464	587.0464	0.0396	0.0864	613.7835
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0202	0.0119	0.1789	6.20E-04	0.0815	3.60E-04	0.0818	0.0217	3.30E-04	0.022	0	58.3701	58.3701	1.27E-03	1.34E-03	58.7999
Total	0.0407	1.1776	0.5375	6.38E-03	0.276	7.48E-03	0.2835	0.0779	7.14E-03	0.085	0	645.4165	645.4165	0.0408	0.0877	672.5834

# 3.10 Phase 2 Excavation & Grading - 2026

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Fugitive Dust					0.0164	0	0.0164	2.48E-03	0	2.48E-03	0	0	0	0	0	0
Off-Road	0.0285	0.2339	0.41	6.20E-04		0.0113	0.0113		0.0106	0.0106	0	53.9713	53.9713	0.0136	0	54.3116
Total	0.0285	0.2339	0.41	6.20E-04	0.0164	0.0113	0.0277	2.48E-03	0.0106	0.0131	0	53.9713	53.9713	0.0136	0	54.3116

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Hauling	6.05E-03	0.3498	0.1098	1.71E-03	0.0592	2.16E-03	0.0614	0.0171	2.06E-03	0.0192	0	175.1675	175.1675	0.0123	0.0258	183.1633
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	5.92E-03	3.31E-03	0.0519	1.80E-04	0.0248	1.00E-04	0.0249	6.60E-03	1.00E-04	6.69E-03	0	17.3936	17.3936	3.60E-04	3.90E-04	17.5175
Total	0.012	0.3531	0.1617	1.89E-03	0.084	2.26E-03	0.0863	0.0237	2.16E-03	0.0259	0	192.5611	192.5611	0.0127	0.0262	200.6808

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							МТ	/yr		
Fugitive Dust					7.38E-03	0	7.38E-03	1.12E-03	0	1.12E-03	0	0	0	0	0	0
Off-Road	8.14E-03	0.0698	0.4447	6.20E-04		9.60E-04	9.60E-04		9.60E-04	9.60E-04	0	53.9712	53.9712	0.0136	0	54.3115
Total	8.14E-03	0.0698	0.4447	6.20E-04	7.38E-03	9.60E-04	8.34E-03	1.12E-03	9.60E-04	2.08E-03	0	53.9712	53.9712	0.0136	0	54.3115

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							МТ	/yr		
Hauling	6.05E-03	0.3498	0.1098	1.71E-03	0.0592	2.16E-03	0.0614	0.0171	2.06E-03	0.0192	0	175.1675	175.1675	0.0123		183.1633
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker		3.31E-03	0.0519	1.80E-04	0.0248		0.0249	6.60E-03		6.69E-03		17.3936	17.3936	3.60E-04	3.90E-04	17.5175
Total	0.012	0.3531	0.1617	1.89E-03	0.084	2.26E-03	0.0863	0.0237	2.16E-03	0.0259	0	192.5611	192.5611	0.0127	0.0262	200.6808

# **3.11 Phase 2 Trenching - 2026**

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	ns/yr							MT.	/yr		
Off-Road	0.02	0.165	0.2785	4.60E-04		6.95E-03	6.95E-03		6.78E-03	6.78E-03	0	40.0036	40.0036	5.47E-03	0	40.1403
Total	0.02	0.165	0.2785	4.60E-04		6.95E-03	6.95E-03		6.78E-03	6.78E-03	0	40.0036	40.0036	5.47E-03	0	40.1403

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Hauling	1.20E-04	6.96E-03	2.18E-03	3.00E-05	1.18E-03	4.00E-05	1.22E-03	3.40E-04	4.00E-05	3.80E-04	0	3.4843	3.4843	2.40E-04	5.10E-04	3.6434
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	2.50E-04	1.40E-04	2.17E-03	1.00E-05	1.04E-03	0	1.04E-03	2.80E-04	0	2.80E-04	0	0.7289	0.7289	1.00E-05	2.00E-05	0.7341
Total	3.70E-04	7.10E-03	4.35E-03	4.00E-05	2.22E-03	4.00E-05	2.26E-03	6.20E-04	4.00E-05	6.60E-04	0	4.2132	4.2132	2.50E-04	5.30E-04	4.3775

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Off-Road	4.90E-03	0.0213	0.3023	4.60E-04		6.50E-04	6.50E-04		6.50E-04	6.50E-04	0	40.0035	40.0035	5.47E-03	0	40.1402
Total	4.90E-03	0.0213	0.3023	4.60E-04		6.50E-04	6.50E-04		6.50E-04	6.50E-04	0	40.0035	40.0035	5.47E-03	0	40.1402

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	1.20E-04	6.96E-03	2.18E-03	3.00E-05	1.18E-03	4.00E-05	1.22E-03	3.40E-04	4.00E-05	3.80E-04	0	3.4843	3.4843	2.40E-04	5.10E-04	3.6434
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	2.50E-04	1.40E-04	2.17E-03	1.00E-05	1.04E-03	0	1.04E-03	2.80E-04	0	2.80E-04	0	0.7289	0.7289	1.00E-05	2.00E-05	0.7341
Total	3.70E-04	7.10E-03	4.35E-03	4.00E-05	2.22E-03	4.00E-05	2.26E-03	6.20E-04	4.00E-05	6.60E-04	0	4.2132	4.2132	2.50E-04	5.30E-04	4.3775

3.12 Phase 2 Core & Shell - 2026 <u>Unmitigated Construction On-Site</u>

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT/	/yr		
Off-Road	0.4208	3.4166	5.0506	8.49E-03		0.1218	0.1218		0.1207	0.1207	0	708.2388	708.2388	0.0675	0	709.9251
Total	0.4208	3.4166	5.0506	8.49E-03		0.1218	0.1218		0.1207	0.1207	0	708.2388	708.2388	0.0675	0	709.9251

# **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0.0166	0.9582	0.3007	4.70E-03	0.1622	5.90E-03	0.1681	0.0469	5.65E-03	0.0525	0	479.8101	479.8101	0.0337	0.0707	501.7118
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.1169	0.0655	1.0256	3.61E-03	0.4901	2.06E-03	0.4921	0.1304	1.89E-03	0.1323	0	343.7296	343.7296	7.02E-03	7.63E-03	346.1782
Total	0.1335	1.0237	1.3262	8.31E-03	0.6522	7.96E-03	0.6602	0.1773	7.54E-03	0.1848	0	823.5397	823.5397	0.0407	0.0783	847.89

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Off-Road	0.1015	1.0478	5.3562	8.49E-03		0.0114	0.0114		0.0114	0.0114	0	708.238	708.238	0.0675	0	709.9242

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# RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1015	1.0478	5.3562	8.49E-03	0.0114	0.0114	0.0114	0.0114	0	708.238	708.238	0.0675	0	709.9242

# **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Hauling	0.0166	0.9582	0.3007	4.70E-03	0.1622	5.90E-03	0.1681	0.0469	5.65E-03	0.0525	0	479.8101	479.8101	0.0337	0.0707	501.7118
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.1169	0.0655	1.0256	3.61E-03	0.4901	2.06E-03	0.4921	0.1304	1.89E-03	0.1323	0	343.7296	343.7296	7.02E-03	7.63E-03	346.1782
Total	0.1335	1.0237	1.3262	8.31E-03	0.6522	7.96E-03	0.6602	0.1773	7.54E-03	0.1848	0	823.5397	823.5397	0.0407	0.0783	847.89

#### 3.12 Phase 2 Core & Shell - 2027

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Off-Road	0.36	2.9227	4.3204	7.26E-03		0.1041	0.1041		0.1032	0.1032	0	605.8429	605.8429	0.0577	0	607.2853
Total	0.36	2.9227	4.3204	7.26E-03		0.1041	0.1041		0.1032	0.1032	0	605.8429	605.8429	0.0577	0	607.2853

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0.0138	0.8074	0.2583	3.92E-03	0.1387	5.01E-03	0.1438	0.0401	4.79E-03	0.0449	0	401.6065	401.6065	0.0293	0.0592	419.9794
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0964	0.052	0.8417	3.01E-03	0.4192	1.65E-03	0.4209	0.1116	1.52E-03	0.1131	0	288.6304	288.6304	5.55E-03	6.25E-03	290.6303
Total	0.1102	0.8594	1.1	6.93E-03	0.558	6.66E-03	0.5646	0.1517	6.31E-03	0.158	0	690.2369	690.2369	0.0349	0.0654	710.6097

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Off-Road	0.0868	0.8963	4.5818	7.26E-03		9.70E-03	9.70E-03		9.70E-03	9.70E-03	0	605.8421	605.8421	0.0577	0	607.2846
Total	0.0868	0.8963	4.5818	7.26E-03		9.70E-03	9.70E-03		9.70E-03	9.70E-03	0	605.8421	605.8421	0.0577	0	607.2846

### **Mitigated Construction Off-Site**

- 1	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10 Total	Fugitive	Exhaust	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
ı					PM10	PM10		PM2.5	PM2.5							

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category					to	ons/yr							MT	/yr		
Hauling	0.0138	0.8074	0.2583	3.92E-03	0.1387	5.01E-03	0.1438	0.0401	4.79E-03	0.0449	0	401.6065	401.6065	0.0293	0.0592	419.9794
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0964	0.052	0.8417	3.01E-03	0.4192	1.65E-03	0.4209	0.1116	1.52E-03	0.1131	0	288.6304	288.6304	5.55E-03	6.25E-03	290.6303
Total	0.1102	0.8594	1.1	6.93E-03	0.558	6.66E-03	0.5646	0.1517	6.31E-03	0.158	0	690.2369	690.2369	0.0349	0.0654	710.6097

# 3.13 Phase 2 Interiors - 2027

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Archit. Coating	4.5344					0	0		0	0	0	0	0	0	0	0
Off-Road	0.0171	0.1146	0.1809	3.00E-04		5.15E-03	5.15E-03		5.15E-03	5.15E-03	0	25.5325	25.5325	1.39E-03	0	25.5674
Total	4.5515	0.1146	0.1809	3.00E-04		5.15E-03	5.15E-03		5.15E-03	5.15E-03	0	25.5325	25.5325	1.39E-03	0	25.5674

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr					MT	⁄yr				
Hauling	0.0128	0.753		3.66E-03	0.1294	4.67E-03		0.0374	4.47E-03		0	374.5125	374.5125		0.0552	391.6459

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0906	0.0488	0.7904	2.82E-03	0.3936	1.55E-03	0.3952	0.1048	1.43E-03	0.1062	0	271.0144	271.0144	5.21E-03	5.86E-03	272.8923
Total	0.1034	0.8018	1.0312	6.48E-03	0.523	6.22E-03	0.5292	0.1421	5.90E-03	0.148	0	645.5269	645.5269	0.0326	0.0611	664.5381

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Archit. Coating	4.5344					0	0		0	0	0	0	0	0	0	0
Off-Road	2.97E-03	0.0129	0.1832	3.00E-04		4.00E-04	4.00E-04		4.00E-04	4.00E-04	0	25.5325	25.5325	1.39E-03		25.5673
Total	4.5374	0.0129	0.1832	3.00E-04		4.00E-04	4.00E-04		4.00E-04	4.00E-04	0	25.5325	25.5325	1.39E-03	0	25.5673

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0.0128	0.753	0.2408	3.66E-03		4.67E-03			4.47E-03			374.5125	374.5125			391.6459
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0906	0.0488		2.82E-03			0.3952	0.1048	1.43E-03		0		271.0144		5.86E-03	

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1034	0.8018	1.0312	6.48E-03	0.523	6.22E-03	0.5292	0.1421	5.90E-03	0.148	0	645.5269	645.5269	0.0326	0.0611	664.5381

#### 3.13 Phase 2 Interiors - 2028

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Archit. Coating	7.4365					0	0		0	0	0	0	0	0	0	0
Off-Road	0.028	0.1879	0.2967	4.90E-04		8.45E-03	8.45E-03		8.45E-03	8.45E-03	0	41.8734	41.8734	2.28E-03	0	41.9305
Total	7.4645	0.1879	0.2967	4.90E-04		8.45E-03	8.45E-03		8.45E-03	8.45E-03	0	41.8734	41.8734	2.28E-03	0	41.9305

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Hauling	0.0206	1.2197	0.398	5.86E-03	0.2122	7.62E-03	0.2198	0.0613	7.28E-03	0.0686	0	601.4023	601.4023	0.0457	0.0887	628.9694
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.1433	0.0749	1.25	4.52E-03	0.6455	2.37E-03	0.6479	0.1718	2.18E-03	0.174	0	437.2386	437.2386	7.93E-03	9.26E-03	440.1973
Total	0.1639	1.2946	1.648	0.0104	0.8578	9.99E-03	0.8677	0.2331	9.46E-03	0.2426	0	1,038.64	1,038.64	0.0536	0.0979	1,069.17

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Archit. Coating	7.4365					0	0		0	0	0	0	0	0	0	0
Off-Road	4.87E-03	0.0211	0.3005	4.90E-04		6.50E-04	6.50E-04		6.50E-04	6.50E-04	0	41.8733	41.8733	2.28E-03	0	41.9304
Total	7.4413	0.0211	0.3005	4.90E-04		6.50E-04	6.50E-04		6.50E-04	6.50E-04	0	41.8733	41.8733	2.28E-03	0	41.9304

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Hauling	0.0206	1.2197	0.398	5.86E-03	0.2122	7.62E-03	0.2198	0.0613	7.28E-03	0.0686	0	601.4023	601.4023	0.0457	0.0887	628.9694
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.1433	0.0749	1.25	4.52E-03	0.6455	2.37E-03	0.6479	0.1718	2.18E-03	0.174	0	437.2386	437.2386	7.93E-03	9.26E-03	440.1973
Total	0.1639	1.2946	1.648	0.0104	0.8578	9.99E-03	0.8677	0.2331	9.46E-03	0.2426	0	1,038.64	1,038.64	0.0536	0.0979	1,069.17

3.14 Phase 2 Sitework - 2028 <u>Unmitigated Construction On-Site</u>

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							МТ	/yr		
Off-Road	0.1057	0.9503	1.4557	2.22E-03		0.0424	0.0424		0.0398	0.0398	0	193.4978	193.4978	0.0498	0	194.742
Paving	0					0	0		0	0	0	0	0	0	0	0
Total	0.1057	0.9503	1.4557	2.22E-03		0.0424	0.0424		0.0398	0.0398	0	193.4978	193.4978	0.0498	0	194.742

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ons/yr							MT	/yr		
Hauling	4.37E-03	0.2585	0.0844	1.24E-03	0.045	1.61E-03	0.0466	0.013	1.54E-03	0.0145	0	127.4629	127.4629	9.68E-03	0.0188	133.3055
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0147	7.67E-03	0.1281	4.60E-04	0.0661	2.40E-04	0.0664	0.0176	2.20E-04	0.0178	0	44.7903	44.7903	8.10E-04	9.50E-04	45.0934
Total	0.019	0.2662	0.2124	1.70E-03	0.1111	1.85E-03	0.113	0.0306	1.76E-03	0.0324	0	172.2532	172.2532	0.0105	0.0197	178.3989

## **Mitigated Construction On-Site**

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Off-Road	0.0291	0.2474		2.22E-03			3.45E-03			3.45E-03			193.4976		0	194.7418
Paving	0					0	0		0	0	0	0	0	0	0	0
Total	0.0291	0.2474	1.5945	2.22E-03		3.45E-03	3.45E-03		3.45E-03	3.45E-03	0	193.4976	193.4976	0.0498	0	194.7418

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	4.37E-03	0.2585	0.0844	1.24E-03	0.045	1.61E-03	0.0466	0.013	1.54E-03	0.0145	0	127.4629	127.4629	9.68E-03	0.0188	133.3055
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	0.0147	7.67E-03	0.1281	4.60E-04	0.0661	2.40E-04	0.0664	0.0176	2.20E-04	0.0178	0	44.7903	44.7903	8.10E-04	9.50E-04	45.0934
Total	0.019	0.2662	0.2124	1.70E-03	0.1111	1.85E-03	0.113	0.0306	1.76E-03	0.0324	0	172.2532	172.2532	0.0105	0.0197	178.3989

# 3.15 Phase 1 Nightwork Unloading - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		

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# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-Road	4.16E-03		0.0614	9.00E-05	2.08E-03		1.92E-03	1.92E-03		7.5236	7.5236	2.43E-03	0	7.5844
Total	4.16E-03	0.0422	0.0614	9.00E-05	2.08E-03	2.08E-03	1.92E-03	1.92E-03	0	7.5236	7.5236	2.43E-03	0	7.5844

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	4.70E-04	3.10E-04	4.28E-03	1.00E-05	1.73E-03	1.00E-05	1.74E-03	4.60E-04	1.00E-05	4.70E-04	0	1.3034	1.3034	3.00E-05	3.00E-05	1.3138
Total	4.70E-04	3.10E-04	4.28E-03	1.00E-05	1.73E-03	1.00E-05	1.74E-03	4.60E-04	1.00E-05	4.70E-04	0	1.3034	1.3034	3.00E-05	3.00E-05	1.3138

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							МТ	/yr		
Off-Road	1.04E-03	4.53E-03	0.0644	9.00E-05		1.40E-04	1.40E-04		1.40E-04	1.40E-04	0	7.5236	7.5236	2.43E-03	0	7.5844
Total	1.04E-03	4.53E-03	0.0644	9.00E-05		1.40E-04	1.40E-04		1.40E-04	1.40E-04	0	7.5236	7.5236	2.43E-03	0	7.5844

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#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	4.70E-04	3.10E-04	4.28E-03	1.00E-05	1.73E-03	1.00E-05	1.74E-03	4.60E-04	1.00E-05	4.70E-04	0	1.3034	1.3034	3.00E-05	3.00E-05	1.3138
Total	4.70E-04	3.10E-04	4.28E-03	1.00E-05	1.73E-03	1.00E-05	1.74E-03	4.60E-04	1.00E-05	4.70E-04	0	1.3034	1.3034	3.00E-05	3.00E-05	1.3138

## 3.16 Phase 1 Nightwork Utilities - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT/	/yr		
Off-Road	8.30E-03	0.0768	0.1076	1.80E-04		3.65E-03	3.65E-03		3.52E-03	3.52E-03	0	15.8215	15.8215	2.71E-03	0	15.8893
Total	8.30E-03	0.0768	0.1076	1.80E-04		3.65E-03	3.65E-03		3.52E-03	3.52E-03	0	15.8215	15.8215	2.71E-03	0	15.8893

**Unmitigated Construction Off-Site** 

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## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	6.50E-04	4.20E-04	5.83E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.7773	1.7773	4.00E-05	4.00E-05	1.7916
Total	6.50E-04	4.20E-04	5.83E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.7773	1.7773	4.00E-05	4.00E-05	1.7916

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Off-Road	1.99E-03	8.63E-03	0.1228	1.80E-04		2.70E-04	2.70E-04		2.70E-04	2.70E-04	0	15.8215	15.8215	2.71E-03	0	15.8893
Total	1.99E-03	8.63E-03	0.1228	1.80E-04		2.70E-04	2.70E-04		2.70E-04	2.70E-04	0	15.8215	15.8215	2.71E-03	0	15.8893

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	6.50E-04	4.20E-04	5.83E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.7773	1.7773	4.00E-05	4.00E-05	1.7916
Total	6.50E-04	4.20E-04	5.83E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.7773	1.7773	4.00E-05	4.00E-05	1.7916

## 3.17 Phase 1 Nightwork Concrete Pour - 2023

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Off-Road	0.0106	0.0878	0.0992	2.30E-04		3.99E-03	3.99E-03		3.76E-03	3.76E-03	0	20.4213	20.4213	5.19E-03	0	20.5511
Total	0.0106	0.0878	0.0992	2.30E-04		3.99E-03	3.99E-03		3.76E-03	3.76E-03	0	20.4213	20.4213	5.19E-03	0	20.5511

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	1.60E-04	1.00E-04	1.40E-03	0	5.70E-04	0	5.70E-04	1.50E-04	0	1.50E-04	0	0.4266	0.4266	1.00E-05	1.00E-05	
Total	1.60E-04	1.00E-04	1.40E-03	0	5.70E-04	0	5.70E-04	1.50E-04	0	1.50E-04	0	0.4266	0.4266	1.00E-05	1.00E-05	0.43

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## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	⁄yr		
Off-Road	2.73E-03	0.0119	0.1323	2.30E-04		3.60E-04	3.60E-04		3.60E-04	3.60E-04	0	20.4213	20.4213	5.19E-03	0	20.5511
Total	2.73E-03	0.0119	0.1323	2.30E-04		3.60E-04	3.60E-04		3.60E-04	3.60E-04	Ö	20.4213	20.4213	5.19E-03	0	20.5511

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	1.60E-04	1.00E-04	1.40E-03	0	5.70E-04	0	5.70E-04	1.50E-04	0	1.50E-04	0	0.4266	0.4266	1.00E-05	1.00E-05	0.43
Total	1.60E-04	1.00E-04	1.40E-03	0	5.70E-04	0	5.70E-04	1.50E-04	0	1.50E-04	0	0.4266	0.4266	1.00E-05	1.00E-05	0.43

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## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Off-Road	1.98E-03	0.02	0.0334	5.00E-05		8.10E-04	8.10E-04		7.50E-04	7.50E-04	0	4.1103	4.1103	1.33E-03	0	4.1435
Total	1.98E-03	0.02	0.0334	5.00E-05		8.10E-04	8.10E-04		7.50E-04	7.50E-04	Ö	4.1103	4.1103	1.33E-03	0	4.1435

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	<sup>-</sup> /yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	2.30E-04	1.40E-04	2.07E-03	1.00E-05	9.40E-04	0	9.50E-04	2.50E-04	0	2.60E-04	0	0.6768	0.6768	1.00E-05	2.00E-05	0.6817
Total	2.30E-04	1.40E-04	2.07E-03	1.00E-05	9.40E-04	0	9.50E-04	2.50E-04	0	2.60E-04	0	0.6768	0.6768	1.00E-05	2.00E-05	0.6817

#### **Mitigated Construction On-Site**

ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10 Total	Fugitive		PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
				PM10	PM10		PM2.5	PM2.5							

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category					tor	ns/yr						MT	/yr		
Off-Road	5.70E-04	2.47E-03	0.0351	5.00E-05		8.00E-05	8.00E-05	8.00E-05	8.00E-05	0	4.1103	4.1103	1.33E-03	0	4.1435
Total	5.70E-04	2.47E-03	0.0351	5.00E-05		8.00E-05	8.00E-05	8.00E-05	8.00E-05	0	4.1103	4.1103	1.33E-03	0	4.1435

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	2.30E-04	1.40E-04	2.07E-03	1.00E-05	9.40E-04	0	9.50E-04	2.50E-04	0	2.60E-04	0	0.6768	0.6768	1.00E-05	2.00E-05	0.6817
Total	2.30E-04	1.40E-04	2.07E-03	1.00E-05	9.40E-04	0	9.50E-04	2.50E-04	0	2.60E-04	0	0.6768	0.6768	1.00E-05	2.00E-05	0.6817

# 3.19 Phase 2 Nightwork Utilties - 2025

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Off-Road	6.91E-03	0.0643	0.1004	1.60E-04		2.63E-03	2.63E-03		2.54E-03	2.54E-03	0	14.2416	14.2416	2.14E-03	0	14.2952
Total	6.91E-03	0.0643	0.1004	1.60E-04		2.63E-03	2.63E-03		2.54E-03	2.54E-03	Ö	14.2416	14.2416	2.14E-03	0	14.2952

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## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	5.90E-04	3.40E-04	5.19E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.6919	1.6919	4.00E-05	4.00E-05	1.7043
Total	5.90E-04	3.40E-04	5.19E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.6919	1.6919	4.00E-05	4.00E-05	1.7043

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Off-Road	1.77E-03	7.65E-03	0.1089	1.60E-04		2.40E-04	2.40E-04		2.40E-04	2.40E-04	0	14.2416	14.2416	2.14E-03	0	14.2952
Total	1.77E-03	7.65E-03	0.1089	1.60E-04		2.40E-04	2.40E-04		2.40E-04	2.40E-04	0	14.2416	14.2416	2.14E-03	0	14.2952

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### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT.	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	5.90E-04	3.40E-04	5.19E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.6919	1.6919	4.00E-05	4.00E-05	1.7043
Total	5.90E-04	3.40E-04	5.19E-03	2.00E-05	2.36E-03	1.00E-05	2.37E-03	6.30E-04	1.00E-05	6.40E-04	0	1.6919	1.6919	4.00E-05	4.00E-05	1.7043

# 3.20 Phase 2 Nightwork Concrete Pour - 2025

# **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	ns/yr							MT	/yr		
Off-Road	4.78E-03	0.0362	0.0489	1.20E-04		1.55E-03	1.55E-03		1.46E-03	1.46E-03	0	10.2106	10.2106	2.58E-03	0	10.2752
Total	4.78E-03	0.0362	0.0489	1.20E-04		1.55E-03	1.55E-03		1.46E-03	1.46E-03	Ö	10.2106	10.2106	2.58E-03	0	10.2752

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
					1 10110	1 10110		1 1012.5	1 1012.5							

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category					to	ns/yr							МТ	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worker	7.00E-05	4.00E-05	6.20E-04	0	2.80E-04	0	2.80E-04	8.00E-05	0	8.00E-05	0	0.203	0.203	0	0	0.2045
Total	7.00E-05	4.00E-05	6.20E-04	0	2.80E-04	0	2.80E-04	8.00E-05	0	8.00E-05	0	0.203	0.203	0	0	0.2045

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							МТ	/yr		
Off-Road	1.37E-03	5.93E-03	0.066	1.20E-04		1.80E-04	1.80E-04		1.80E-04	1.80E-04	0	10.2106	10.2106	2.58E-03	0	10.2752
Total	1.37E-03	5.93E-03	0.066	1.20E-04		1.80E-04	1.80E-04		1.80E-04	1.80E-04	Ö	10.2106	10.2106	2.58E-03	0	10.2752

# **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					to	ns/yr							MT	/yr		
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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## RWC Transit District Sequoia Station Construction HRA - San Mateo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	7.00E-05		6.20E-04	0	2.80E-04	0	2.80E-04	8.00E-05	0	8.00E-05	0	0.203	0.203	0	0	0.2045
Total	7.00E-05	4.00E-05	6.20E-04	0	2.80E-04	0	2.80E-04	8.00E-05	0	8.00E-05	0	0.203	0.203	0	0	0.2045

## 4.0 Operational Detail - Mobile

**Operational emissions not estimated** 

## **Sequoia Station Construction HRA**

# Summary of AERMOD Outputs for All Source and Offsite Receptors 7.5 m receptor height

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567325.16	4148290.16	567325.16_4148290.16	0.05461	0.12818	0.05449	567325.16	4148290.16	567325.16_4148290.16	0.05703	0.13666	0.08703
567345.16	4148290.16	567345.16_4148290.16	0.05674	0.13602	0.05676	567345.16	4148290.16	567345.16_4148290.16	0.05925	0.14543	0.09006
567365.16	4148290.16	567365.16_4148290.16	0.05908	0.14495	0.05918	567365.16	4148290.16	567365.16_4148290.16	0.06165	0.15525	0.0933
567385.16	4148290.16	567385.16_4148290.16	0.06149	0.15456	0.06156	567385.16	4148290.16	567385.16_4148290.16	0.06418	0.16596	0.09668
567405.16	4148290.16	567405.16_4148290.16	0.064	0.16504	0.06388	567405.16	4148290.16	567405.16_4148290.16	0.06686	0.17771	0.10027
567425.16	4148290.16	567425.16_4148290.16	0.06677	0.17702	0.06624	567425.16	4148290.16	567425.16_4148290.16	0.06974	0.19094	0.10425
567445.16	4148290.16	567445.16_4148290.16	0.06968	0.19008	0.06857	567445.16	4148290.16	567445.16_4148290.16	0.07285	0.20549	0.10863
567465.16	4148290.16	567465.16_4148290.16	0.07275	0.20447	0.07104	567465.16	4148290.16	567465.16_4148290.16	0.07617	0.22159	0.11358
567485.16	4148290.16	567485.16_4148290.16	0.07605	0.22031	0.07385	567485.16	4148290.16	567485.16_4148290.16	0.07973	0.23941	0.11922
567505.16	4148290.16	567505.16_4148290.16	0.07962	0.23801	0.07723	567505.16	4148290.16	567505.16_4148290.16	0.08359	0.25928	0.12573
567525.16	4148290.16	567525.16_4148290.16	0.08355	0.25788	0.08131	567525.16	4148290.16	567525.16_4148290.16	0.0878	0.28148	0.13311
567545.16	4148290.16	567545.16_4148290.16	0.0878	0.27995	0.08596	567545.16	4148290.16	567545.16_4148290.16	0.09236	0.30614	0.14124
567565.16	4148290.16	567565.16_4148290.16	0.09242	0.30453	0.09093	567565.16	4148290.16	567565.16_4148290.16	0.09732	0.33352	0.14989
567585.16	4148290.16	567585.16_4148290.16	0.09736	0.33142	0.09587	567585.16	4148290.16	567585.16_4148290.16	0.10267	0.36362	0.15875
567605.16	4148290.16	567605.16_4148290.16	0.10372	0.36611	0.10158	567605.16	4148290.16	567605.16_4148290.16	0.10915	0.39957	0.16816
567625.16	4148290.16	567625.16_4148290.16	0.10878	0.39514	0.10605	567625.16	4148290.16	567625.16_4148290.16	0.11508	0.43399	0.17644
567645.16	4148290.16	567645.16_4148290.16	0.11525	0.43147	0.11168	567645.16	4148290.16	567645.16_4148290.16	0.12219	0.47416	0.18518
567685.16	4148290.16	567685.16_4148290.16	0.13045	0.51455	0.12527	567685.16	4148290.16	567685.16_4148290.16	0.13892	0.56552	0.20442
567705.16	4148290.16	567705.16_4148290.16	0.13889	0.55824	0.13294	567705.16	4148290.16	567705.16_4148290.16	0.14835	0.61511	0.21576
567725.16	4148290.16	567725.16_4148290.16	0.14889	0.60728	0.1423	567725.16	4148290.16	567725.16_4148290.16	0.15933	0.66921	0.2298
567745.16	4148290.16	567745.16_4148290.16	0.16	0.65817	0.15345	567745.16	4148290.16	567745.16_4148290.16	0.17148	0.72581	0.24656
567765.16	4148290.16	567765.16_4148290.16	0.17251	0.71148	0.1669	567765.16	4148290.16	567765.16_4148290.16	0.18511	0.78492	0.2662
567785.16	4148290.16	567785.16_4148290.16	0.18653	0.76669	0.18239	567785.16	4148290.16	567785.16_4148290.16	0.20041	0.8459	0.28839
567805.16	4148290.16	567805.16_4148290.16	0.20311	0.82807	0.19991	567805.16	4148290.16	567805.16_4148290.16	0.21816	0.91034	0.31321
567825.16	4148290.16	567825.16_4148290.16	0.22057	0.88507	0.21737	567825.16	4148290.16	567825.16_4148290.16	0.23743	0.97274	0.33914
567845.16	4148290.16	567845.16_4148290.16	0.23959	0.93928	0.23544	567845.16	4148290.16	567845.16_4148290.16	0.25872	1.03341	0.36701
567865.16	4148290.16	567865.16_4148290.16	0.26166	0.99564	0.25641	567865.16	4148290.16	567865.16_4148290.16	0.28299	1.09409	0.39874
567885.16	4148290.16	567885.16_4148290.16	0.28632	1.04942	0.2809	567885.16	4148290.16	567885.16_4148290.16	0.30994	1.15202	0.43492
567905.16	4148290.16	567905.16_4148290.16	0.31278	1.09601	0.30872	567905.16	4148290.16	567905.16_4148290.16	0.3391	1.20458	0.47548
567925.16	4148290.16	567925.16_4148290.16	0.34191	1.13905	0.34051	567925.16	4148290.16	567925.16_4148290.16	0.37097	1.25283	0.52119
567945.16	4148290.16	567945.16_4148290.16	0.3739	1.17979	0.37592	567945.16	4148290.16	567945.16_4148290.16	0.40561	1.29678	0.57225
567965.16	4148290.16	567965.16_4148290.16	0.40618	1.20966	0.41179	567965.16	4148290.16	567965.16_4148290.16	0.44145	1.33245	0.62681
567985.16	4148290.16	567985.16_4148290.16	0.43931	1.23223	0.44772	567985.16	4148290.16	567985.16_4148290.16	0.47872	1.36127	0.68534
568005.16	4148290.16	568005.16_4148290.16	0.47412	1.25056	0.48393	568005.16	4148290.16	568005.16_4148290.16	0.51768	1.38454	0.74855
568025.16	4148290.16	568025.16_4148290.16	0.51103	1.26549	0.52131	568025.16	4148290.16	568025.16_4148290.16	0.55826	1.40276	0.81674
568045.16	4148290.16	568045.16_4148290.16	0.54814	1.27193	0.55928	568045.16	4148290.16	568045.16_4148290.16	0.59925	1.41429	0.8882
568065.16	4148290.16	568065.16_4148290.16	0.58625	1.27396	0.59917	568065.16	4148290.16	568065.16_4148290.16	0.64102	1.42122	0.96228

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568085.16	4148290.16	568085.16_4148290.16	0.62516	1.27347	0.63992	568085.16	4148290.16	568085.16_4148290.16	0.68341	1.42481	1.03659
568105.16	4148290.16	568105.16_4148290.16	0.66426	1.27175	0.68014	568105.16	4148290.16	568105.16_4148290.16	0.72598	1.42615	1.10864
568125.16	4148290.16	568125.16_4148290.16	0.70261	1.26923	0.71916	568125.16	4148290.16	568125.16_4148290.16	0.76804	1.42605	1.17716
568145.16	4148290.16	568145.16_4148290.16	0.73885	1.26469	0.75589	568145.16	4148290.16	568145.16_4148290.16	0.80862	1.42478	1.24166
568165.16	4148290.16	568165.16_4148290.16	0.77271	1.25869	0.78978	568165.16	4148290.16	568165.16_4148290.16	0.8474	1.42315	1.30242
568185.16	4148290.16	568185.16_4148290.16	0.80483	1.25249	0.82131	568185.16	4148290.16	568185.16_4148290.16	0.88467	1.42209	1.36015
568205.16	4148290.16	568205.16_4148290.16	0.83779	1.25017	0.85349	568205.16	4148290.16	568205.16_4148290.16	0.92177	1.42323	1.41742
568225.16	4148290.16	568225.16_4148290.16	0.87069	1.24945	0.88635	568225.16	4148290.16	568225.16_4148290.16	0.95852	1.42598	1.47514
568245.16	4148290.16	568245.16_4148290.16	0.90419	1.25129	0.92077	568245.16	4148290.16	568245.16_4148290.16	0.99552	1.43065	1.53436
568265.16	4148290.16	568265.16_4148290.16	0.94006	1.25876	0.95799	568265.16	4148290.16	568265.16_4148290.16	1.03393	1.43796	1.59577
568285.16	4148290.16	568285.16_4148290.16	0.97423	1.26567	0.99348	568285.16	4148290.16	568285.16_4148290.16	1.07191	1.44603	1.65618
568305.16	4148290.16	568305.16_4148290.16	1.00767	1.27391	1.02781	568305.16	4148290.16	568305.16_4148290.16	1.11007	1.45514	1.71663
568325.16	4148290.16	568325.16_4148290.16	1.04199	1.2857	1.06246	568325.16	4148290.16	568325.16_4148290.16	1.14921	1.46552	1.77954
568345.16	4148290.16	568345.16_4148290.16	1.07542	1.29787	1.09597	568345.16	4148290.16	568345.16_4148290.16	1.18849	1.47599	1.84545
568365.16	4148290.16	568365.16_4148290.16	1.11103	1.31368	1.13126	568365.16	4148290.16	568365.16_4148290.16	1.22925	1.4869	1.91731
568385.16	4148290.16	568385.16_4148290.16	1.14528	1.32738	1.16525	568385.16	4148290.16	568385.16_4148290.16	1.26981	1.49648	1.99357
568405.16	4148290.16	568405.16_4148290.16	1.18396	1.34513	1.20374	568405.16	4148290.16	568405.16_4148290.16	1.31264	1.5057	2.07814
568425.16	4148290.16	568425.16_4148290.16	1.22024	1.35775	1.24072	568425.16	4148290.16	568425.16_4148290.16	1.35462	1.51215	2.16718
568445.16	4148290.16	568445.16_4148290.16	1.26033	1.3718	1.282	568445.16	4148290.16	568445.16_4148290.16	1.39835	1.51692	2.26439
568465.16	4148290.16	568465.16_4148290.16	1.29829	1.38047	1.32172	568465.16	4148290.16	568465.16_4148290.16	1.44111	1.51829	2.36545
568525.16	4148290.16	568525.16_4148290.16	1.40144	1.38071	1.43172	568525.16	4148290.16	568525.16_4148290.16	1.56202	1.50204	2.68222
568545.16	4148290.16	568545.16_4148290.16	1.43866	1.37894	1.47081	568545.16	4148290.16	568545.16_4148290.16	1.60147	1.49117	2.79261
568565.16	4148290.16	568565.16_4148290.16	1.47182	1.37228	1.50521	568565.16	4148290.16	568565.16_4148290.16	1.6374	1.47685	2.89987
568585.16	4148290.16	568585.16_4148290.16	1.49406	1.35674	1.52796	568585.16	4148290.16	568585.16_4148290.16	1.66669	1.45846	2.99825
568605.16	4148290.16	568605.16_4148290.16	1.51131	1.33753	1.54438	568605.16	4148290.16	568605.16_4148290.16	1.69141	1.43727	3.09011
568625.16	4148290.16	568625.16_4148290.16	1.52576	1.31649	1.55722	568625.16	4148290.16	568625.16_4148290.16	1.71217	1.41385	3.17594
568645.16	4148290.16	568645.16_4148290.16	1.5464	1.29923	1.57619	568645.16	4148290.16	568645.16_4148290.16	1.73206	1.38964	3.26034
568665.16	4148290.16	568665.16_4148290.16	1.55802	1.27683	1.58741	568665.16	4148290.16	568665.16_4148290.16	1.74527	1.36303	3.33372
568685.16	4148290.16	568685.16_4148290.16	1.55912	1.24933	1.58831	568685.16	4148290.16	568685.16_4148290.16	1.75159	1.33427	3.395
568705.16	4148290.16	568705.16_4148290.16	1.56503	1.22524	1.59256	568705.16	4148290.16	568705.16_4148290.16	1.75691	1.30536	3.45387
568725.16	4148290.16	568725.16_4148290.16	1.56312	1.19756	1.58904	568725.16	4148290.16	568725.16_4148290.16	1.75725	1.27506	3.50656
567325.16	4148310.16	567325.16_4148310.16	0.05437	0.1281	0.05399	567325.16	4148310.16	567325.16_4148310.16	0.05693	0.13652	0.0873
567345.16	4148310.16	567345.16_4148310.16	0.05662	0.13632	0.05638	567345.16	4148310.16	567345.16_4148310.16	0.05919	0.14551	0.09041
567365.16	4148310.16	567365.16_4148310.16	0.05894	0.14514	0.05883	567365.16	4148310.16	567365.16_4148310.16	0.06159	0.1553	0.09367
567385.16	4148310.16	567385.16_4148310.16	0.06135	0.15472	0.06136	567385.16	4148310.16	567385.16_4148310.16	0.06411	0.16603	0.09707
567405.16	4148310.16	567405.16_4148310.16	0.064	0.16566	0.06402	567405.16	4148310.16	567405.16_4148310.16	0.06683	0.1781	0.10075
567425.16	4148310.16	567425.16_4148310.16	0.06675	0.17755	0.06662	567425.16	4148310.16	567425.16_4148310.16	0.06973	0.19135	0.10463
567445.16	4148310.16	567445.16_4148310.16	0.06964	0.19058	0.06916	567445.16	4148310.16	567445.16_4148310.16	0.07282	0.20597	0.10882
567465.16	4148310.16	567465.16_4148310.16	0.07282	0.20549	0.07178	567465.16	4148310.16	567465.16_4148310.16	0.07619	0.22249	0.11353

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567485.16	4148310.16	567485.16_4148310.16	0.07621	0.22195	0.07453	567485.16	4148310.16	567485.16_4148310.16	0.07983	0.24081	0.11882
567505.16	4148310.16	567505.16_4148310.16	0.0796	0.23921	0.07739	567505.16	4148310.16	567505.16_4148310.16	0.08358	0.26062	0.12469
567525.16	4148310.16	567525.16_4148310.16	0.08351	0.25942	0.08101	567525.16	4148310.16	567525.16_4148310.16	0.0878	0.28328	0.13163
567545.16	4148310.16	567545.16_4148310.16	0.08775	0.28197	0.08536	567545.16	4148310.16	567545.16_4148310.16	0.09237	0.30854	0.13954
567565.16	4148310.16	567565.16_4148310.16	0.0924	0.30724	0.09038	567565.16	4148310.16	567565.16_4148310.16	0.09735	0.33675	0.14832
567585.16	4148310.16	567585.16_4148310.16	0.09779	0.33701	0.09605	567585.16	4148310.16	567585.16_4148310.16	0.103	0.36902	0.15792
567605.16	4148310.16	567605.16_4148310.16	0.10372	0.37046	0.10187	567605.16	4148310.16	567605.16_4148310.16	0.10919	0.40499	0.16787
567625.16	4148310.16	567625.16_4148310.16	0.1096	0.40447	0.10733	567625.16	4148310.16	567625.16_4148310.16	0.11566	0.44301	0.17755
567645.16	4148310.16	567645.16_4148310.16	0.11607	0.44221	0.11304	567645.16	4148310.16	567645.16_4148310.16	0.12275	0.48497	0.18717
567665.16	4148310.16	567665.16_4148310.16	0.12295	0.4822	0.11908	567665.16	4148310.16	567665.16_4148310.16	0.1305	0.53015	0.19666
567705.16	4148310.16	567705.16_4148310.16	0.13945	0.57439	0.13388	567705.16	4148310.16	567705.16_4148310.16	0.14888	0.6333	0.2179
567725.16	4148310.16	567725.16_4148310.16	0.14925	0.6256	0.1428	567725.16	4148310.16	567725.16_4148310.16	0.15975	0.69062	0.23106
567745.16	4148310.16	567745.16_4148310.16	0.16032	0.68006	0.15334	567745.16	4148310.16	567745.16_4148310.16	0.17197	0.75148	0.24697
567765.16	4148310.16	567765.16_4148310.16	0.17298	0.73801	0.16625	567765.16	4148310.16	567765.16_4148310.16	0.1858	0.81568	0.26621
567785.16	4148310.16	567785.16_4148310.16	0.18725	0.79839	0.18172	567785.16	4148310.16	567785.16_4148310.16	0.20137	0.8823	0.28865
567805.16	4148310.16	567805.16_4148310.16	0.20371	0.86278	0.19959	567805.16	4148310.16	567805.16_4148310.16	0.21919	0.95164	0.31412
567825.16	4148310.16	567825.16_4148310.16	0.22199	0.92734	0.21858	567825.16	4148310.16	567825.16_4148310.16	0.23916	1.0213	0.34168
567845.16	4148310.16	567845.16_4148310.16	0.24196	0.98914	0.2381	567845.16	4148310.16	567845.16_4148310.16	0.26132	1.08935	0.37115
567865.16	4148310.16	567865.16_4148310.16	0.26404	1.04794	0.25906	567865.16	4148310.16	567865.16_4148310.16	0.286	1.15513	0.40344
567885.16	4148310.16	567885.16_4148310.16	0.28934	1.10646	0.28365	567885.16	4148310.16	567885.16_4148310.16	0.31391	1.21925	0.44044
567905.16	4148310.16	567905.16_4148310.16	0.31754	1.16104	0.31255	567905.16	4148310.16	567905.16_4148310.16	0.34485	1.27931	0.48277
567925.16	4148310.16	567925.16_4148310.16	0.34828	1.20939	0.34563	567925.16	4148310.16	567925.16_4148310.16	0.37856	1.33363	0.53054
567945.16	4148310.16	567945.16_4148310.16	0.38191	1.2536	0.38278	567945.16	4148310.16	567945.16_4148310.16	0.41523	1.38255	0.58408
567965.16	4148310.16	567965.16_4148310.16	0.41673	1.2882	0.42155	567965.16	4148310.16	567965.16_4148310.16	0.45378	1.42326	0.64213
567985.16	4148310.16	567985.16_4148310.16	0.45263	1.31458	0.46082	567985.16	4148310.16	567985.16_4148310.16	0.49404	1.4562	0.70467
568005.16	4148310.16	568005.16_4148310.16	0.48884	1.33112	0.4991	568005.16	4148310.16	568005.16_4148310.16	0.53535	1.48077	0.77126
568025.16	4148310.16	568025.16_4148310.16	0.53011	1.35263	0.54111	568025.16	4148310.16	568025.16_4148310.16	0.58006	1.50317	0.84549
568045.16	4148310.16	568045.16_4148310.16	0.57027	1.36047	0.5823	568045.16	4148310.16	568045.16_4148310.16	0.6245	1.51628	0.92242
568065.16	4148310.16	568065.16_4148310.16	0.61054	1.36071	0.62451	568065.16	4148310.16	568065.16_4148310.16	0.66919	1.52317	1.0016
568085.16	4148310.16	568085.16_4148310.16	0.65258	1.36059	0.66856	568085.16	4148310.16	568085.16_4148310.16	0.71501	1.52726	1.08183
568105.16	4148310.16	568105.16_4148310.16	0.69375	1.3566	0.71096	568105.16	4148310.16	568105.16_4148310.16	0.76046	1.52794	1.15881
568125.16	4148310.16	568125.16_4148310.16	0.73535	1.35454	0.75314	568125.16	4148310.16	568125.16_4148310.16	0.80602	1.52809	1.23283
568145.16	4148310.16	568145.16_4148310.16	0.77433	1.34956	0.7926	568145.16	4148310.16	568145.16_4148310.16	0.84977	1.52674	1.30225
568165.16	4148310.16	568165.16_4148310.16	0.81009	1.34182	0.82842	568165.16	4148310.16	568165.16_4148310.16	0.89124	1.52469	1.36717
568185.16	4148310.16	568185.16_4148310.16	0.84704	1.33978	0.86463	568185.16	4148310.16	568185.16_4148310.16	0.93254	1.52524	1.43067
568205.16	4148310.16	568205.16_4148310.16	0.88317	1.33883	0.89994	568205.16	4148310.16	568205.16_4148310.16	0.9728	1.52715	1.49268
568225.16	4148310.16	568225.16_4148310.16	0.91678	1.33565	0.93365	568225.16	4148310.16	568225.16_4148310.16	1.01148	1.52966	1.55349
568245.16	4148310.16	568245.16_4148310.16	0.95417	1.34097	0.97205	568245.16	4148310.16	568245.16_4148310.16	1.05199	1.53587	1.61806
568265.16	4148310.16	568265.16_4148310.16	0.98884	1.34401	1.00835	568265.16	4148310.16	568265.16_4148310.16	1.09145	1.54257	1.68163

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568285.16	4148310.16	568285.16_4148310.16	1.02611	1.35381	1.04686	568285.16	4148310.16	568285.16_4148310.16	1.13271	1.55194	1.74724
568305.16	4148310.16	568305.16_4148310.16	1.06443	1.36765	1.08575	568305.16	4148310.16	568305.16_4148310.16	1.17512	1.56283	1.81452
568325.16	4148310.16	568325.16_4148310.16	1.09977	1.37883	1.12128	568325.16	4148310.16	568325.16_4148310.16	1.21674	1.5732	1.88255
568345.16	4148310.16	568345.16_4148310.16	1.13785	1.39501	1.15896	568345.16	4148310.16	568345.16_4148310.16	1.26034	1.58443	1.95661
568365.16	4148310.16	568365.16_4148310.16	1.17501	1.40966	1.19557	568365.16	4148310.16	568365.16_4148310.16	1.30408	1.59449	2.03552
568385.16	4148310.16	568385.16_4148310.16	1.21337	1.42448	1.23349	568385.16	4148310.16	568385.16_4148310.16	1.3489	1.6033	2.12138
568405.16	4148310.16	568405.16_4148310.16	1.25219	1.43743	1.27256	568405.16	4148310.16	568405.16_4148310.16	1.39436	1.60997	2.2143
568425.16	4148310.16	568425.16_4148310.16	1.29808	1.455	1.31929	568425.16	4148310.16	568425.16_4148310.16	1.44329	1.61549	2.31856
568445.16	4148310.16	568445.16_4148310.16	1.33867	1.46273	1.36202	568445.16	4148310.16	568445.16_4148310.16	1.49011	1.61644	2.42612
568505.16	4148310.16	568505.16_4148310.16	1.45605	1.46133	1.4875	568505.16	4148310.16	568505.16_4148310.16	1.62831	1.59763	2.77247
568525.16	4148310.16	568525.16_4148310.16	1.49963	1.45896	1.53351	568525.16	4148310.16	568525.16_4148310.16	1.67513	1.58538	2.8955
568545.16	4148310.16	568545.16_4148310.16	1.53978	1.45145	1.57591	568545.16	4148310.16	568545.16_4148310.16	1.71903	1.56934	3.01675
568565.16	4148310.16	568565.16_4148310.16	1.55289	1.42287	1.59188	568565.16	4148310.16	568565.16_4148310.16	1.74978	1.54633	3.11994
568585.16	4148310.16	568585.16_4148310.16	1.59823	1.41683	1.63651	568585.16	4148310.16	568585.16_4148310.16	1.79137	1.52595	3.24096
568605.16	4148310.16	568605.16_4148310.16	1.62656	1.39826	1.66334	568605.16	4148310.16	568605.16_4148310.16	1.82288	1.50086	3.34715
568625.16	4148310.16	568625.16_4148310.16	1.64716	1.37484	1.68204	568625.16	4148310.16	568625.16_4148310.16	1.84782	1.47303	3.44387
568665.16	4148310.16	568665.16_4148310.16	1.67197	1.32042	1.7058	568665.16	4148310.16	568665.16_4148310.16	1.88007	1.41173	3.61035
568685.16	4148310.16	568685.16_4148310.16	1.67797	1.29146	1.71191	568685.16	4148310.16	568685.16_4148310.16	1.88825	1.37923	3.67932
568705.16	4148310.16	568705.16_4148310.16	1.68032	1.2619	1.71294	568705.16	4148310.16	568705.16_4148310.16	1.89184	1.34594	3.73941
568725.16	4148310.16	568725.16_4148310.16	1.67739	1.23074	1.70833	568725.16	4148310.16	568725.16_4148310.16	1.89095	1.3119	3.79354
567325.16	4148330.16	567325.16_4148330.16	0.05413	0.12799	0.0535	567325.16	4148330.16	567325.16_4148330.16	0.05683	0.13637	0.08763
567345.16	4148330.16	567345.16_4148330.16	0.05642	0.13636	0.0559	567345.16	4148330.16	567345.16_4148330.16	0.05912	0.14545	0.09078
567365.16	4148330.16	567365.16_4148330.16	0.05872	0.14514	0.05834	567365.16	4148330.16	567365.16_4148330.16	0.06149	0.15523	0.09404
567385.16	4148330.16	567385.16_4148330.16	0.06126	0.15516	0.06102	567385.16	4148330.16	567385.16_4148330.16	0.06406	0.16624	0.09756
567405.16	4148330.16	567405.16_4148330.16	0.0639	0.16599	0.06378	567405.16	4148330.16	567405.16_4148330.16	0.06679	0.17829	0.10124
567425.16	4148330.16	567425.16_4148330.16	0.06665	0.17785	0.06659	567425.16	4148330.16	567425.16_4148330.16	0.06968	0.19158	0.10512
567445.16	4148330.16	567445.16_4148330.16	0.06959	0.19111	0.06945	567445.16	4148330.16	567445.16_4148330.16	0.0728	0.20642	0.10927
567465.16	4148330.16	567465.16_4148330.16	0.07285	0.20633	0.07238	567465.16	4148330.16	567465.16_4148330.16	0.0762	0.22323	0.11386
567485.16	4148330.16	567485.16_4148330.16	0.07619	0.22276	0.07521	567485.16	4148330.16	567485.16_4148330.16	0.07981	0.24168	0.11882
567505.16	4148330.16	567505.16_4148330.16	0.07978	0.24113	0.07816	567505.16	4148330.16	567505.16_4148330.16	0.08371	0.26232	0.12441
567525.16	4148330.16	567525.16_4148330.16	0.08349	0.26089	0.08126	567525.16	4148330.16	567525.16_4148330.16	0.0878	0.28495	0.13067
567545.16	4148330.16	567545.16_4148330.16	0.08783	0.28442	0.08524	567545.16	4148330.16	567545.16_4148330.16	0.09246	0.31111	0.13817
567565.16	4148330.16	567565.16_4148330.16	0.09269	0.3113	0.09009	567565.16	4148330.16	567565.16_4148330.16	0.09757	0.34066	0.14684
567585.16	4148330.16	567585.16_4148330.16	0.09823	0.34261	0.09589	567585.16	4148330.16	567585.16_4148330.16	0.10331	0.37439	0.15663
567605.16	4148330.16	567605.16_4148330.16	0.10403	0.37643	0.10193	567605.16	4148330.16	567605.16_4148330.16	0.10946	0.41128	0.16697
567625.16	4148330.16	567625.16_4148330.16	0.11014	0.41283	0.10804	567625.16	4148330.16	567625.16_4148330.16	0.11605	0.45149	0.1776
567645.16	4148330.16	567645.16_4148330.16	0.11636	0.45039	0.11388	567645.16	4148330.16	567645.16_4148330.16	0.12302	0.49439	0.18808
567665.16	4148330.16	567665.16_4148330.16	0.12312	0.49133	0.1199	567665.16	4148330.16	567665.16_4148330.16	0.13065	0.54137	0.19841
567725.16	4148330.16	567725.16_4148330.16	0.14977	0.64499	0.14371	567725.16	4148330.16	567725.16_4148330.16	0.16024	0.713	0.23317

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567745.16	4148330.16	567745.16_4148330.16	0.1611	0.70485	0.15411	567745.16	4148330.16	567745.16_4148330.16	0.17271	0.77924	0.24844
567765.16	4148330.16	567765.16_4148330.16	0.17356	0.76617	0.16619	567765.16	4148330.16	567765.16_4148330.16	0.18653	0.84814	0.26668
567785.16	4148330.16	567785.16_4148330.16	0.18821	0.83313	0.18134	567785.16	4148330.16	567785.16_4148330.16	0.20247	0.92142	0.28898
567805.16	4148330.16	567805.16_4148330.16	0.20432	0.89995	0.19889	567805.16	4148330.16	567805.16_4148330.16	0.22021	0.9957	0.31448
567825.16	4148330.16	567825.16_4148330.16	0.22295	0.97041	0.21886	567825.16	4148330.16	567825.16_4148330.16	0.24058	1.07229	0.34324
567845.16	4148330.16	567845.16_4148330.16	0.24416	1.04233	0.24033	567845.16	4148330.16	567845.16_4148330.16	0.26378	1.14948	0.37473
567865.16	4148330.16	567865.16_4148330.16	0.26696	1.10752	0.26232	567865.16	4148330.16	567865.16_4148330.16	0.2893	1.22271	0.40845
567885.16	4148330.16	567885.16_4148330.16	0.29276	1.17057	0.28709	567885.16	4148330.16	567885.16_4148330.16	0.31808	1.29346	0.44638
567905.16	4148330.16	567905.16_4148330.16	0.32252	1.23319	0.31682	567905.16	4148330.16	567905.16_4148330.16	0.35071	1.36168	0.49037
567925.16	4148330.16	567925.16_4148330.16	0.35438	1.28534	0.35054	567925.16	4148330.16	567925.16_4148330.16	0.38603	1.42203	0.53978
567945.16	4148330.16	567945.16_4148330.16	0.38938	1.3322	0.389	567945.16	4148330.16	567945.16_4148330.16	0.42465	1.47614	0.59562
567965.16	4148330.16	567965.16_4148330.16	0.42686	1.37225	0.43073	567965.16	4148330.16	567965.16_4148330.16	0.46611	1.52276	0.65737
567985.16	4148330.16	567985.16_4148330.16	0.46686	1.40699	0.47456	567985.16	4148330.16	567985.16_4148330.16	0.51029	1.5622	0.7251
568005.16	4148330.16	568005.16_4148330.16	0.5071	1.4294	0.51746	568005.16	4148330.16	568005.16_4148330.16	0.55563	1.59154	0.79724
568025.16	4148330.16	568025.16_4148330.16	0.54896	1.44501	0.56066	568025.16	4148330.16	568025.16_4148330.16	0.60258	1.61335	0.87495
568045.16	4148330.16	568045.16_4148330.16	0.59333	1.4569	0.60623	568045.16	4148330.16	568045.16_4148330.16	0.65129	1.6293	0.95857
568065.16	4148330.16	568065.16_4148330.16	0.63749	1.45904	0.65251	568065.16	4148330.16	568065.16_4148330.16	0.7001	1.63767	1.04464
568085.16	4148330.16	568085.16_4148330.16	0.6811	1.45437	0.69846	568085.16	4148330.16	568085.16_4148330.16	0.74873	1.64046	1.13005
568105.16	4148330.16	568105.16_4148330.16	0.72607	1.45131	0.7447	568105.16	4148330.16	568105.16_4148330.16	0.79822	1.64169	1.21363
568125.16	4148330.16	568125.16_4148330.16	0.77006	1.44715	0.78927	568125.16	4148330.16	568125.16_4148330.16	0.84703	1.64121	1.29296
568145.16	4148330.16	568145.16_4148330.16	0.81383	1.44546	0.83341	568145.16	4148330.16	568145.16_4148330.16	0.89522	1.64107	1.36899
568165.16	4148330.16	568165.16_4148330.16	0.85393	1.44012	0.87353	568165.16	4148330.16	568165.16_4148330.16	0.94076	1.63996	1.43995
568185.16	4148330.16	568185.16_4148330.16	0.89272	1.43615	0.91161	568185.16	4148330.16	568185.16_4148330.16	0.9848	1.64016	1.50765
568205.16	4148330.16	568205.16_4148330.16	0.93053	1.43367	0.94868	568205.16	4148330.16	568205.16_4148330.16	1.02766	1.64203	1.57356
568225.16	4148330.16	568225.16_4148330.16	0.96907	1.43526	0.98736	568225.16	4148330.16	568225.16_4148330.16	1.07049	1.64645	1.64059
568245.16	4148330.16	568245.16_4148330.16	1.0058	1.43624	1.02539	568245.16	4148330.16	568245.16_4148330.16	1.11244	1.65201	1.70776
568265.16	4148330.16	568265.16_4148330.16	1.04476	1.44373	1.0659	568265.16	4148330.16	568265.16_4148330.16	1.15584	1.66044	1.77732
568285.16	4148330.16	568285.16_4148330.16	1.0828	1.45245	1.10513	568285.16	4148330.16	568285.16_4148330.16	1.19942	1.66994	1.84707
568305.16	4148330.16	568305.16_4148330.16	1.12399	1.46849	1.14665	568305.16	4148330.16	568305.16_4148330.16	1.24533	1.68156	1.92061
568325.16	4148330.16	568325.16_4148330.16	1.16508	1.48553	1.18743	568325.16	4148330.16	568325.16_4148330.16	1.29195	1.69315	1.99769
568345.16	4148330.16	568345.16_4148330.16	1.20563	1.50171	1.22728	568345.16	4148330.16	568345.16_4148330.16	1.33907	1.70377	2.07972
568365.16	4148330.16	568365.16_4148330.16	1.24536	1.51541	1.26627	568365.16	4148330.16	568365.16_4148330.16	1.38652	1.71252	2.16766
568385.16	4148330.16	568385.16_4148330.16	1.28845	1.53079	1.30886	568385.16	4148330.16	568385.16_4148330.16	1.43615	1.71982	2.265
568405.16	4148330.16	568405.16_4148330.16	1.33455	1.54582	1.35539	568405.16	4148330.16	568405.16_4148330.16	1.4877	1.72471	2.3721
568425.16	4148330.16	568425.16_4148330.16	1.38096	1.55639	1.40352	568425.16	4148330.16	568425.16_4148330.16	1.5399	1.72598	2.48728
568485.16	4148330.16	568485.16_4148330.16	1.51673	1.557	1.54886	568485.16	4148330.16	568485.16_4148330.16	1.69676	1.70497	2.86591
568505.16	4148330.16	568505.16_4148330.16	1.55733	1.54567	1.59282	568505.16	4148330.16	568505.16_4148330.16	1.7468	1.68929	2.99558
568525.16	4148330.16	568525.16_4148330.16	1.60858	1.5403	1.64649	568525.16	4148330.16	568525.16_4148330.16	1.80063	1.67191	3.13334
568545.16	4148330.16	568545.16_4148330.16	1.64843	1.52363	1.68888	568545.16	4148330.16	568545.16_4148330.16	1.84811	1.64936	3.2639

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568565.16	4148330.16	568565.16_4148330.16	1.67042	1.49341	1.71332	568565.16	4148330.16	568565.16_4148330.16	1.88611	1.62147	3.38183
568585.16	4148330.16	568585.16_4148330.16	1.69639	1.46636	1.73984	568585.16	4148330.16	568585.16_4148330.16	1.92308	1.59204	3.49966
568605.16	4148330.16	568605.16_4148330.16	1.72728	1.44286	1.76955	568605.16	4148330.16	568605.16_4148330.16	1.9586	1.56153	3.61653
568625.16	4148330.16	568625.16_4148330.16	1.77063	1.42654	1.81041	568625.16	4148330.16	568625.16_4148330.16	1.99463	1.53095	3.73544
568645.16	4148330.16	568645.16_4148330.16	1.79357	1.3988	1.83234	568645.16	4148330.16	568645.16_4148330.16	2.01815	1.49668	3.8358
568665.16	4148330.16	568665.16_4148330.16	1.79529	1.36144	1.83501	568665.16	4148330.16	568665.16_4148330.16	2.02925	1.45952	3.91656
568685.16	4148330.16	568685.16_4148330.16	1.80833	1.33164	1.84824	568685.16	4148330.16	568685.16_4148330.16	2.04	1.42322	3.99443
568705.16	4148330.16	568705.16_4148330.16	1.81064	1.29838	1.84929	568705.16	4148330.16	568705.16_4148330.16	2.04299	1.38579	4.05741
568725.16	4148330.16	568725.16_4148330.16	1.8038	1.26245	1.84066	568725.16	4148330.16	568725.16_4148330.16	2.03963	1.34766	4.11092
567325.16	4148350.16	567325.16_4148350.16	0.05396	0.12794	0.05303	567325.16	4148350.16	567325.16_4148350.16	0.05677	0.13627	0.08806
567345.16	4148350.16	567345.16_4148350.16	0.05616	0.13615	0.05536	567345.16	4148350.16	567345.16_4148350.16	0.05901	0.14526	0.09118
567365.16	4148350.16	567365.16_4148350.16	0.05849	0.1451	0.05783	567365.16	4148350.16	567365.16_4148350.16	0.06141	0.15514	0.09448
567385.16	4148350.16	567385.16_4148350.16	0.06107	0.15526	0.06054	567385.16	4148350.16	567385.16_4148350.16	0.06401	0.16625	0.09804
567405.16	4148350.16	567405.16_4148350.16	0.06369	0.16608	0.06332	567405.16	4148350.16	567405.16_4148350.16	0.06672	0.17832	0.10173
567425.16	4148350.16	567425.16_4148350.16	0.06649	0.17805	0.06625	567425.16	4148350.16	567425.16_4148350.16	0.06963	0.19173	0.10567
567445.16	4148350.16	567445.16_4148350.16	0.0696	0.19195	0.06944	567445.16	4148350.16	567445.16_4148350.16	0.07282	0.20701	0.10994
567465.16	4148350.16	567465.16_4148350.16	0.07276	0.20684	0.07256	567465.16	4148350.16	567465.16_4148350.16	0.07618	0.22372	0.11441
567485.16	4148350.16	567485.16_4148350.16	0.07616	0.22355	0.07572	567485.16	4148350.16	567485.16_4148350.16	0.07979	0.24247	0.11925
567505.16	4148350.16	567505.16_4148350.16	0.07996	0.24297	0.07901	567505.16	4148350.16	567505.16_4148350.16	0.0838	0.2639	0.12471
567525.16	4148350.16	567525.16_4148350.16	0.0837	0.2632	0.08212	567525.16	4148350.16	567525.16_4148350.16	0.08794	0.28704	0.13056
567545.16	4148350.16	567545.16_4148350.16	0.08805	0.28724	0.08579	567545.16	4148350.16	567545.16_4148350.16	0.09258	0.31381	0.13752
567565.16	4148350.16	567565.16_4148350.16	0.09287	0.31473	0.09017	567565.16	4148350.16	567565.16_4148350.16	0.09772	0.34415	0.14563
567585.16	4148350.16	567585.16_4148350.16	0.09822	0.34596	0.09541	567585.16	4148350.16	567585.16_4148350.16	0.10335	0.37837	0.15498
567605.16	4148350.16	567605.16_4148350.16	0.10405	0.38083	0.10144	567605.16	4148350.16	567605.16_4148350.16	0.10953	0.41656	0.16539
567625.16	4148350.16	567625.16_4148350.16	0.10987	0.41685	0.10761	567625.16	4148350.16	567625.16_4148350.16	0.11596	0.45742	0.1763
567645.16	4148350.16	567645.16_4148350.16	0.11573	0.45377	0.11367	567645.16	4148350.16	567645.16_4148350.16	0.12271	0.50103	0.18743
567665.16	4148350.16	567665.16_4148350.16	0.123	0.49902	0.12044	567665.16	4148350.16	567665.16_4148350.16	0.13065	0.55178	0.19921
567685.16	4148350.16	567685.16_4148350.16	0.13124	0.55013	0.12776	567685.16	4148350.16	567685.16_4148350.16	0.13965	0.60831	0.21108
567745.16	4148350.16	567745.16_4148350.16	0.1615	0.72794	0.15489	567745.16	4148350.16	567745.16_4148350.16	0.17318	0.80675	0.25047
567765.16	4148350.16	567765.16_4148350.16	0.17435	0.79633	0.16682	567765.16	4148350.16	567765.16_4148350.16	0.18736	0.88253	0.26804
567785.16	4148350.16	567785.16_4148350.16	0.18872	0.86698	0.18098	567785.16	4148350.16	567785.16_4148350.16	0.20325	0.96137	0.28925
567805.16	4148350.16	567805.16_4148350.16	0.20533	0.94181	0.19843	567805.16	4148350.16	567805.16_4148350.16	0.22146	1.04376	0.31485
567825.16	4148350.16	567825.16_4148350.16	0.22425	1.01887	0.21889	567825.16	4148350.16	567825.16_4148350.16	0.24221	1.1281	0.3444
567845.16	4148350.16	567845.16_4148350.16	0.24554	1.09555	0.24131	567845.16	4148350.16	567845.16_4148350.16	0.2657	1.21245	0.3771
567865.16	4148350.16	567865.16_4148350.16	0.26994	1.17296	0.26552	567865.16	4148350.16	567865.16_4148350.16	0.2926	1.29655	0.41317
567885.16	4148350.16	567885.16_4148350.16	0.29681	1.24399	0.29136	567885.16	4148350.16	567885.16_4148350.16	0.32259	1.3762	0.45276
567905.16	4148350.16	567905.16_4148350.16	0.32671	1.30865	0.32073	567905.16	4148350.16	567905.16_4148350.16	0.35606	1.45056	0.49747
567925.16	4148350.16	567925.16_4148350.16	0.3611	1.37168	0.35619	567925.16	4148350.16	567925.16_4148350.16	0.3939	1.52083	0.54956
567945.16	4148350.16	567945.16_4148350.16	0.3977	1.42223	0.39596	567945.16	4148350.16	567945.16_4148350.16	0.43468	1.58125	0.60786

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567965.16	4148350.16	567965.16_4148350.16	0.43771	1.46713	0.44041	567965.16	4148350.16	567965.16_4148350.16	0.47909	1.63416	0.67334
567985.16	4148350.16	567985.16_4148350.16	0.48107	1.50751	0.48818	567985.16	4148350.16	567985.16_4148350.16	0.52694	1.67954	0.74592
568005.16	4148350.16	568005.16_4148350.16	0.52545	1.53578	0.53581	568005.16	4148350.16	568005.16_4148350.16	0.57657	1.71412	0.82393
568025.16	4148350.16	568025.16_4148350.16	0.56988	1.55039	0.58214	568025.16	4148350.16	568025.16_4148350.16	0.62709	1.73763	0.90688
568045.16	4148350.16	568045.16_4148350.16	0.61773	1.56325	0.63148	568045.16	4148350.16	568045.16_4148350.16	0.68	1.75543	0.99709
568065.16	4148350.16	568065.16_4148350.16	0.66646	1.5682	0.68257	568065.16	4148350.16	568065.16_4148350.16	0.73359	1.76577	1.09106
568085.16	4148350.16	568085.16_4148350.16	0.71326	1.56176	0.732	568085.16	4148350.16	568085.16_4148350.16	0.7862	1.76836	1.18342
568105.16	4148350.16	568105.16_4148350.16	0.76259	1.55986	0.78271	568105.16	4148350.16	568105.16_4148350.16	0.84026	1.77021	1.27456
568125.16	4148350.16	568125.16_4148350.16	0.80919	1.55291	0.82986	568125.16	4148350.16	568125.16_4148350.16	0.89265	1.76883	1.35965
568145.16	4148350.16	568145.16_4148350.16	0.85435	1.54663	0.87542	568145.16	4148350.16	568145.16_4148350.16	0.94378	1.76727	1.44054
568165.16	4148350.16	568165.16_4148350.16	0.89963	1.5452	0.92066	568165.16	4148350.16	568165.16_4148350.16	0.99406	1.76768	1.5184
568185.16	4148350.16	568185.16_4148350.16	0.94231	1.54298	0.96264	568185.16	4148350.16	568185.16_4148350.16	1.04207	1.76875	1.59193
568205.16	4148350.16	568205.16_4148350.16	0.98288	1.54064	1.00262	568205.16	4148350.16	568205.16_4148350.16	1.08824	1.77111	1.66283
568225.16	4148350.16	568225.16_4148350.16	1.02141	1.53808	1.04164	568225.16	4148350.16	568225.16_4148350.16	1.13298	1.77489	1.73298
568245.16	4148350.16	568245.16_4148350.16	1.06446	1.54679	1.08599	568245.16	4148350.16	568245.16_4148350.16	1.18001	1.78312	1.80772
568265.16	4148350.16	568265.16_4148350.16	1.1043	1.55278	1.12741	568265.16	4148350.16	568265.16_4148350.16	1.22587	1.79158	1.88145
568285.16	4148350.16	568285.16_4148350.16	1.14596	1.56469	1.16996	568285.16	4148350.16	568285.16_4148350.16	1.27341	1.80209	1.95773
568305.16	4148350.16	568305.16_4148350.16	1.18997	1.5822	1.21392	568305.16	4148350.16	568305.16_4148350.16	1.32303	1.81389	2.03836
568325.16	4148350.16	568325.16_4148350.16	1.23421	1.60037	1.25746	568325.16	4148350.16	568325.16_4148350.16	1.37367	1.82512	2.12397
568345.16	4148350.16	568345.16_4148350.16	1.28042	1.61992	1.30249	568345.16	4148350.16	568345.16_4148350.16	1.4261	1.83531	2.21735
568365.16	4148350.16	568365.16_4148350.16	1.32499	1.6342	1.34618	568365.16	4148350.16	568365.16_4148350.16	1.47858	1.84238	2.31744
568385.16	4148350.16	568385.16_4148350.16	1.37155	1.64683	1.39259	568385.16	4148350.16	568385.16_4148350.16	1.53277	1.84661	2.42732
568405.16	4148350.16	568405.16_4148350.16	1.42313	1.66009	1.4451	568405.16	4148350.16	568405.16_4148350.16	1.58995	1.84805	2.54919
568485.16	4148350.16	568485.16_4148350.16	1.62735	1.65361	1.66342	568485.16	4148350.16	568485.16_4148350.16	1.82352	1.80726	3.10342
568505.16	4148350.16	568505.16_4148350.16	1.67421	1.63714	1.71404	568505.16	4148350.16	568505.16_4148350.16	1.88041	1.78541	3.24791
568525.16	4148350.16	568525.16_4148350.16	1.72692	1.62238	1.76932	568525.16	4148350.16	568525.16_4148350.16	1.93908	1.7608	3.39688
568545.16	4148350.16	568545.16_4148350.16	1.77647	1.60266	1.82074	568545.16	4148350.16	568545.16_4148350.16	1.9948	1.7324	3.5435
568565.16	4148350.16	568565.16_4148350.16	1.79998	1.56427	1.84667	568565.16	4148350.16	568565.16_4148350.16	2.03749	1.6977	3.67255
568585.16	4148350.16	568585.16_4148350.16	1.83655	1.53509	1.88389	568585.16	4148350.16	568585.16_4148350.16	2.08249	1.66283	3.80716
568605.16	4148350.16	568605.16_4148350.16	1.87597	1.50798	1.92287	568605.16	4148350.16	568605.16_4148350.16	2.1245	1.62671	3.93923
568625.16	4148350.16	568625.16_4148350.16	1.91055	1.47873	1.95652	568625.16	4148350.16	568625.16_4148350.16	2.15969	1.58879	4.06247
568645.16	4148350.16	568645.16_4148350.16	1.93304	1.44439	1.97869	568645.16	4148350.16	568645.16_4148350.16	2.18488	1.54883	4.17129
568665.16	4148350.16	568665.16_4148350.16	1.95048	1.40949	1.99672	568665.16	4148350.16	568665.16_4148350.16	2.20263	1.50808	4.26797
568685.16	4148350.16	568685.16_4148350.16	1.95525	1.37108	2.00225	568685.16	4148350.16	568685.16_4148350.16	2.21046	1.46625	4.34611
568705.16	4148350.16	568705.16_4148350.16	1.9525	1.3319	1.99836	568705.16	4148350.16	568705.16_4148350.16	2.21097	1.42415	4.40898
568725.16	4148350.16	568725.16_4148350.16	1.942	1.29161	1.98586	568725.16	4148350.16	568725.16_4148350.16	2.20506	1.38194	4.46187
567325.16	4148370.16	567325.16_4148370.16	0.0538	0.12768	0.0525	567325.16	4148370.16	567325.16_4148370.16	0.05672	0.13606	0.08857
567345.16	4148370.16	567345.16_4148370.16	0.05593	0.13586	0.05482	567345.16	4148370.16	567345.16_4148370.16	0.05893	0.14503	0.09167
567365.16	4148370.16	567365.16_4148370.16	0.05836	0.14523	0.0574	567365.16	4148370.16	567365.16_4148370.16	0.0614	0.15515	0.09505

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567385.16	4148370.16	567385.16_4148370.16	0.06083	0.15514	0.06002	567385.16	4148370.16	567385.16_4148370.16	0.06393	0.16612	0.09856
567405.16	4148370.16	567405.16_4148370.16	0.06346	0.16604	0.06279	567405.16	4148370.16	567405.16_4148370.16	0.06664	0.17826	0.10229
567425.16	4148370.16	567425.16_4148370.16	0.06639	0.17856	0.06587	567425.16	4148370.16	567425.16_4148370.16	0.06961	0.19203	0.10634
567445.16	4148370.16	567445.16_4148370.16	0.06943	0.19218	0.06906	567445.16	4148370.16	567445.16_4148370.16	0.07276	0.20721	0.11059
567465.16	4148370.16	567465.16_4148370.16	0.07264	0.20723	0.07237	567465.16	4148370.16	567465.16_4148370.16	0.07613	0.2241	0.1151
567485.16	4148370.16	567485.16_4148370.16	0.07609	0.22423	0.07584	567485.16	4148370.16	567485.16_4148370.16	0.07978	0.24313	0.11994
567505.16	4148370.16	567505.16_4148370.16	0.07992	0.24384	0.07944	567505.16	4148370.16	567505.16_4148370.16	0.08378	0.26485	0.12527
567525.16	4148370.16	567525.16_4148370.16	0.08386	0.26517	0.08295	567525.16	4148370.16	567525.16_4148370.16	0.08803	0.28886	0.13101
567545.16	4148370.16	567545.16_4148370.16	0.0882	0.28955	0.08663	567545.16	4148370.16	567545.16_4148370.16	0.09269	0.31613	0.1375
567565.16	4148370.16	567565.16_4148370.16	0.09298	0.31743	0.09068	567565.16	4148370.16	567565.16_4148370.16	0.09779	0.3471	0.145
567585.16	4148370.16	567585.16_4148370.16	0.09829	0.34944	0.09546	567585.16	4148370.16	567585.16_4148370.16	0.10344	0.38231	0.15376
567605.16	4148370.16	567605.16_4148370.16	0.10333	0.38126	0.10033	567605.16	4148370.16	567605.16_4148370.16	0.10916	0.41937	0.16317
567625.16	4148370.16	567625.16_4148370.16	0.10913	0.41836	0.10639	567625.16	4148370.16	567625.16_4148370.16	0.11561	0.46175	0.1741
567645.16	4148370.16	567645.16_4148370.16	0.11552	0.45959	0.1132	567645.16	4148370.16	567645.16_4148370.16	0.12268	0.50895	0.1861
567665.16	4148370.16	567665.16_4148370.16	0.12302	0.50792	0.12074	567665.16	4148370.16	567665.16_4148370.16	0.13078	0.56282	0.19902
567685.16	4148370.16	567685.16_4148370.16	0.13162	0.56323	0.12874	567685.16	4148370.16	567685.16_4148370.16	0.14001	0.62343	0.21239
567705.16	4148370.16	567705.16_4148370.16	0.1405	0.62014	0.13668	567705.16	4148370.16	567705.16_4148370.16	0.14987	0.68783	0.22537
567765.16	4148370.16	567765.16_4148370.16	0.17483	0.82547	0.16761	567765.16	4148370.16	567765.16_4148370.16	0.18794	0.91732	0.27013
567785.16	4148370.16	567785.16_4148370.16	0.18921	0.90201	0.18115	567785.16	4148370.16	567785.16_4148370.16	0.20398	1.00322	0.29023
567805.16	4148370.16	567805.16_4148370.16	0.20637	0.98641	0.19829	567805.16	4148370.16	567805.16_4148370.16	0.22271	1.095	0.31545
567825.16	4148370.16	567825.16_4148370.16	0.22529	1.06934	0.21838	567825.16	4148370.16	567825.16_4148370.16	0.24365	1.18729	0.3449
567845.16	4148370.16	567845.16_4148370.16	0.24705	1.15426	0.24176	567845.16	4148370.16	567845.16_4148370.16	0.2677	1.28111	0.37882
567865.16	4148370.16	567865.16_4148370.16	0.27212	1.24009	0.26757	567865.16	4148370.16	567865.16_4148370.16	0.29537	1.37505	0.41674
567885.16	4148370.16	567885.16_4148370.16	0.3007	1.32382	0.29553	567885.16	4148370.16	567885.16_4148370.16	0.32695	1.46666	0.45877
567905.16	4148370.16	567905.16_4148370.16	0.33143	1.3944	0.32547	567905.16	4148370.16	567905.16_4148370.16	0.36168	1.54975	0.505
567925.16	4148370.16	567925.16_4148370.16	0.36751	1.46557	0.36185	567925.16	4148370.16	567925.16_4148370.16	0.40158	1.6296	0.55919
567945.16	4148370.16	567945.16_4148370.16	0.40667	1.52453	0.40358	567945.16	4148370.16	567945.16_4148370.16	0.44519	1.69926	0.62065
567965.16	4148370.16	567965.16_4148370.16	0.45043	1.57938	0.45175	567965.16	4148370.16	567965.16_4148370.16	0.49342	1.76143	0.69089
567985.16	4148370.16	567985.16_4148370.16	0.49581	1.61937	0.50213	567985.16	4148370.16	567985.16_4148370.16	0.54429	1.81085	0.76751
568005.16	4148370.16	568005.16_4148370.16	0.54356	1.65022	0.55388	568005.16	4148370.16	568005.16_4148370.16	0.59805	1.84989	0.85112
568025.16	4148370.16	568025.16_4148370.16	0.59368	1.67309	0.60642	568025.16	4148370.16	568025.16_4148370.16	0.65422	1.87927	0.94202
568045.16	4148370.16	568045.16_4148370.16	0.64318	1.67971	0.65782	568045.16	4148370.16	568045.16_4148370.16	0.71061	1.89632	1.03786
568065.16	4148370.16	568065.16_4148370.16	0.69604	1.68514	0.71331	568065.16	4148370.16	568065.16_4148370.16	0.76905	1.90794	1.13997
568085.16	4148370.16	568085.16_4148370.16	0.75066	1.68797	0.77077	568085.16	4148370.16	568085.16_4148370.16	0.82856	1.91456	1.24355
568105.16	4148370.16	568105.16_4148370.16	0.8018	1.67945	0.82356	568105.16	4148370.16	568105.16_4148370.16	0.88609	1.91421	1.34088
568125.16	4148370.16	568125.16_4148370.16	0.85305	1.67339	0.87527	568125.16	4148370.16	568125.16_4148370.16	0.94345	1.91324	1.43376
568145.16	4148370.16	568145.16_4148370.16	0.90217	1.66694	0.9247	568145.16	4148370.16	568145.16_4148370.16	0.99905	1.91172	1.52147
568165.16	4148370.16	568165.16_4148370.16	0.94702	1.65707	0.96961	568165.16	4148370.16	568165.16_4148370.16	1.0515	1.90962	1.60312
568185.16	4148370.16	568185.16_4148370.16	0.99701	1.66326	1.01888	568185.16	4148370.16	568185.16_4148370.16	1.10541	1.91367	1.68504

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568205.16	4148370.16	568205.16_4148370.16	1.03952	1.65919	1.06108	568205.16	4148370.16	568205.16_4148370.16	1.1547	1.91597	1.76072
568225.16	4148370.16	568225.16_4148370.16	1.08274	1.66075	1.10501	568225.16	4148370.16	568225.16_4148370.16	1.20388	1.92141	1.83759
568245.16	4148370.16	568245.16_4148370.16	1.12801	1.66965	1.15177	568245.16	4148370.16	568245.16_4148370.16	1.25416	1.93006	1.91748
568265.16	4148370.16	568265.16_4148370.16	1.1694	1.6749	1.19472	568265.16	4148370.16	568265.16_4148370.16	1.30306	1.93853	1.99632
568285.16	4148370.16	568285.16_4148370.16	1.2184	1.6956	1.24404	568285.16	4148370.16	568285.16_4148370.16	1.3567	1.95103	2.08241
568305.16	4148370.16	568305.16_4148370.16	1.26315	1.71013	1.28838	568305.16	4148370.16	568305.16_4148370.16	1.40928	1.96141	2.16983
568325.16	4148370.16	568325.16_4148370.16	1.31028	1.72767	1.33434	568325.16	4148370.16	568325.16_4148370.16	1.46409	1.9712	2.26515
568345.16	4148370.16	568345.16_4148370.16	1.35974	1.74573	1.38242	568345.16	4148370.16	568345.16_4148370.16	1.52105	1.97907	2.37007
568365.16	4148370.16	568365.16_4148370.16	1.41263	1.76354	1.43433	568365.16	4148370.16	568365.16_4148370.16	1.58052	1.98417	2.48648
568385.16	4148370.16	568385.16_4148370.16	1.4636	1.77269	1.48576	568385.16	4148370.16	568385.16_4148370.16	1.64006	1.98417	2.61161
568445.16	4148370.16	568445.16_4148370.16	1.62292	1.768	1.65486	568445.16	4148370.16	568445.16_4148370.16	1.82703	1.95493	3.04252
568465.16	4148370.16	568465.16_4148370.16	1.67916	1.75739	1.71591	568465.16	4148370.16	568465.16_4148370.16	1.89232	1.93549	3.19979
568485.16	4148370.16	568485.16_4148370.16	1.74404	1.7491	1.78492	568485.16	4148370.16	568485.16_4148370.16	1.96184	1.9128	3.36565
568505.16	4148370.16	568505.16_4148370.16	1.79765	1.72669	1.84237	568505.16	4148370.16	568505.16_4148370.16	2.02634	1.88374	3.52562
568525.16	4148370.16	568525.16_4148370.16	1.85925	1.70705	1.90607	568525.16	4148370.16	568525.16_4148370.16	2.09359	1.85214	3.69116
568545.16	4148370.16	568545.16_4148370.16	1.91554	1.6807	1.9638	568545.16	4148370.16	568545.16_4148370.16	2.15693	1.81644	3.85292
568565.16	4148370.16	568565.16_4148370.16	1.96087	1.64591	2.01076	568565.16	4148370.16	568565.16_4148370.16	2.21319	1.77675	4.00681
568585.16	4148370.16	568585.16_4148370.16	1.99907	1.60714	2.05077	568585.16	4148370.16	568585.16_4148370.16	2.26307	1.73442	4.15401
568605.16	4148370.16	568605.16_4148370.16	2.03171	1.56673	2.08498	568605.16	4148370.16	568605.16_4148370.16	2.30624	1.69033	4.29371
568625.16	4148370.16	568625.16_4148370.16	2.06854	1.53048	2.12237	568625.16	4148370.16	568625.16_4148370.16	2.34545	1.64604	4.42925
568645.16	4148370.16	568645.16_4148370.16	2.09172	1.48974	2.14587	568645.16	4148370.16	568645.16_4148370.16	2.3732	1.60019	4.54811
568665.16	4148370.16	568665.16_4148370.16	2.10677	1.44818	2.16169	568665.16	4148370.16	568665.16_4148370.16	2.39137	1.55386	4.65095
568685.16	4148370.16	568685.16_4148370.16	2.10846	1.40408	2.16415	568685.16	4148370.16	568685.16_4148370.16	2.39827	1.50699	4.73251
568705.16	4148370.16	568705.16_4148370.16	2.10572	1.36152	2.16009	568705.16	4148370.16	568705.16_4148370.16	2.39797	1.46065	4.79817
568725.16	4148370.16	568725.16_4148370.16	2.09619	1.31898	2.14804	568725.16	4148370.16	568725.16_4148370.16	2.39083	1.41476	4.85306
567325.16	4148390.16	567325.16_4148390.16	0.05369	0.12721	0.05198	567325.16	4148390.16	567325.16_4148390.16	0.05671	0.13576	0.08917
567345.16	4148390.16	567345.16_4148390.16	0.05578	0.13546	0.05428	567345.16	4148390.16	567345.16_4148390.16	0.05889	0.14476	0.09227
567365.16	4148390.16	567365.16_4148390.16	0.05817	0.14491	0.05686	567365.16	4148390.16	567365.16_4148390.16	0.06136	0.15492	0.09565
567385.16	4148390.16	567385.16_4148390.16	0.0606	0.15489	0.05949	567385.16	4148390.16	567385.16_4148390.16	0.06389	0.16593	0.09917
567405.16	4148390.16	567405.16_4148390.16	0.06329	0.16614	0.06234	567405.16	4148390.16	567405.16_4148390.16	0.06662	0.17829	0.10297
567425.16	4148390.16	567425.16_4148390.16	0.06619	0.17866	0.06539	567425.16	4148390.16	567425.16_4148390.16	0.06957	0.19208	0.10703
567445.16	4148390.16	567445.16_4148390.16	0.06921	0.19228	0.06857	567445.16	4148390.16	567445.16_4148390.16	0.0727	0.20731	0.1113
567465.16	4148390.16	567465.16_4148390.16	0.07245	0.20749	0.07196	567465.16	4148390.16	567465.16_4148390.16	0.07608	0.22436	0.11586
567485.16	4148390.16	567485.16_4148390.16	0.07605	0.22511	0.07568	567485.16	4148390.16	567485.16_4148390.16	0.07979	0.24388	0.12083
567505.16	4148390.16	567505.16_4148390.16	0.07981	0.24453	0.07948	567505.16	4148390.16	567505.16_4148390.16	0.08376	0.26562	0.12609
567525.16	4148390.16	567525.16_4148390.16	0.08385	0.26641	0.08337	567525.16	4148390.16	567525.16_4148390.16	0.08804	0.29016	0.13177
567545.16	4148390.16	567545.16_4148390.16	0.08832	0.29175	0.08742	567545.16	4148390.16	567545.16_4148390.16	0.09277	0.31829	0.13811
567565.16	4148390.16	567565.16_4148390.16	0.09313	0.32027	0.09158	567565.16	4148390.16	567565.16_4148390.16	0.09791	0.35003	0.14518
567585.16	4148390.16	567585.16_4148390.16	0.09777	0.34955	0.0955	567585.16	4148390.16	567585.16_4148390.16	0.10317	0.38409	0.15275

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567605.16	4148390.16	567605.16_4148390.16	0.10399	0.38862	0.10104	567605.16	4148390.16	567605.16_4148390.16	0.10961	0.42618	0.16253
567625.16	4148390.16	567625.16_4148390.16	0.10939	0.42491	0.10617	567625.16	4148390.16	567625.16_4148390.16	0.11582	0.46888	0.17259
567645.16	4148390.16	567645.16_4148390.16	0.11574	0.46772	0.11272	567645.16	4148390.16	567645.16_4148390.16	0.12292	0.51809	0.18446
567665.16	4148390.16	567665.16_4148390.16	0.12347	0.51941	0.12076	567665.16	4148390.16	567665.16_4148390.16	0.13119	0.5753	0.19808
567685.16	4148390.16	567685.16_4148390.16	0.13175	0.57528	0.12909	567685.16	4148390.16	567685.16_4148390.16	0.14021	0.63799	0.21234
567705.16	4148390.16	567705.16_4148390.16	0.14124	0.63874	0.13796	567705.16	4148390.16	567705.16_4148390.16	0.15046	0.70824	0.22712
567725.16	4148390.16	567725.16_4148390.16	0.15147	0.70628	0.14716	567725.16	4148390.16	567725.16_4148390.16	0.16175	0.78411	0.24183
567785.16	4148390.16	567785.16_4148390.16	0.19023	0.94169	0.18231	567785.16	4148390.16	567785.16_4148390.16	0.20499	1.04885	0.29276
567805.16	4148390.16	567805.16_4148390.16	0.20722	1.0322	0.19852	567805.16	4148390.16	567805.16_4148390.16	0.22379	1.14879	0.31661
567825.16	4148390.16	567825.16_4148390.16	0.22676	1.12626	0.21838	567825.16	4148390.16	567825.16_4148390.16	0.24533	1.25226	0.34581
567845.16	4148390.16	567845.16_4148390.16	0.24875	1.21917	0.24185	567845.16	4148390.16	567845.16_4148390.16	0.26978	1.35614	0.38011
567865.16	4148390.16	567865.16_4148390.16	0.27382	1.31087	0.26851	567865.16	4148390.16	567865.16_4148390.16	0.29778	1.45951	0.41918
567885.16	4148390.16	567885.16_4148390.16	0.30362	1.40639	0.29856	567885.16	4148390.16	567885.16_4148390.16	0.33064	1.56367	0.46361
567905.16	4148390.16	567905.16_4148390.16	0.3375	1.49665	0.33161	567905.16	4148390.16	567905.16_4148390.16	0.36811	1.66293	0.5134
567925.16	4148390.16	567925.16_4148390.16	0.37356	1.56782	0.36753	567925.16	4148390.16	567925.16_4148390.16	0.40901	1.74964	0.56857
567945.16	4148390.16	567945.16_4148390.16	0.41612	1.64038	0.41182	567945.16	4148390.16	567945.16_4148390.16	0.45607	1.83194	0.63389
567965.16	4148390.16	567965.16_4148390.16	0.46162	1.69679	0.46157	567965.16	4148390.16	567965.16_4148390.16	0.50704	1.90071	0.70738
567985.16	4148390.16	567985.16_4148390.16	0.51073	1.74305	0.51614	567985.16	4148390.16	567985.16_4148390.16	0.56219	1.9579	0.78956
568005.16	4148390.16	568005.16_4148390.16	0.56151	1.77425	0.57179	568005.16	4148390.16	568005.16_4148390.16	0.62013	2.00118	0.87883
568025.16	4148390.16	568025.16_4148390.16	0.61785	1.8067	0.63115	568025.16	4148390.16	568025.16_4148390.16	0.68264	2.03757	0.97854
568045.16	4148390.16	568045.16_4148390.16	0.67295	1.81752	0.68848	568045.16	4148390.16	568045.16_4148390.16	0.74508	2.05834	1.08351
568065.16	4148390.16	568065.16_4148390.16	0.72977	1.82079	0.74824	568065.16	4148390.16	568065.16_4148390.16	0.80872	2.07036	1.19435
568085.16	4148390.16	568085.16_4148390.16	0.78772	1.81939	0.80946	568085.16	4148390.16	568085.16_4148390.16	0.87298	2.07606	1.30645
568105.16	4148390.16	568105.16_4148390.16	0.8462	1.81706	0.86971	568105.16	4148390.16	568105.16_4148390.16	0.93743	2.07824	1.41496
568125.16	4148390.16	568125.16_4148390.16	0.90018	1.80599	0.92411	568125.16	4148390.16	568125.16_4148390.16	0.99905	2.07561	1.51483
568145.16	4148390.16	568145.16_4148390.16	0.95214	1.79608	0.97624	568145.16	4148390.16	568145.16_4148390.16	1.05891	2.07308	1.60927
568165.16	4148390.16	568165.16_4148390.16	1.00524	1.7955	1.02928	568165.16	4148390.16	568165.16_4148390.16	1.11822	2.0742	1.70078
568185.16	4148390.16	568185.16_4148390.16	1.05196	1.78792	1.07563	568185.16	4148390.16	568185.16_4148390.16	1.173	2.07435	1.78464
568205.16	4148390.16	568205.16_4148390.16	1.10097	1.79102	1.12457	568205.16	4148390.16	568205.16_4148390.16	1.22791	2.07922	1.86856
568225.16	4148390.16	568225.16_4148390.16	1.14943	1.79766	1.17401	568225.16	4148390.16	568225.16_4148390.16	1.28204	2.08644	1.95295
568245.16	4148390.16	568245.16_4148390.16	1.19413	1.80127	1.22053	568245.16	4148390.16	568245.16_4148390.16	1.33443	2.09385	2.03658
568265.16	4148390.16	568265.16_4148390.16	1.24013	1.81069	1.26785	568265.16	4148390.16	568265.16_4148390.16	1.38819	2.10322	2.12335
568285.16	4148390.16	568285.16_4148390.16	1.29157	1.83131	1.31928	568285.16	4148390.16	568285.16_4148390.16	1.44581	2.11499	2.21719
568305.16	4148390.16	568305.16_4148390.16	1.34495	1.85441	1.37144	568305.16	4148390.16	568305.16_4148390.16	1.50559	2.126	2.31799
568325.16	4148390.16	568325.16_4148390.16	1.39377	1.86774	1.41876	568325.16	4148390.16	568325.16_4148390.16	1.56438	2.13258	2.42399
568345.16	4148390.16	568345.16_4148390.16	1.44798	1.88442	1.47147	568345.16	4148390.16	568345.16_4148390.16	1.62691	2.13706	2.54346
568365.16	4148390.16	568365.16_4148390.16	1.50744	1.90121	1.53025	568365.16	4148390.16	568365.16_4148390.16	1.69294	2.13799	2.67736
568405.16	4148390.16	568405.16_4148390.16	1.62405	1.90718	1.65093	568405.16	4148390.16	568405.16_4148390.16	1.8273	2.1216	2.97576
568425.16	4148390.16	568425.16_4148390.16	1.68003	1.89586	1.71142	568425.16	4148390.16	568425.16_4148390.16	1.89515	2.10379	3.13603

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568445.16	4148390.16	568445.16_4148390.16	1.73863	1.88051	1.77528	568445.16	4148390.16	568445.16_4148390.16	1.96526	2.08079	3.30342
568465.16	4148390.16	568465.16_4148390.16	1.80374	1.86502	1.84547	568465.16	4148390.16	568465.16_4148390.16	2.03928	2.05359	3.47868
568485.16	4148390.16	568485.16_4148390.16	1.8722	1.84652	1.91826	568485.16	4148390.16	568485.16_4148390.16	2.11542	2.0219	3.65847
568505.16	4148390.16	568505.16_4148390.16	1.93813	1.82089	1.98743	568505.16	4148390.16	568505.16_4148390.16	2.19052	1.98528	3.83797
568525.16	4148390.16	568525.16_4148390.16	1.99683	1.78636	2.04845	568525.16	4148390.16	568525.16_4148390.16	2.26193	1.94384	4.01346
568565.16	4148390.16	568565.16_4148390.16	2.11764	1.71398	2.17243	568565.16	4148390.16	568565.16_4148390.16	2.40047	1.85323	4.36635
568585.16	4148390.16	568585.16_4148390.16	2.16277	1.66857	2.22077	568585.16	4148390.16	568585.16_4148390.16	2.45838	1.80359	4.53132
568605.16	4148390.16	568605.16_4148390.16	2.20377	1.62298	2.26518	568605.16	4148390.16	568605.16_4148390.16	2.50957	1.75285	4.68943
568625.16	4148390.16	568625.16_4148390.16	2.24276	1.57919	2.30636	568625.16	4148390.16	568625.16_4148390.16	2.5536	1.70185	4.83871
568645.16	4148390.16	568645.16_4148390.16	2.26215	1.52986	2.32681	568645.16	4148390.16	568645.16_4148390.16	2.58292	1.64951	4.96592
568665.16	4148390.16	568665.16_4148390.16	2.28882	1.48753	2.35362	568665.16	4148390.16	568665.16_4148390.16	2.60701	1.59863	5.08359
568685.16	4148390.16	568685.16_4148390.16	2.28868	1.43829	2.3541	568685.16	4148390.16	568685.16_4148390.16	2.61363	1.54676	5.16986
568705.16	4148390.16	568705.16_4148390.16	2.28501	1.39188	2.34889	568705.16	4148390.16	568705.16_4148390.16	2.61207	1.49607	5.23843
568725.16	4148390.16	568725.16_4148390.16	2.26903	1.34446	2.32975	568725.16	4148390.16	568725.16_4148390.16	2.60072	1.446	5.29183
567325.16	4148410.16	567325.16_4148410.16	0.05372	0.12669	0.05167	567325.16	4148410.16	567325.16_4148410.16	0.05677	0.13546	0.08991
567345.16	4148410.16	567345.16_4148410.16	0.05573	0.13496	0.05384	567345.16	4148410.16	567345.16_4148410.16	0.05892	0.14446	0.09298
567365.16	4148410.16	567365.16_4148410.16	0.05806	0.14448	0.05636	567365.16	4148410.16	567365.16_4148410.16	0.06139	0.15464	0.09637
567385.16	4148410.16	567385.16_4148410.16	0.06043	0.15452	0.05896	567385.16	4148410.16	567385.16_4148410.16	0.06387	0.16568	0.09989
567405.16	4148410.16	567405.16_4148410.16	0.06302	0.16565	0.06176	567405.16	4148410.16	567405.16_4148410.16	0.06656	0.17797	0.10366
567425.16	4148410.16	567425.16_4148410.16	0.06596	0.17849	0.06488	567425.16	4148410.16	567425.16_4148410.16	0.06953	0.19197	0.10778
567445.16	4148410.16	567445.16_4148410.16	0.06898	0.19224	0.06807	567445.16	4148410.16	567445.16_4148410.16	0.07265	0.2073	0.11209
567465.16	4148410.16	567465.16_4148410.16	0.07226	0.20774	0.07152	567465.16	4148410.16	567465.16_4148410.16	0.07604	0.22459	0.11672
567485.16	4148410.16	567485.16_4148410.16	0.07591	0.22565	0.07532	567485.16	4148410.16	567485.16_4148410.16	0.07977	0.24437	0.12176
567505.16	4148410.16	567505.16_4148410.16	0.07965	0.24506	0.07921	567505.16	4148410.16	567505.16_4148410.16	0.08371	0.26623	0.12703
567525.16	4148410.16	567525.16_4148410.16	0.08384	0.2677	0.08344	567525.16	4148410.16	567525.16_4148410.16	0.08807	0.29142	0.13281
567545.16	4148410.16	567545.16_4148410.16	0.08827	0.29306	0.08776	567545.16	4148410.16	567545.16_4148410.16	0.09277	0.31982	0.13902
567565.16	4148410.16	567565.16_4148410.16	0.09294	0.32125	0.0921	567565.16	4148410.16	567565.16_4148410.16	0.09781	0.3517	0.14574
567585.16	4148410.16	567585.16_4148410.16	0.09782	0.35239	0.09641	567585.16	4148410.16	567585.16_4148410.16	0.10323	0.38737	0.15309
567605.16	4148410.16	567605.16_4148410.16	0.10349	0.38943	0.10124	567605.16	4148410.16	567605.16_4148410.16	0.10934	0.42888	0.16174
567625.16	4148410.16	567625.16_4148410.16	0.11034	0.43508	0.10729	567625.16	4148410.16	567625.16_4148410.16	0.11644	0.47812	0.17234
567645.16	4148410.16	567645.16_4148410.16	0.11636	0.47784	0.11293	567645.16	4148410.16	567645.16_4148410.16	0.12337	0.52831	0.1833
567665.16	4148410.16	567665.16_4148410.16	0.12354	0.52872	0.12018	567665.16	4148410.16	567665.16_4148410.16	0.13135	0.58648	0.19638
567685.16	4148410.16	567685.16_4148410.16	0.1322	0.58954	0.12908	567685.16	4148410.16	567685.16_4148410.16	0.14062	0.65384	0.21143
567705.16	4148410.16	567705.16_4148410.16	0.14158	0.65564	0.13848	567705.16	4148410.16	567705.16_4148410.16	0.15083	0.72786	0.22735
567725.16	4148410.16	567725.16_4148410.16	0.15142	0.72429	0.14782	567725.16	4148410.16	567725.16_4148410.16	0.16188	0.80712	0.24335
567745.16	4148410.16	567745.16_4148410.16	0.16291	0.80233	0.15818	567745.16	4148410.16	567745.16_4148410.16	0.17463	0.89556	0.25984
567785.16	4148410.16	567785.16_4148410.16	0.19114	0.98251	0.18367	567785.16	4148410.16	567785.16_4148410.16	0.20591	1.09652	0.29641
567805.16	4148410.16	567805.16_4148410.16	0.20817	1.08096	0.19944	567805.16	4148410.16	567805.16_4148410.16	0.22488	1.20612	0.31908
567825.16	4148410.16	567825.16_4148410.16	0.22777	1.18389	0.21846	567825.16	4148410.16	567825.16_4148410.16	0.24667	1.32038	0.34704

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567845.16	4148410.16	567845.16_4148410.16	0.25064	1.29089	0.242	567845.16	4148410.16	567845.16_4148410.16	0.27195	1.43824	0.38144
567865.16	4148410.16	567865.16_4148410.16	0.27598	1.39141	0.26912	567865.16	4148410.16	567865.16_4148410.16	0.30046	1.5534	0.42127
567885.16	4148410.16	567885.16_4148410.16	0.30647	1.49732	0.30086	567885.16	4148410.16	567885.16_4148410.16	0.33425	1.67053	0.46769
567905.16	4148410.16	567905.16_4148410.16	0.34137	1.59779	0.33567	567905.16	4148410.16	567905.16_4148410.16	0.37308	1.78282	0.51981
567925.16	4148410.16	567925.16_4148410.16	0.38025	1.68523	0.37406	567925.16	4148410.16	567925.16_4148410.16	0.4168	1.88519	0.5784
567945.16	4148410.16	567945.16_4148410.16	0.42427	1.76309	0.41908	567945.16	4148410.16	567945.16_4148410.16	0.4662	1.97768	0.64615
567965.16	4148410.16	567965.16_4148410.16	0.47361	1.83119	0.4721	567965.16	4148410.16	567965.16_4148410.16	0.52134	2.05875	0.72452
567985.16	4148410.16	567985.16_4148410.16	0.52697	1.88552	0.53122	567985.16	4148410.16	567985.16_4148410.16	0.5813	2.12555	0.81288
568005.16	4148410.16	568005.16_4148410.16	0.58238	1.92157	0.5924	568005.16	4148410.16	568005.16_4148410.16	0.64465	2.17579	0.90949
568025.16	4148410.16	568025.16_4148410.16	0.64147	1.94938	0.65544	568025.16	4148410.16	568025.16_4148410.16	0.71184	2.21399	1.0158
568045.16	4148410.16	568045.16_4148410.16	0.70599	1.97588	0.72253	568045.16	4148410.16	568045.16_4148410.16	0.78304	2.2436	1.13346
568065.16	4148410.16	568065.16_4148410.16	0.76653	1.9737	0.78641	568065.16	4148410.16	568065.16_4148410.16	0.85222	2.25496	1.25361
568085.16	4148410.16	568085.16_4148410.16	0.82827	1.96698	0.85192	568085.16	4148410.16	568085.16_4148410.16	0.92193	2.25943	1.37549
568105.16	4148410.16	568105.16_4148410.16	0.89444	1.97037	0.92002	568105.16	4148410.16	568105.16_4148410.16	0.99399	2.26405	1.49639
568125.16	4148410.16	568125.16_4148410.16	0.95437	1.96057	0.98017	568125.16	4148410.16	568125.16_4148410.16	1.06205	2.26193	1.60635
568145.16	4148410.16	568145.16_4148410.16	1.0103	1.94828	1.03603	568145.16	4148410.16	568145.16_4148410.16	1.12706	2.25867	1.70879
568165.16	4148410.16	568165.16_4148410.16	1.06361	1.93882	1.08927	568165.16	4148410.16	568165.16_4148410.16	1.18945	2.25716	1.80543
568185.16	4148410.16	568185.16_4148410.16	1.11471	1.93292	1.1402	568185.16	4148410.16	568185.16_4148410.16	1.24928	2.25816	1.89678
568205.16	4148410.16	568205.16_4148410.16	1.16873	1.93988	1.19452	568205.16	4148410.16	568205.16_4148410.16	1.30935	2.26446	1.98843
568225.16	4148410.16	568225.16_4148410.16	1.22398	1.95441	1.25105	568225.16	4148410.16	568225.16_4148410.16	1.36951	2.27391	2.08192
568245.16	4148410.16	568245.16_4148410.16	1.27441	1.96348	1.30326	568245.16	4148410.16	568245.16_4148410.16	1.42749	2.28244	2.17423
568265.16	4148410.16	568265.16_4148410.16	1.32549	1.97646	1.35536	568265.16	4148410.16	568265.16_4148410.16	1.48669	2.29179	2.27023
568285.16	4148410.16	568285.16_4148410.16	1.37831	1.99313	1.40781	568285.16	4148410.16	568285.16_4148410.16	1.54808	2.30092	2.37261
568305.16	4148410.16	568305.16_4148410.16	1.43297	2.01085	1.4609	568305.16	4148410.16	568305.16_4148410.16	1.61183	2.30811	2.48396
568325.16	4148410.16	568325.16_4148410.16	1.48933	2.02651	1.51532	568325.16	4148410.16	568325.16_4148410.16	1.67778	2.31172	2.60668
568385.16	4148410.16	568385.16_4148410.16	1.68033	2.05471	1.70695	568385.16	4148410.16	568385.16_4148410.16	1.89357	2.29301	3.06259
568405.16	4148410.16	568405.16_4148410.16	1.73978	2.04056	1.77075	568405.16	4148410.16	568405.16_4148410.16	1.96624	2.27205	3.23366
568425.16	4148410.16	568425.16_4148410.16	1.80678	2.02615	1.84306	568425.16	4148410.16	568425.16_4148410.16	2.04376	2.24615	3.41619
568445.16	4148410.16	568445.16_4148410.16	1.87553	2.00547	1.91754	568445.16	4148410.16	568445.16_4148410.16	2.12345	2.21422	3.60391
568465.16	4148410.16	568465.16_4148410.16	1.94565	1.97915	1.99285	568465.16	4148410.16	568465.16_4148410.16	2.20501	2.17678	3.79484
568485.16	4148410.16	568485.16_4148410.16	2.01777	1.94863	2.06892	568485.16	4148410.16	568485.16_4148410.16	2.28831	2.13462	3.98876
568505.16	4148410.16	568505.16_4148410.16	2.08535	1.9099	2.13944	568505.16	4148410.16	568505.16_4148410.16	2.37001	2.08747	4.18129
568525.16	4148410.16	568525.16_4148410.16	2.14676	1.8638	2.2032	568525.16	4148410.16	568525.16_4148410.16	2.44874	2.03606	4.37156
568545.16	4148410.16	568545.16_4148410.16	2.21909	1.82284	2.27737	568545.16	4148410.16	568545.16_4148410.16	2.53077	1.98356	4.56999
568565.16	4148410.16	568565.16_4148410.16	2.27902	1.7734	2.34051	568565.16	4148410.16	568565.16_4148410.16	2.60499	1.92775	4.76074
568585.16	4148410.16	568585.16_4148410.16	2.33883	1.72481	2.405	568585.16	4148410.16	568585.16_4148410.16	2.67512	1.87107	4.94997
568605.16	4148410.16	568605.16_4148410.16	2.39787	1.67785	2.46913	568605.16	4148410.16	568605.16_4148410.16	2.73922	1.81415	5.13393
568625.16	4148410.16	568625.16_4148410.16	2.43183	1.6228	2.50712	568625.16	4148410.16	568625.16_4148410.16	2.78645	1.7555	5.29436
568645.16	4148410.16	568645.16_4148410.16	2.46333	1.5715	2.53992	568645.16	4148410.16	568645.16_4148410.16	2.82423	1.69783	5.44063

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568665.16	4148410.16	568665.16_4148410.16	2.48922	1.5227	2.56572	568665.16	4148410.16	568665.16_4148410.16	2.85045	1.64121	5.56761
568685.16	4148410.16	568685.16_4148410.16	2.49787	1.4723	2.57431	568685.16	4148410.16	568685.16_4148410.16	2.86082	1.58509	5.66608
568705.16	4148410.16	568705.16_4148410.16	2.48034	1.41777	2.55512	568705.16	4148410.16	568705.16_4148410.16	2.85335	1.52926	5.73143
568725.16	4148410.16	568725.16_4148410.16	2.4633	1.36788	2.53343	568725.16	4148410.16	568725.16_4148410.16	2.83936	1.47552	5.78714
567325.16	4148430.16	567325.16_4148430.16	0.05391	0.12613	0.05179	567325.16	4148430.16	567325.16_4148430.16	0.05694	0.13515	0.09079
567345.16	4148430.16	567345.16_4148430.16	0.05594	0.13469	0.05382	567345.16	4148430.16	567345.16_4148430.16	0.0592	0.1443	0.09392
567365.16	4148430.16	567365.16_4148430.16	0.05809	0.14395	0.05606	567365.16	4148430.16	567365.16_4148430.16	0.06148	0.15434	0.09722
567385.16	4148430.16	567385.16_4148430.16	0.06039	0.15404	0.05853	567385.16	4148430.16	567385.16_4148430.16	0.06393	0.1654	0.10073
567405.16	4148430.16	567405.16_4148430.16	0.06293	0.16533	0.06128	567405.16	4148430.16	567405.16_4148430.16	0.06659	0.17778	0.10452
567425.16	4148430.16	567425.16_4148430.16	0.06579	0.17818	0.06436	567425.16	4148430.16	567425.16_4148430.16	0.06953	0.19178	0.10864
567445.16	4148430.16	567445.16_4148430.16	0.06878	0.19208	0.06757	567445.16	4148430.16	567445.16_4148430.16	0.07264	0.20723	0.11298
567465.16	4148430.16	567465.16_4148430.16	0.07219	0.20829	0.07117	567465.16	4148430.16	567465.16_4148430.16	0.07608	0.22499	0.11774
567485.16	4148430.16	567485.16_4148430.16	0.07567	0.22573	0.07485	567485.16	4148430.16	567485.16_4148430.16	0.07972	0.24455	0.12272
567505.16	4148430.16	567505.16_4148430.16	0.07944	0.24542	0.0788	567505.16	4148430.16	567505.16_4148430.16	0.08366	0.26669	0.12807
567525.16	4148430.16	567525.16_4148430.16	0.08369	0.2685	0.08319	567525.16	4148430.16	567525.16_4148430.16	0.08804	0.29232	0.13394
567545.16	4148430.16	567545.16_4148430.16	0.08804	0.29364	0.08763	567545.16	4148430.16	567545.16_4148430.16	0.09268	0.3208	0.1401
567565.16	4148430.16	567565.16_4148430.16	0.09265	0.32178	0.09222	567565.16	4148430.16	567565.16_4148430.16	0.09769	0.35297	0.1467
567585.16	4148430.16	567585.16_4148430.16	0.09796	0.35552	0.09723	567585.16	4148430.16	567585.16_4148430.16	0.10332	0.3907	0.15416
567605.16	4148430.16	567605.16_4148430.16	0.10337	0.39205	0.10207	567605.16	4148430.16	567605.16_4148430.16	0.1093	0.43252	0.16219
567625.16	4148430.16	567625.16_4148430.16	0.10971	0.43598	0.10753	567625.16	4148430.16	567625.16_4148430.16	0.1161	0.48156	0.17168
567645.16	4148430.16	567645.16_4148430.16	0.11721	0.48918	0.11412	567645.16	4148430.16	567645.16_4148430.16	0.12393	0.53925	0.18314
567665.16	4148430.16	567665.16_4148430.16	0.12415	0.54101	0.12052	567665.16	4148430.16	567665.16_4148430.16	0.13181	0.59934	0.19532
567685.16	4148430.16	567685.16_4148430.16	0.13251	0.6032	0.12878	567685.16	4148430.16	567685.16_4148430.16	0.14093	0.66935	0.20997
567705.16	4148430.16	567705.16_4148430.16	0.1417	0.6715	0.13818	567705.16	4148430.16	567705.16_4148430.16	0.15106	0.74698	0.22626
567725.16	4148430.16	567725.16_4148430.16	0.15208	0.74783	0.1486	567725.16	4148430.16	567725.16_4148430.16	0.16247	0.83356	0.24393
567745.16	4148430.16	567745.16_4148430.16	0.16358	0.83074	0.15948	567745.16	4148430.16	567745.16_4148430.16	0.17522	0.9283	0.26217
567765.16	4148430.16	567765.16_4148430.16	0.17738	0.92743	0.17198	567765.16	4148430.16	567765.16_4148430.16	0.19028	1.03515	0.28136
567805.16	4148430.16	567805.16_4148430.16	0.20935	1.13403	0.20099	567805.16	4148430.16	567805.16_4148430.16	0.22605	1.26786	0.3232
567825.16	4148430.16	567825.16_4148430.16	0.22874	1.24491	0.21919	567825.16	4148430.16	567825.16_4148430.16	0.2479	1.3932	0.34957
567845.16	4148430.16	567845.16_4148430.16	0.25165	1.36215	0.24176	567845.16	4148430.16	567845.16_4148430.16	0.27348	1.5241	0.38265
567865.16	4148430.16	567865.16_4148430.16	0.27894	1.4853	0.27008	567865.16	4148430.16	567865.16_4148430.16	0.30364	1.65911	0.42373
567885.16	4148430.16	567885.16_4148430.16	0.30966	1.60046	0.30261	567885.16	4148430.16	567885.16_4148430.16	0.33805	1.78988	0.47129
567905.16	4148430.16	567905.16_4148430.16	0.34511	1.70981	0.33908	567905.16	4148430.16	567905.16_4148430.16	0.37789	1.91598	0.52554
567925.16	4148430.16	567925.16_4148430.16	0.38623	1.81285	0.38002	567925.16	4148430.16	567925.16_4148430.16	0.42409	2.0353	0.58751
567945.16	4148430.16	567945.16_4148430.16	0.43361	1.90719	0.4277	567945.16	4148430.16	567945.16_4148430.16	0.47709	2.14467	0.65935
567965.16	4148430.16	567965.16_4148430.16	0.48477	1.97773	0.48189	567965.16	4148430.16	567965.16_4148430.16	0.53527	2.23541	0.74107
567985.16	4148430.16	567985.16_4148430.16	0.54258	2.04126	0.54548	567985.16	4148430.16	567985.16_4148430.16	0.60041	2.31375	0.83591
568005.16	4148430.16	568005.16_4148430.16	0.60548	2.09317	0.61493	568005.16	4148430.16	568005.16_4148430.16	0.67126	2.37681	0.94253
568025.16	4148430.16	568025.16_4148430.16	0.67091	2.12655	0.68537	568025.16	4148430.16	568025.16_4148430.16	0.74567	2.42181	1.05884

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568045.16	4148430.16	568045.16_4148430.16	0.73852	2.1444	0.75629	568045.16	4148430.16	568045.16_4148430.16	0.82253	2.45098	1.18496
568065.16	4148430.16	568065.16_4148430.16	0.80962	2.15581	0.83108	568065.16	4148430.16	568065.16_4148430.16	0.90176	2.46948	1.32065
568085.16	4148430.16	568085.16_4148430.16	0.87814	2.1489	0.90391	568085.16	4148430.16	568085.16_4148430.16	0.97927	2.47466	1.45585
568105.16	4148430.16	568105.16_4148430.16	0.94575	2.13823	0.97385	568105.16	4148430.16	568105.16_4148430.16	1.05585	2.47442	1.58523
568125.16	4148430.16	568125.16_4148430.16	1.01156	2.12825	1.03971	568125.16	4148430.16	568125.16_4148430.16	1.13083	2.47238	1.70624
568145.16	4148430.16	568145.16_4148430.16	1.07159	2.11308	1.09933	568145.16	4148430.16	568145.16_4148430.16	1.2016	2.46827	1.81769
568165.16	4148430.16	568165.16_4148430.16	1.13009	2.10496	1.1575	568165.16	4148430.16	568165.16_4148430.16	1.27005	2.46734	1.92348
568185.16	4148430.16	568185.16_4148430.16	1.18966	2.10876	1.21698	568185.16	4148430.16	568185.16_4148430.16	1.33732	2.47139	2.02571
568205.16	4148430.16	568205.16_4148430.16	1.24518	2.11167	1.27335	568205.16	4148430.16	568205.16_4148430.16	1.40113	2.47639	2.12339
568225.16	4148430.16	568225.16_4148430.16	1.30197	2.12319	1.33184	568225.16	4148430.16	568225.16_4148430.16	1.46501	2.4846	2.22299
568245.16	4148430.16	568245.16_4148430.16	1.36049	2.14167	1.39196	568245.16	4148430.16	568245.16_4148430.16	1.53015	2.49458	2.3266
568265.16	4148430.16	568265.16_4148430.16	1.4155	2.15489	1.44762	568265.16	4148430.16	568265.16_4148430.16	1.59462	2.50214	2.43261
568285.16	4148430.16	568285.16_4148430.16	1.47413	2.17323	1.50532	568285.16	4148430.16	568285.16_4148430.16	1.66246	2.50877	2.54855
568305.16	4148430.16	568305.16_4148430.16	1.53558	2.19159	1.56474	568305.16	4148430.16	568305.16_4148430.16	1.73329	2.51205	2.67661
568365.16	4148430.16	568365.16_4148430.16	1.72046	2.19769	1.74873	568365.16	4148430.16	568365.16_4148430.16	1.95508	2.48284	3.14162
568385.16	4148430.16	568385.16_4148430.16	1.79902	2.20012	1.83016	568385.16	4148430.16	568385.16_4148430.16	2.03976	2.46231	3.33338
568425.16	4148430.16	568425.16_4148430.16	1.95237	2.16638	1.99456	568425.16	4148430.16	568425.16_4148430.16	2.2123	2.39648	3.73714
568445.16	4148430.16	568445.16_4148430.16	2.02456	2.13159	2.07293	568445.16	4148430.16	568445.16_4148430.16	2.29907	2.35232	3.94102
568465.16	4148430.16	568465.16_4148430.16	2.1006	2.09351	2.15379	568465.16	4148430.16	568465.16_4148430.16	2.38914	2.30317	4.14848
568485.16	4148430.16	568485.16_4148430.16	2.17901	2.05152	2.23536	568485.16	4148430.16	568485.16_4148430.16	2.4815	2.24953	4.35874
568505.16	4148430.16	568505.16_4148430.16	2.24974	1.99945	2.30865	568505.16	4148430.16	568505.16_4148430.16	2.57119	2.19086	4.5663
568525.16	4148430.16	568525.16_4148430.16	2.32064	1.94486	2.38206	568525.16	4148430.16	568525.16_4148430.16	2.66095	2.12937	4.777
568545.16	4148430.16	568545.16_4148430.16	2.39281	1.88951	2.45763	568545.16	4148430.16	568545.16_4148430.16	2.75021	2.06609	4.99114
568565.16	4148430.16	568565.16_4148430.16	2.46757	1.83524	2.53721	568565.16	4148430.16	568565.16_4148430.16	2.83815	2.00201	5.20795
568585.16	4148430.16	568585.16_4148430.16	2.5445	1.7829	2.62047	568585.16	4148430.16	568585.16_4148430.16	2.9228	1.93784	5.42485
568605.16	4148430.16	568605.16_4148430.16	2.60204	1.72409	2.68509	568605.16	4148430.16	568605.16_4148430.16	2.99373	1.87243	5.62511
568625.16	4148430.16	568625.16_4148430.16	2.65351	1.66733	2.74183	568625.16	4148430.16	568625.16_4148430.16	3.05429	1.80787	5.8122
568645.16	4148430.16	568645.16_4148430.16	2.69299	1.61134	2.78338	568645.16	4148430.16	568645.16_4148430.16	3.10033	1.74427	5.97772
568665.16	4148430.16	568665.16_4148430.16	2.71162	1.55374	2.80181	568665.16	4148430.16	568665.16_4148430.16	3.12733	1.68146	6.11276
568685.16	4148430.16	568685.16_4148430.16	2.73284	1.50306	2.82199	568685.16	4148430.16	568685.16_4148430.16	3.14348	1.62128	6.22815
568705.16	4148430.16	568705.16_4148430.16	2.70787	1.44341	2.79424	568705.16	4148430.16	568705.16_4148430.16	3.13232	1.56096	6.29576
567325.16	4148450.16	567325.16_4148450.16	0.05428	0.12555	0.05248	567325.16	4148450.16	567325.16_4148450.16	0.05721	0.13486	0.09181
567345.16	4148450.16	567345.16_4148450.16	0.05627	0.13424	0.05427	567345.16	4148450.16	567345.16_4148450.16	0.05946	0.14407	0.09496
567365.16	4148450.16	567365.16_4148450.16	0.05829	0.14338	0.05619	567365.16	4148450.16	567365.16_4148450.16	0.06168	0.15403	0.09823
567385.16	4148450.16	567385.16_4148450.16	0.0605	0.15349	0.05841	567385.16	4148450.16	567385.16_4148450.16	0.06407	0.16509	0.10172
567405.16	4148450.16	567405.16_4148450.16	0.06305	0.16512	0.06106	567405.16	4148450.16	567405.16_4148450.16	0.06676	0.17767	0.10557
567425.16	4148450.16	567425.16_4148450.16	0.06574	0.17774	0.06392	567425.16	4148450.16	567425.16_4148450.16	0.0696	0.19154	0.10962
567445.16	4148450.16	567445.16_4148450.16	0.06865	0.19172	0.06706	567445.16	4148450.16	567445.16_4148450.16	0.07266	0.20704	0.11397
567465.16	4148450.16	567465.16_4148450.16	0.07197	0.20794	0.07062	567465.16	4148450.16	567465.16_4148450.16	0.07607	0.22484	0.11874

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567485.16	4148450.16	567485.16_4148450.16	0.07546	0.22569	0.07435	567485.16	4148450.16	567485.16_4148450.16	0.0797	0.24464	0.12378
567505.16	4148450.16	567505.16_4148450.16	0.07934	0.24614	0.07844	567505.16	4148450.16	567505.16_4148450.16	0.0837	0.26734	0.12927
567525.16	4148450.16	567525.16_4148450.16	0.0835	0.26905	0.0828	567525.16	4148450.16	567525.16_4148450.16	0.08801	0.293	0.13515
567545.16	4148450.16	567545.16_4148450.16	0.08768	0.29363	0.08717	567545.16	4148450.16	567545.16_4148450.16	0.09255	0.32132	0.14124
567565.16	4148450.16	567565.16_4148450.16	0.09247	0.32294	0.09209	567565.16	4148450.16	567565.16_4148450.16	0.09764	0.35452	0.14801
567585.16	4148450.16	567585.16_4148450.16	0.09791	0.35775	0.09752	567585.16	4148450.16	567585.16_4148450.16	0.10333	0.39336	0.15553
567605.16	4148450.16	567605.16_4148450.16	0.10347	0.39573	0.10287	567605.16	4148450.16	567605.16_4148450.16	0.10938	0.43666	0.16351
567625.16	4148450.16	567625.16_4148450.16	0.11	0.4419	0.10879	567625.16	4148450.16	567625.16_4148450.16	0.1163	0.48792	0.17274
567645.16	4148450.16	567645.16_4148450.16	0.11687	0.49298	0.1148	567645.16	4148450.16	567645.16_4148450.16	0.12377	0.5454	0.18301
567665.16	4148450.16	567665.16_4148450.16	0.12469	0.55271	0.12164	567665.16	4148450.16	567665.16_4148450.16	0.13219	0.61179	0.19511
567685.16	4148450.16	567685.16_4148450.16	0.13276	0.6162	0.12898	567685.16	4148450.16	567685.16_4148450.16	0.14119	0.68444	0.20876
567705.16	4148450.16	567705.16_4148450.16	0.1421	0.68957	0.13807	567705.16	4148450.16	567705.16_4148450.16	0.15144	0.76747	0.22491
567725.16	4148450.16	567725.16_4148450.16	0.15254	0.77096	0.14862	567725.16	4148450.16	567725.16_4148450.16	0.16292	0.86003	0.24314
567745.16	4148450.16	567745.16_4148450.16	0.16426	0.86087	0.16032	567745.16	4148450.16	567745.16_4148450.16	0.17586	0.9626	0.26297
567765.16	4148450.16	567765.16_4148450.16	0.17757	0.96018	0.17293	567765.16	4148450.16	567765.16_4148450.16	0.1906	1.07564	0.28376
567785.16	4148450.16	567785.16_4148450.16	0.19296	1.07085	0.18693	567785.16	4148450.16	567785.16_4148450.16	0.20763	1.19996	0.30539
567825.16	4148450.16	567825.16_4148450.16	0.22997	1.31174	0.22071	567825.16	4148450.16	567825.16_4148450.16	0.24923	1.47222	0.35401
567845.16	4148450.16	567845.16_4148450.16	0.25327	1.44357	0.24279	567845.16	4148450.16	567845.16_4148450.16	0.27533	1.61948	0.38581
567865.16	4148450.16	567865.16_4148450.16	0.28061	1.57864	0.27009	567865.16	4148450.16	567865.16_4148450.16	0.30586	1.77034	0.4256
567885.16	4148450.16	567885.16_4148450.16	0.31217	1.71004	0.30315	567885.16	4148450.16	567885.16_4148450.16	0.3413	1.91979	0.4739
567905.16	4148450.16	567905.16_4148450.16	0.34916	1.83753	0.34193	567905.16	4148450.16	567905.16_4148450.16	0.38287	2.06592	0.53079
567925.16	4148450.16	567925.16_4148450.16	0.39203	1.95559	0.3855	567925.16	4148450.16	567925.16_4148450.16	0.43119	2.20382	0.59607
567945.16	4148450.16	567945.16_4148450.16	0.44237	2.06687	0.43597	567945.16	4148450.16	567945.16_4148450.16	0.48759	2.33231	0.67209
567965.16	4148450.16	567965.16_4148450.16	0.49862	2.1575	0.49431	567965.16	4148450.16	567965.16_4148450.16	0.55105	2.44257	0.75988
567985.16	4148450.16	567985.16_4148450.16	0.56114	2.23053	0.56229	567985.16	4148450.16	567985.16_4148450.16	0.62179	2.53423	0.8615
568005.16	4148450.16	568005.16_4148450.16	0.62819	2.28215	0.63679	568005.16	4148450.16	568005.16_4148450.16	0.69845	2.60463	0.97592
568025.16	4148450.16	568025.16_4148450.16	0.70021	2.32024	0.71514	568025.16	4148450.16	568025.16_4148450.16	0.78078	2.65722	1.10315
568045.16	4148450.16	568045.16_4148450.16	0.77588	2.34376	0.795	568045.16	4148450.16	568045.16_4148450.16	0.86687	2.6925	1.24253
568065.16	4148450.16	568065.16_4148450.16	0.85209	2.34806	0.87549	568065.16	4148450.16	568065.16_4148450.16	0.95375	2.71042	1.39057
568085.16	4148450.16	568085.16_4148450.16	0.93265	2.35432	0.96098	568085.16	4148450.16	568085.16_4148450.16	1.04278	2.72166	1.54446
568105.16	4148450.16	568105.16_4148450.16	1.0065	2.33929	1.03759	568105.16	4148450.16	568105.16_4148450.16	1.12729	2.72007	1.68744
568125.16	4148450.16	568125.16_4148450.16	1.07411	2.31574	1.10516	568125.16	4148450.16	568125.16_4148450.16	1.20748	2.7133	1.81732
568145.16	4148450.16	568145.16_4148450.16	1.14586	2.31485	1.17594	568145.16	4148450.16	568145.16_4148450.16	1.28866	2.7139	1.94412
568165.16	4148450.16	568165.16_4148450.16	1.20847	2.30402	1.23797	568165.16	4148450.16	568165.16_4148450.16	1.363	2.71188	2.05903
568185.16	4148450.16	568185.16_4148450.16	1.26981	2.30201	1.2994	568185.16	4148450.16	568185.16_4148450.16	1.43469	2.71383	2.16835
568205.16	4148450.16	568205.16_4148450.16	1.33202	2.31104	1.36288	568205.16	4148450.16	568205.16_4148450.16	1.50526	2.71991	2.27632
568225.16	4148450.16	568225.16_4148450.16	1.39132	2.32012	1.42413	568225.16	4148450.16	568225.16_4148450.16	1.57376	2.72617	2.38351
568245.16	4148450.16	568245.16_4148450.16	1.45144	2.33407	1.48564	568245.16	4148450.16	568245.16_4148450.16	1.64318	2.73283	2.49527
568265.16	4148450.16	568265.16_4148450.16	1.51427	2.35277	1.5485	568265.16	4148450.16	568265.16_4148450.16	1.71543	2.73846	2.61614

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568285.16	4148450.16	568285.16_4148450.16	1.57859	2.36985	1.61138	568285.16	4148450.16	568285.16_4148450.16	1.79017	2.74011	2.74847
568345.16	4148450.16	568345.16_4148450.16	1.83288	2.44907	1.85995	568345.16	4148450.16	568345.16_4148450.16	2.05332	2.71795	3.27022
568365.16	4148450.16	568365.16_4148450.16	1.84795	2.36371	1.8809	568365.16	4148450.16	568365.16_4148450.16	2.11218	2.67593	3.43079
568385.16	4148450.16	568385.16_4148450.16	1.92796	2.34924	1.96547	568385.16	4148450.16	568385.16_4148450.16	2.20268	2.64153	3.64262
568405.16	4148450.16	568405.16_4148450.16	2.01525	2.33038	2.05867	568405.16	4148450.16	568405.16_4148450.16	2.29839	2.60017	3.86612
568425.16	4148450.16	568425.16_4148450.16	2.10004	2.29756	2.14998	568425.16	4148450.16	568425.16_4148450.16	2.39498	2.55036	4.09124
568445.16	4148450.16	568445.16_4148450.16	2.19043	2.26047	2.24574	568445.16	4148450.16	568445.16_4148450.16	2.49612	2.4948	4.32103
568465.16	4148450.16	568465.16_4148450.16	2.27527	2.21088	2.33457	568465.16	4148450.16	568465.16_4148450.16	2.59668	2.43261	4.54745
568485.16	4148450.16	568485.16_4148450.16	2.35899	2.1548	2.42091	568485.16	4148450.16	568485.16_4148450.16	2.69833	2.36584	4.7746
568505.16	4148450.16	568505.16_4148450.16	2.43896	2.09204	2.50322	568505.16	4148450.16	568505.16_4148450.16	2.79949	2.29528	5.00248
568525.16	4148450.16	568525.16_4148450.16	2.51542	2.02472	2.583	568525.16	4148450.16	568525.16_4148450.16	2.89957	2.22213	5.23247
568545.16	4148450.16	568545.16_4148450.16	2.60501	1.96381	2.67748	568545.16	4148450.16	568545.16_4148450.16	3.0046	2.14931	5.47499
568565.16	4148450.16	568565.16_4148450.16	2.69585	1.90296	2.77512	568565.16	4148450.16	568565.16_4148450.16	3.10807	2.07619	5.7206
568585.16	4148450.16	568585.16_4148450.16	2.77578	1.83829	2.86327	568585.16	4148450.16	568585.16_4148450.16	3.20326	2.00256	5.95902
568605.16	4148450.16	568605.16_4148450.16	2.84943	1.77459	2.94543	568605.16	4148450.16	568605.16_4148450.16	3.28985	1.92987	6.1891
568625.16	4148450.16	568625.16_4148450.16	2.91026	1.71119	3.01327	568625.16	4148450.16	568625.16_4148450.16	3.36268	1.85836	6.40151
568645.16	4148450.16	568645.16_4148450.16	2.94747	1.64612	3.05386	568645.16	4148450.16	568645.16_4148450.16	3.4151	1.78801	6.58413
568665.16	4148450.16	568665.16_4148450.16	2.9791	1.58671	3.08494	568665.16	4148450.16	568665.16_4148450.16	3.45193	1.7204	6.74296
568685.16	4148450.16	568685.16_4148450.16	2.98732	1.52727	3.09084	568685.16	4148450.16	568685.16_4148450.16	3.4655	1.65465	6.86402
567325.16	4148470.16	567325.16_4148470.16	0.05482	0.12501	0.05371	567325.16	4148470.16	567325.16_4148470.16	0.0576	0.13462	0.09289
567345.16	4148470.16	567345.16_4148470.16	0.05672	0.13361	0.05525	567345.16	4148470.16	567345.16_4148470.16	0.0598	0.14377	0.09606
567365.16	4148470.16	567365.16_4148470.16	0.05868	0.14279	0.05693	567365.16	4148470.16	567365.16_4148470.16	0.06198	0.15373	0.09936
567385.16	4148470.16	567385.16_4148470.16	0.06082	0.15292	0.05885	567385.16	4148470.16	567385.16_4148470.16	0.06434	0.16481	0.10286
567405.16	4148470.16	567405.16_4148470.16	0.0633	0.16466	0.06122	567405.16	4148470.16	567405.16_4148470.16	0.06699	0.17743	0.10672
567425.16	4148470.16	567425.16_4148470.16	0.06585	0.17721	0.06379	567425.16	4148470.16	567425.16_4148470.16	0.06977	0.19126	0.11075
567445.16	4148470.16	567445.16_4148470.16	0.06867	0.19128	0.06672	567445.16	4148470.16	567445.16_4148470.16	0.07279	0.20682	0.11509
567465.16	4148470.16	567465.16_4148470.16	0.07195	0.20775	0.07019	567465.16	4148470.16	567465.16_4148470.16	0.07617	0.22479	0.11991
567485.16	4148470.16	567485.16_4148470.16	0.07532	0.22547	0.07381	567485.16	4148470.16	567485.16_4148470.16	0.07974	0.2446	0.12494
567505.16	4148470.16	567505.16_4148470.16	0.07917	0.24619	0.07792	567505.16	4148470.16	567505.16_4148470.16	0.08372	0.26756	0.1305
567525.16	4148470.16	567525.16_4148470.16	0.08306	0.26838	0.08211	567525.16	4148470.16	567525.16_4148470.16	0.0879	0.29286	0.13627
567545.16	4148470.16	567545.16_4148470.16	0.08739	0.29399	0.08669	567545.16	4148470.16	567545.16_4148470.16	0.09249	0.32201	0.14255
567565.16	4148470.16	567565.16_4148470.16	0.09243	0.32484	0.09192	567565.16	4148470.16	567565.16_4148470.16	0.09769	0.35645	0.14957
567585.16	4148470.16	567585.16_4148470.16	0.09783	0.35993	0.09747	567585.16	4148470.16	567585.16_4148470.16	0.10335	0.39585	0.15713
567605.16	4148470.16	567605.16_4148470.16	0.10346	0.39895	0.10317	567605.16	4148470.16	567605.16_4148470.16	0.10943	0.44036	0.16515
567625.16	4148470.16	567625.16_4148470.16	0.10968	0.44425	0.10923	567625.16	4148470.16	567625.16_4148470.16	0.11614	0.49185	0.17401
567645.16	4148470.16	567645.16_4148470.16	0.11656	0.49676	0.11561	567645.16	4148470.16	567645.16_4148470.16	0.12362	0.55132	0.1839
567665.16	4148470.16	567665.16_4148470.16	0.12535	0.56498	0.12338	567665.16	4148470.16	567665.16_4148470.16	0.13262	0.62454	0.19615
567685.16	4148470.16	567685.16_4148470.16	0.13305	0.62922	0.13012	567685.16	4148470.16	567685.16_4148470.16	0.14141	0.69946	0.2086
567705.16	4148470.16	567705.16_4148470.16	0.14251	0.70774	0.13865	567705.16	4148470.16	567705.16_4148470.16	0.15179	0.78809	0.224

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567725.16	4148470.16	567725.16_4148470.16	0.15286	0.79381	0.14856	567725.16	4148470.16	567725.16_4148470.16	0.16325	0.88661	0.24178
567745.16	4148470.16	567745.16_4148470.16	0.16469	0.89065	0.16038	567745.16	4148470.16	567745.16_4148470.16	0.17631	0.99725	0.26223
567765.16	4148470.16	567765.16_4148470.16	0.17813	0.99802	0.17373	567765.16	4148470.16	567765.16_4148470.16	0.19118	1.11994	0.28473
567785.16	4148470.16	567785.16_4148470.16	0.19363	1.11764	0.18841	567785.16	4148470.16	567785.16_4148470.16	0.20831	1.25546	0.30863
567805.16	4148470.16	567805.16_4148470.16	0.21121	1.24685	0.20445	567805.16	4148470.16	567805.16_4148470.16	0.22794	1.40185	0.33342
567845.16	4148470.16	567845.16_4148470.16	0.25493	1.53151	0.24458	567845.16	4148470.16	567845.16_4148470.16	0.2771	1.72303	0.39092
567865.16	4148470.16	567865.16_4148470.16	0.2827	1.68392	0.2712	567865.16	4148470.16	567865.16_4148470.16	0.30827	1.89402	0.42928
567885.16	4148470.16	567885.16_4148470.16	0.31511	1.83481	0.30403	567885.16	4148470.16	567885.16_4148470.16	0.34476	2.0656	0.47714
567905.16	4148470.16	567905.16_4148470.16	0.3536	1.98376	0.34429	567905.16	4148470.16	567905.16_4148470.16	0.38799	2.23546	0.53582
567925.16	4148470.16	567925.16_4148470.16	0.3974	2.11462	0.38988	567925.16	4148470.16	567925.16_4148470.16	0.43791	2.39318	0.60374
567945.16	4148470.16	567945.16_4148470.16	0.45	2.2417	0.44312	567945.16	4148470.16	567945.16_4148470.16	0.49728	2.54279	0.68377
567965.16	4148470.16	567965.16_4148470.16	0.51086	2.35311	0.50538	567965.16	4148470.16	567965.16_4148470.16	0.56589	2.67553	0.77754
567985.16	4148470.16	567985.16_4148470.16	0.57881	2.44037	0.57809	567985.16	4148470.16	567985.16_4148470.16	0.64295	2.78497	0.88664
568005.16	4148470.16	568005.16_4148470.16	0.65294	2.50356	0.66018	568005.16	4148470.16	568005.16_4148470.16	0.72773	2.86978	1.01155
568025.16	4148470.16	568025.16_4148470.16	0.73234	2.54605	0.74741	568025.16	4148470.16	568025.16_4148470.16	0.81905	2.93124	1.1512
568045.16	4148470.16	568045.16_4148470.16	0.81625	2.57177	0.83675	568045.16	4148470.16	568045.16_4148470.16	0.91528	2.97213	1.30508
568065.16	4148470.16	568065.16_4148470.16	0.90383	2.5849	0.9293	568065.16	4148470.16	568065.16_4148470.16	1.01435	2.99623	1.47172
568085.16	4148470.16	568085.16_4148470.16	0.99045	2.58121	1.02177	568085.16	4148470.16	568085.16_4148470.16	1.11239	3.0048	1.64126
568105.16	4148470.16	568105.16_4148470.16	1.07395	2.56823	1.10862	568105.16	4148470.16	568105.16_4148470.16	1.20769	3.00423	1.80205
568125.16	4148470.16	568125.16_4148470.16	1.15049	2.54672	1.18494	568125.16	4148470.16	568125.16_4148470.16	1.2978	2.99797	1.9475
568145.16	4148470.16	568145.16_4148470.16	1.22535	2.53658	1.25839	568145.16	4148470.16	568145.16_4148470.16	1.38527	2.99505	2.0844
568165.16	4148470.16	568165.16_4148470.16	1.29814	2.53653	1.33024	568165.16	4148470.16	568165.16_4148470.16	1.4693	2.99576	2.21357
568185.16	4148470.16	568185.16_4148470.16	1.36475	2.53502	1.3972	568185.16	4148470.16	568185.16_4148470.16	1.54767	2.99675	2.33328
568205.16	4148470.16	568205.16_4148470.16	1.42513	2.53021	1.45933	568205.16	4148470.16	568205.16_4148470.16	1.62106	2.99721	2.44648
568225.16	4148470.16	568225.16_4148470.16	1.49257	2.54692	1.5286	568225.16	4148470.16	568225.16_4148470.16	1.69752	3.00294	2.56632
568245.16	4148470.16	568245.16_4148470.16	1.54684	2.53932	1.58394	568245.16	4148470.16	568245.16_4148470.16	1.76796	3.00003	2.68298
568265.16	4148470.16	568265.16_4148470.16	1.62242	2.57013	1.65863	568265.16	4148470.16	568265.16_4148470.16	1.8511	3.0034	2.82522
568325.16	4148470.16	568325.16_4148470.16	1.8329	2.5745	1.86576	568325.16	4148470.16	568325.16_4148470.16	2.10417	2.95676	3.33493
568345.16	4148470.16	568345.16_4148470.16	1.93562	2.59485	1.96958	568345.16	4148470.16	568345.16_4148470.16	2.20727	2.93132	3.5598
568365.16	4148470.16	568365.16_4148470.16	2.02254	2.57723	2.06067	568365.16	4148470.16	568365.16_4148470.16	2.3046	2.89023	3.78745
568385.16	4148470.16	568385.16_4148470.16	2.08533	2.51941	2.13051	568385.16	4148470.16	568385.16_4148470.16	2.39276	2.83396	4.00751
568405.16	4148470.16	568405.16_4148470.16	2.17601	2.48176	2.22804	568405.16	4148470.16	568405.16_4148470.16	2.49596	2.77572	4.24995
568425.16	4148470.16	568425.16_4148470.16	2.25788	2.42502	2.31666	568425.16	4148470.16	568425.16_4148470.16	2.5975	2.70808	4.48755
568445.16	4148470.16	568445.16_4148470.16	2.36132	2.37919	2.4246	568445.16	4148470.16	568445.16_4148470.16	2.71148	2.63821	4.73984
568465.16	4148470.16	568465.16_4148470.16	2.46088	2.3215	2.52714	568465.16	4148470.16	568465.16_4148470.16	2.82596	2.56231	4.98998
568505.16	4148470.16	568505.16_4148470.16	2.65672	2.18662	2.72766	568505.16	4148470.16	568505.16_4148470.16	3.05904	2.39972	5.49691
568525.16	4148470.16	568525.16_4148470.16	2.74098	2.1064	2.81632	568525.16	4148470.16	568525.16_4148470.16	3.17164	2.31428	5.74944
568545.16	4148470.16	568545.16_4148470.16	2.83115	2.02928	2.91316	568545.16	4148470.16	568545.16_4148470.16	3.28694	2.22935	6.01168
568585.16	4148470.16	568585.16_4148470.16	3.02248	1.88476	3.12331	568585.16	4148470.16	568585.16_4148470.16	3.51663	2.06367	6.55349

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568605.16	4148470.16	568605.16_4148470.16	3.11265	1.81561	3.22347	568605.16	4148470.16	568605.16_4148470.16	3.62181	1.98354	6.8179
568625.16	4148470.16	568625.16_4148470.16	3.19217	1.74852	3.31181	568625.16	4148470.16	568625.16_4148470.16	3.71356	1.90567	7.06639
568645.16	4148470.16	568645.16_4148470.16	3.24313	1.67966	3.36774	568645.16	4148470.16	568645.16_4148470.16	3.78136	1.82962	7.28123
568665.16	4148470.16	568665.16_4148470.16	3.28584	1.6169	3.4094	568665.16	4148470.16	568665.16_4148470.16	3.82967	1.757	7.46833
568705.16	4148470.16	568705.16_4148470.16	3.26352	1.48756	3.37472	568705.16	4148470.16	568705.16_4148470.16	3.83212	1.61846	7.69621
568725.16	4148470.16	568725.16_4148470.16	3.25724	1.43515	3.35696	568725.16	4148470.16	568725.16_4148470.16	3.81097	1.55515	7.77952
567325.16	4148490.16	567325.16_4148490.16	0.05547	0.12453	0.05524	567325.16	4148490.16	567325.16_4148490.16	0.05808	0.13444	0.09399
567345.16	4148490.16	567345.16_4148490.16	0.0573	0.13295	0.05666	567345.16	4148490.16	567345.16_4148490.16	0.06022	0.14348	0.09717
567365.16	4148490.16	567365.16_4148490.16	0.05925	0.14222	0.05822	567365.16	4148490.16	567365.16_4148490.16	0.0624	0.15349	0.10054
567385.16	4148490.16	567385.16_4148490.16	0.06131	0.15233	0.05991	567385.16	4148490.16	567385.16_4148490.16	0.06472	0.16453	0.10408
567405.16	4148490.16	567405.16_4148490.16	0.06371	0.16405	0.06198	567405.16	4148490.16	567405.16_4148490.16	0.06733	0.17714	0.10796
567425.16	4148490.16	567425.16_4148490.16	0.06617	0.17662	0.06422	567425.16	4148490.16	567425.16_4148490.16	0.07006	0.19097	0.11201
567445.16	4148490.16	567445.16_4148490.16	0.06888	0.19072	0.06683	567445.16	4148490.16	567445.16_4148490.16	0.07302	0.20655	0.11636
567465.16	4148490.16	567465.16_4148490.16	0.07205	0.20727	0.07001	567465.16	4148490.16	567465.16_4148490.16	0.07636	0.22458	0.12118
567485.16	4148490.16	567485.16_4148490.16	0.07531	0.22509	0.07341	567485.16	4148490.16	567485.16_4148490.16	0.07987	0.24448	0.12622
567505.16	4148490.16	567505.16_4148490.16	0.07908	0.24598	0.07739	567505.16	4148490.16	567505.16_4148490.16	0.0838	0.26759	0.13181
567525.16	4148490.16	567525.16_4148490.16	0.0828	0.26797	0.08143	567525.16	4148490.16	567525.16_4148490.16	0.08787	0.29286	0.13754
567545.16	4148490.16	567545.16_4148490.16	0.08732	0.29502	0.08625	567545.16	4148490.16	567545.16_4148490.16	0.09258	0.32307	0.14407
567565.16	4148490.16	567565.16_4148490.16	0.09219	0.32565	0.09141	567565.16	4148490.16	567565.16_4148490.16	0.09768	0.3576	0.15108
567585.16	4148490.16	567585.16_4148490.16	0.09741	0.36035	0.09691	567585.16	4148490.16	567585.16_4148490.16	0.10322	0.3971	0.1586
567605.16	4148490.16	567605.16_4148490.16	0.10285	0.39894	0.1026	567605.16	4148490.16	567605.16_4148490.16	0.10916	0.44185	0.16658
567625.16	4148490.16	567625.16_4148490.16	0.10962	0.44825	0.10944	567625.16	4148490.16	567625.16_4148490.16	0.11618	0.49666	0.17587
567645.16	4148490.16	567645.16_4148490.16	0.11646	0.50188	0.11621	567645.16	4148490.16	567645.16_4148490.16	0.12359	0.55786	0.18565
567665.16	4148490.16	567665.16_4148490.16	0.12409	0.56448	0.12343	567665.16	4148490.16	567665.16_4148490.16	0.13189	0.62897	0.1966
567685.16	4148490.16	567685.16_4148490.16	0.13325	0.64139	0.13164	567685.16	4148490.16	567685.16_4148490.16	0.14156	0.71384	0.20961
567705.16	4148490.16	567705.16_4148490.16	0.14263	0.72368	0.13989	567705.16	4148490.16	567705.16_4148490.16	0.15191	0.80735	0.22402
567725.16	4148490.16	567725.16_4148490.16	0.15337	0.81834	0.14951	567725.16	4148490.16	567725.16_4148490.16	0.16367	0.91441	0.24116
567745.16	4148490.16	567745.16_4148490.16	0.16529	0.9229	0.16076	567745.16	4148490.16	567745.16_4148490.16	0.17683	1.03389	0.26118
567765.16	4148490.16	567765.16_4148490.16	0.17868	1.03815	0.17398	567765.16	4148490.16	567765.16_4148490.16	0.19171	1.16654	0.28419
567785.16	4148490.16	567785.16_4148490.16	0.19421	1.16736	0.18931	567785.16	4148490.16	567785.16_4148490.16	0.20894	1.31423	0.3099
567805.16	4148490.16	567805.16_4148490.16	0.21169	1.3061	0.20593	567805.16	4148490.16	567805.16_4148490.16	0.22853	1.47405	0.3371
567825.16	4148490.16	567825.16_4148490.16	0.23288	1.46528	0.2253	567825.16	4148490.16	567825.16_4148490.16	0.25199	1.65154	0.36643
567865.16	4148490.16	567865.16_4148490.16	0.28421	1.7943	0.27272	567865.16	4148490.16	567865.16_4148490.16	0.31016	2.02742	0.43462
567885.16	4148490.16	567885.16_4148490.16	0.31736	1.96767	0.30494	567885.16	4148490.16	567885.16_4148490.16	0.3476	2.2249	0.48117
567905.16	4148490.16	567905.16_4148490.16	0.3564	2.13582	0.34492	567905.16	4148490.16	567905.16_4148490.16	0.39188	2.42003	0.53954
567925.16	4148490.16	567925.16_4148490.16	0.40311	2.29806	0.39368	567925.16	4148490.16	567925.16_4148490.16	0.44475	2.60954	0.61103
567945.16	4148490.16	567945.16_4148490.16	0.45809	2.44527	0.45025	567945.16	4148490.16	567945.16_4148490.16	0.50719	2.78541	0.69543
567965.16	4148490.16	567965.16_4148490.16	0.52247	2.57417	0.51599	567965.16	4148490.16	567965.16_4148490.16	0.58034	2.94233	0.79476
567985.16	4148490.16	567985.16_4148490.16	0.59739	2.68583	0.59477	567985.16	4148490.16	567985.16_4148490.16	0.66504	3.07725	0.91284

	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
Semons-16   4144890116   Semons-16, 14148890.116   0.06419   2.85175   0.08817   Semons-16, 1414890.116   Semons-16, 1414890.116   1.0819   3.3381   1.75819   58508.516   4144890.116   Semons-16, 1414890.116   Semons-16	568005.16	4148490.16	568005.16_4148490.16	0.67877	2.75985	0.68419	568005.16	4148490.16	568005.16_4148490.16	0.75849	3.17869	1.04871
S80805.16   4148490.16   S80805.16   4148490.16   0.96094   2.8875   0.9887   0.9887   0.9887   0.9887   0.9887   0.9887   0.9887   0.9887   0.9887   0.9887   0.9887   0.98885.16   4148490.16   0.98885.16   4148490.16   0.98885.16   4148490.16   0.98885.16   0.98	568025.16	4148490.16	568025.16_4148490.16	0.76755	2.81151	0.7823	568025.16	4148490.16	568025.16_4148490.16	0.86077	3.25299	1.20331
\$68885.16   \$448490.16   \$68085.16   \$448490.16   \$1.8984   \$2.8785   \$1.8879   \$58805.16   \$448490.16   \$1.8986   \$3.3333   \$1.74877   \$58105.16   \$448490.16   \$568125.16	568045.16	4148490.16	568045.16_4148490.16	0.86436	2.85197	0.8861	568045.16	4148490.16	568045.16_4148490.16	0.97089	3.30581	1.3768
588105.16   4184990.16   588105.16 4148490.16   1.2792   2.81412   1.27552   588125.16   418490.16   588125.16 418490.16   1.2702   2.81412   2.27552   588125.16   418490.16   588125.16 418490.16   1.27552   2.2435   588125.16   418490.16   588125.16 418490.16	568065.16	4148490.16	568065.16_4148490.16	0.96094	2.85875	0.9887	568065.16	4148490.16	568065.16_4148490.16	1.0819	3.33047	1.5619
	568085.16	4148490.16	568085.16_4148490.16	1.05318	2.83674	1.08784	568085.16	4148490.16	568085.16_4148490.16	1.18986	3.33335	1.74871
Sestid-1.6	568105.16	4148490.16	568105.16_4148490.16	1.14841	2.82785	1.18729	568105.16	4148490.16	568105.16_4148490.16	1.29824	3.33454	1.93102
	568125.16	4148490.16	568125.16_4148490.16	1.23702	2.81412	1.27552	568125.16	4148490.16	568125.16_4148490.16	1.40102	3.33046	2.09609
568185.16         4148490.16         568185.16         1448490.16         568205.16         148490.16         568205.16         148490.16         568205.16         4148490.16         568205.16         4148490.16         568205.16         4148490.16         568205.16         4148490.16         568205.16         4148490.16         568205.16         4148490.16         568225.16         4148490.16         568225.16         4148490.16         568225.16         4148490.16         568225.16         4148490.16         568225.16         4148490.16         568235.16         4148490.16         568235.16         4148490.16         568235.16         4148490.16         568235.16         4148490.16         568235.16         4148490.16         568235.16         4148490.16         568305.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16         568325.16         4148490.16	568145.16	4148490.16	568145.16_4148490.16	1.31402	2.78926	1.35057	568145.16	4148490.16	568145.16_4148490.16	1.49506	3.32172	2.2435
568205.16         4148490.16         568205.16         148490.16         1.75532         3.31939         2.64431           568225.16         4148490.16         568225.16         4184890.16         1.75532         3.31343         2.76971           568225.16         4148490.16         568225.16         4148490.16         568225.16         4148490.16         56825.16         4148490.16         1.83459         3.31343         2.79219           568305.16         4148490.16         568305.16         4148490.16         568305.16         4148490.16         568305.16         4148490.16         1.90449         3.31343         2.7903           56835.16         4148490.16         568305.16         4148490.16         1.904490.16         1.9049         2.70534         2.10829         568305.16         4148490.16         568335.16         4148490.16         2.80933         3.16249         3.90886           568385.16         4148490.16         568365.16         4148490.16         2.60335.16         4148490.16         2.60345.16         4148490.16         2.2020         3.2030         3.7077           568385.16         4148490.16         568365.16         4148490.16         2.60335.16         4148490.16         2.60335.16         4148490.16         2.60335.16         4148490.16<	568165.16	4148490.16	568165.16_4148490.16	1.3922	2.78737	1.42753	568165.16	4148490.16	568165.16_4148490.16	1.58696	3.32057	2.38489
568225.16	568185.16	4148490.16	568185.16_4148490.16	1.46473	2.78707	1.50076	568185.16	4148490.16	568185.16_4148490.16	1.67295	3.31984	2.51641
568245.16         418490.16         568245.16_4148490.16         1.67382         2.80885         1.71345         568205.16         418490.16         568245.16_4148490.16         1.92049         3.31318         2.91296           568305.16         418499.16         568305.16 4148490.16         568305.16 4148490.16         2.19234         3.25554         3.44929           56835.16         418499.16         568325.16 4148490.16         568345.16 4148490.16         2.28927         2.13109         3.67007           56835.16         418490.16         568345.16 4148490.16         2.28969         2.76594         2.10829         568385.16         4148490.16         568365.16_4148490.16         2.25694         2.0893         2.27174         568365.16         4148490.16         568365.16_4148490.16         2.25688         3.11846         4.0671           568365.16         4148490.16         568365.16_4148490.16         2.25694         2.69996         2.37024         568385.16         4148490.16         568365.16_4148490.16         2.61012         3.0366         4.43037           56845.16         4148490.16         568405.16_4148490.16         2.8081         2.41023         568405.16         4148490.16         56845.16_4148490.16         2.61021         3.0365         2.9562         4.8040           5	568205.16	4148490.16	568205.16_4148490.16	1.53417	2.79048	1.57236	568205.16	4148490.16	568205.16_4148490.16	1.75532	3.31939	2.64343
568305.16         4148490.16         568305.16_4148490.16         1.90152         2.8131         1.9372         568305.16         4148490.16         568325.16_4148490.16         2.19234         3.25354         3.44929           568325.16         4148490.16         568325.16_4148490.16         568325.16_4148490.16         2.8927         3.1309         3.67007           56835.16         4148490.16         568335.16_4148490.16         2.2697         2.70694         2.10829         568365.16         4148490.16         56835.16_4148490.16         2.38983         3.16249         3.9086           568365.16         4148490.16         568365.16_4148490.16         2.68365.16_4148490.16         2.26584         2.69996         2.32024         568365.16_4148490.16         568365.16_4148490.16         2.61021         3.0366         4.20671           568405.16         4148490.16         568405.16_4148490.16         568405.16_4148490.16         568405.16_4148490.16         568405.16_4148490.16         2.61021         3.0366         4.2037           56845.16         4148490.16         568445.16_4148490.16         2.68445.16_4148490.16         2.68445.16_4148490.16         2.6845.16_4148490.16         2.68245.16_4148490.16         2.8365         2.78644         2.2463           568485.16         4148490.16         56845.16_4148490.16	568225.16	4148490.16	568225.16_4148490.16	1.59866	2.78896	1.63845	568225.16	4148490.16	568225.16_4148490.16	1.83459	3.3154	2.76971
568325.16         4148490.16         568325.16_4148490.16         1.9821         2.79403         2.0128         568325.16         4148490.16         568325.16_4148490.16         2.28927         3.21309         3.67007           568345.16         4148490.16         568345.16_4148490.16         2.08345.16         4148490.16         568345.16_4148490.16         2.289278         3.21309         3.67007           568345.16         4148490.16         568345.16_4148490.16         2.68345.16_4148490.16         2.68345.16_4148490.16         2.68345.16_4148490.16         2.68345.16_4148490.16         2.68345.16_4148490.16         2.68345.16_4148490.16         2.68045.16_4148490.16         2.68045.16_4148490.16         2.58035         2.68145.16         2.418490.16         56845.16_4148490.16         2.58035         2.67674         2.51793         568425.16_4148490.16         568425.16_4148490.16         2.68045.16         4148490.16         568425.16_4148490.16         2.57634         2.51793         568425.16_4148490.16         568425.16_4148490.16         2.68645.16_4148490.16         2.68645.16_4148490.16         2.68645.16_4148490.16         2.68693         2.42986         2.74129         568445.16_4148490.16         568445.16_4148490.16         3.08387         2.69223         548701           568485.16_4148490.16         568485.16_4148490.16         568485.16_4148490.16         568485.16_4148490.	568245.16	4148490.16	568245.16_4148490.16	1.67382	2.80885	1.71345	568245.16	4148490.16	568245.16_4148490.16	1.92049	3.31318	2.91296
568345.16         4148490.16         568345.16_4148490.16         2.06699         2.76594         2.10829         568345.16         4148490.16         568345.16_4148490.16         2.38983         3.16249         3.90886           568365.16         4148490.16         568365.16_4148490.16         2.25688         3.11846         4.20671           568365.16         4148490.16         568385.16_4148490.16         2.26599         2.23024         568385.16         4148490.16         56835.16_4148490.16         2.5088         3.11846         4.20671           568405.16         4148490.16         568405.16_4148490.16         2.35035         2.63104         2.41223         568405.16         4148490.16         568416.4148490.16         2.83565         2.87641         4.94778           568405.16         4148490.16         568425.16_4148490.16         2.57031         2.51202         2.64179         568465.16         4148490.16         56845.16_4148490.16         2.62678         2.7129         568465.16         4148490.16         56845.16_4148490.16         2.62679         2.24986         2.74129         568465.16         4148490.16         56845.16_4148490.16         3.03837         2.69223         5.88701           56855.16         4148490.16         568485.16_4148490.16         2.6845.16_4148490.16         2.6845.16	568305.16	4148490.16	568305.16_4148490.16	1.90152	2.8131	1.9372	568305.16	4148490.16	568305.16_4148490.16	2.19234	3.25354	3.44929
568365.16         4148490.16         568365.16_4148490.16         2.22706         2.80943         2.27174         568365.16         4148490.16         568365.16_4148490.16         2.52688         3.11846         4.20671           568385.16         4148490.16         568365.16_4148490.16         2.26594         2.69996         2.32024         568365.16         4148490.16         568365.16_4148490.16         2.61021         3.0366         4.43037           568405.16         4148490.16         568405.16_4148490.16         2.68405.16_4148490.16         2.57031         2.51202         2.64179         568405.16         4148490.16         568405.16_4148490.16         2.95688         2.78644         5.22463           568405.16         4148490.16         568405.16_4148490.16         2.57031         2.51202         2.64179         568405.16         4148490.16         568405.16_4148490.16         2.96268         2.78644         5.22463           568405.16         4148490.16         568405.16_4148490.16         2.57071         2.34637         2.44129         568405.16         4148490.16         568405.16_4148490.16         3.03337         2.69233         3.4870           568405.16         4148490.16         568405.16_4148490.16         2.88051         2.26679         2.96044         568505.16_4148490.16         56840	568325.16	4148490.16	568325.16_4148490.16	1.9821	2.79403	2.01928	568325.16	4148490.16	568325.16_4148490.16	2.28927	3.21309	3.67007
568385.16         4148490.16         568385.16_4148490.16         2.26594         2.69996         2.32024         568385.16         4148490.16         568385.16_4148490.16         2.61021         3.0366         4.43037           568405.16         4148490.16         568405.16_4148490.16         568405.16_4148490.16         2.6500         2.5674         2.51793         568405.16         4148490.16         568425.16_4148490.16         2.83365         2.87261         4.94758           568445.16         4148490.16         56845.16_4148490.16         2.56840.16         2.57031         2.51202         2.64179         568445.16_4148490.16         56845.16_4148490.16         2.96268         2.78243         568465.16         4148490.16         56845.16_4148490.16         2.6669         2.42986         2.74129         568465.16         4148490.16         56845.16_4148490.16         3.03387         2.69223         5.48701           568505.16         4148490.16         568455.16_4148490.16         2.68051         2.26679         2.96044         568505.16         4148490.16         568455.16_4148490.16         3.33436         2.50023         5.6203           568545.16         4148490.16         568545.16_4148490.16         3.10193         2.0991         3.19504         568545.16         4148490.16         568545.16_4148490.16	568345.16	4148490.16	568345.16_4148490.16	2.06699	2.76594	2.10829	568345.16	4148490.16	568345.16_4148490.16	2.38983	3.16249	3.90886
568405.16         4148490.16         568405.16_4148490.16         2.35035         2.63104         2.41223         568405.16         4148490.16         568405.16_4148490.16         2.71694         2.9565         4.68404           568425.16         4148490.16         568425.16_4148490.16         2.48009         2.56764         2.51793         568425.16         4148490.16         568445.16_4148490.16         2.83365         2.87261         4.94758           568445.16         4148490.16         568445.16_4148490.16         2.6809         2.42986         2.74129         568445.16         4148490.16         568445.16_4148490.16         3.08387         2.6923         5.48701           56845.16         4148490.16         568465.16_4148490.16         2.6609         2.42986         2.74129         568465.16         4148490.16         568465.16_4148490.16         3.08387         2.69233         5.48701           568505.16         4148490.16         568505.16_4148490.16         2.88051         2.26679         2.96044         568505.16         4148490.16         568505.16_4148490.16         3.01406         2.30825         662813           568505.16         4148490.16         568565.16_4148490.16         3.21795         2.01836         3.3216         568505.16         4148490.16         568555.16_4148490.16	568365.16	4148490.16	568365.16_4148490.16	2.22706	2.80943	2.27174	568365.16	4148490.16	568365.16_4148490.16	2.52688	3.11846	4.20671
568425.16         4148490.16         568425.16_4148490.16         2.45009         2.56764         2.51793         568425.16         4148490.16         568425.16_4148490.16         2.83365         2.87261         4.94758           568445.16         4148490.16         568445.16_4148490.16         2.57031         2.51202         2.64179         568445.16         4148490.16         568445.16_4148490.16         2.96268         2.78644         5.22463           568465.16         4148490.16         568465.16_4148490.16         2.6669         2.42986         2.74129         568465.16         4148490.16         568465.16_4148490.16         3.08387         2.69223         5.48701           568505.16         4148490.16         568485.16_4148490.16         2.8051         2.26679         2.96044         568505.16         4148490.16         568505.16_4148490.16         3.0133         2.0991         3.19504         568505.16         4148490.16         56855.16_4148490.16         3.61406         2.30825         6.62813           568555.16         4148490.16         568555.16_4148490.16         3.21795         2.01836         3.3216         568505.16         4148490.16         568555.16_4148490.16         3.61406         2.30825         6.62813           568855.16         4148490.16         568605.16_4148490.16	568385.16	4148490.16	568385.16_4148490.16	2.26594	2.69996	2.32024	568385.16	4148490.16	568385.16_4148490.16	2.61021	3.0366	4.43037
568445.16         4148490.16         568445.16_4148490.16         2.57031         2.51202         2.64179         568445.16         4148490.16         568445.16_4148490.16         2.96268         2.78644         5.2463           568465.16         4148490.16         568465.16_4148490.16         2.6669         2.42986         2.74129         568465.16         4148490.16         56845.16_4148490.16         3.03837         2.69223         5.48701           568485.16         4148490.16         568465.16_4148490.16         2.76771         2.34637         2.84455         568465.16         4148490.16         568485.16_4148490.16         3.20982         2.59615         5.75664           568505.16         4148490.16         568505.16_4148490.16         3.10193         2.0991         3.19504         568505.16         4148490.16         3.61406         2.30825         6.62813           568505.16         4148490.16         568565.16_4148490.16         3.21795         2.01836         3.3216         568565.16         4148490.16         568555.16_4148490.16         3.75211         2.21497         6.93664           568505.16         4148490.16         568505.16_4148490.16         3.32047         1.9318         3.3216         568565.16         4148490.16         568555.16_4148490.16         3.82264         2.12133	568405.16	4148490.16	568405.16_4148490.16	2.35035	2.63104	2.41223	568405.16	4148490.16	568405.16_4148490.16	2.71694	2.9565	4.68404
568465.16         4148490.16         568465.16_4148490.16         2.6669         2.42986         2.74129         568465.16         4148490.16         568465.16_4148490.16         3.08387         2.69223         5.48701           568485.16         4148490.16         568485.16_4148490.16         2.66771         2.34637         2.84455         568485.16         4148490.16         568485.16_4148490.16         3.0982         2.59615         5.75654           568505.16         4148490.16         568505.16_4148490.16         2.88051         2.26679         2.96044         568505.16         4148490.16         568505.16_4148490.16         3.34346         2.50023         6.04018           568545.16         4148490.16         568565.16_4148490.16         3.21795         2.01836         3.3216         568565.16         4148490.16         568565.16_4148490.16         3.61406         2.30825         6.62813           568565.16         4148490.16         568565.16_4148490.16         3.21795         2.01836         3.3216         568565.16         4148490.16         3.68264         2.12333         7.2403           56805.16         4148490.16         568565.16_4148490.16         3.52432         1.78597         3.66257         568605.16         4148490.16         568605.16_4148490.16         4.0501         2.03464	568425.16	4148490.16	568425.16_4148490.16	2.45009	2.56764	2.51793	568425.16	4148490.16	568425.16_4148490.16	2.83365	2.87261	4.94758
568485.16         4148490.16         568485.16_4148490.16         2.76771         2.34637         2.84455         568485.16         4148490.16         568485.16_4148490.16         3.20982         2.59615         5.75654           568505.16         4148490.16         568505.16_4148490.16         2.88051         2.26679         2.96044         568505.16         4148490.16         568505.16_4148490.16         3.34346         2.50023         6.04018           568565.16         4148490.16         568545.16_4148490.16         3.10193         2.0991         3.19504         568565.16         4148490.16         568565.16_4148490.16         3.61406         2.30825         6.62813           568565.16         4148490.16         568565.16_4148490.16         3.21795         2.01836         3.3216         568565.16         4148490.16         3.61406         2.30825         6.62813           568655.16         4148490.16         568565.16_4148490.16         3.32407         1.93518         3.43612         568565.16         4148490.16         3.68264         2.12333         7.2403           568605.16         4148490.16         568605.16_4148490.16         3.52432         1.78597         3.66257         568605.16         4148490.16         568625.16_4148490.16         4.12413         1.95086         7.83492	568445.16	4148490.16	568445.16_4148490.16	2.57031	2.51202	2.64179	568445.16	4148490.16	568445.16_4148490.16	2.96268	2.78644	5.22463
568505.16         4148490.16         568505.16_4148490.16         2.88051         2.26679         2.96044         568505.16         4148490.16         568505.16_4148490.16         3.34346         2.50023         6.04018           568545.16         4148490.16         568545.16_4148490.16         3.10193         2.0991         3.19504         568565.16         4148490.16         568545.16_4148490.16         3.61406         2.30825         6.62813           568565.16         4148490.16         568565.16_4148490.16         3.21795         2.01836         3.3216         568565.16         4148490.16         568565.16_4148490.16         3.75211         2.21497         6.93664           568565.16         4148490.16         568565.16_4148490.16         3.2472         1.93518         3.43612         568565.16         4148490.16         568565.16_4148490.16         3.88264         2.12333         7.2403           568605.16         4148490.16         568605.16_4148490.16         3.64490.16         3.52432         1.78597         3.66257         568605.16         4148490.16         568605.16_4148490.16         4.00501         2.03464         7.53499           56865.16         4148490.16         568605.16_4148490.16         3.64284         1.57945         3.79835         568605.16         4148490.16         56	568465.16	4148490.16	568465.16_4148490.16	2.6669	2.42986	2.74129	568465.16	4148490.16	568465.16_4148490.16	3.08387	2.69223	5.48701
568545.16         4148490.16         568545.16         4148490.16         3.61406         2.30825         6.62813           568565.16         4148490.16         568565.16         4148490.16         568565.16         4148490.16         568565.16         4148490.16         3.61406         2.30825         6.62813           568565.16         4148490.16         568565.16         4148490.16         568565.16         4148490.16         568565.16         4148490.16         3.8264         2.12333         7.2403           568605.16         4148490.16         568605.16         4148490.16         568585.16         4148490.16         568585.16         4148490.16         3.88264         2.12333         7.2403           568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16         568605.16         4148490.16	568485.16	4148490.16	568485.16_4148490.16	2.76771	2.34637	2.84455	568485.16	4148490.16	568485.16_4148490.16	3.20982	2.59615	5.75654
568565.16         4148490.16         568565.16_4148490.16         3.21795         2.01836         3.3216         568565.16         4148490.16         568565.16_4148490.16         3.75211         2.21497         6.93664           568585.16         4148490.16         568585.16_4148490.16         3.32047         1.93518         3.43612         568585.16         4148490.16         568585.16_4148490.16         3.88264         2.12333         7.2403           568605.16         4148490.16         568605.16_4148490.16         3.64490.16         3.54490.16         3.52432         1.78597         3.66257         568625.16         4148490.16         568625.16_4148490.16         4.12413         1.95086         7.83492           568625.16         4148490.16         568685.16_4148490.16         3.6284         1.57945         3.79835         568685.16         4148490.16         568685.16_4148490.16         4.3025         1.71701         8.48775           568705.16         4148490.16         568705.16_4148490.16         3.64781         1.51535         3.77386         568705.16         4148490.16         568705.16_4148490.16         4.29307         1.64594         8.60704           567325.16         4148510.16         568725.16_4148490.16         3.67725.16         4148510.16         567325.16_4148510.16         0.05872 </td <td>568505.16</td> <td>4148490.16</td> <td>568505.16_4148490.16</td> <td>2.88051</td> <td>2.26679</td> <td>2.96044</td> <td>568505.16</td> <td>4148490.16</td> <td>568505.16_4148490.16</td> <td>3.34346</td> <td>2.50023</td> <td>6.04018</td>	568505.16	4148490.16	568505.16_4148490.16	2.88051	2.26679	2.96044	568505.16	4148490.16	568505.16_4148490.16	3.34346	2.50023	6.04018
568585.16         4148490.16         568585.16_4148490.16         3.32047         1.93518         3.43612         568585.16         4148490.16         568585.16_4148490.16         3.88264         2.12333         7.2403           568605.16         4148490.16         568605.16_4148490.16         3.64499         1.85467         3.54256         568605.16         4148490.16         568605.16_4148490.16         4.00501         2.03464         7.53709           568625.16         4148490.16         568625.16_4148490.16         3.52432         1.78597         3.66257         568625.16         4148490.16         568625.16_4148490.16         4.12413         1.95086         7.83492           568685.16         4148490.16         568685.16_4148490.16         3.66284         1.57945         3.79835         568685.16         4148490.16         56865.16_4148490.16         4.3025         1.71701         8.48775           568705.16         4148490.16         568705.16_4148490.16         3.64781         1.51535         3.77386         568705.16         4148490.16         568705.16_4148490.16         4.29307         1.64594         8.60704           568725.16         4148490.16         568725.16_4148490.16         3.61782         1.45618         3.7324         568725.16         4148490.16         568725.16_4148490.16	568545.16	4148490.16	568545.16_4148490.16	3.10193	2.0991	3.19504	568545.16	4148490.16	568545.16_4148490.16	3.61406	2.30825	6.62813
568605.16         4148490.16         568605.16_4148490.16         3.41499         1.85467         3.54256         568605.16         4148490.16         568605.16_4148490.16         4.00501         2.03464         7.53709           568625.16         4148490.16         568625.16_4148490.16         3.52432         1.78597         3.66257         568625.16         4148490.16         568625.16_4148490.16         4.12413         1.95086         7.83492           568685.16         4148490.16         568685.16_4148490.16         3.66284         1.57945         3.79385         568685.16         4148490.16         568705.16_4148490.16         4.29307         1.64594         8.60704           568705.16         4148490.16         568705.16_4148490.16         3.64781         1.51535         3.77386         568705.16         4148490.16         568705.16_4148490.16         4.29307         1.64594         8.60704           568725.16         4148490.16         568725.16_4148490.16         3.61782         1.45618         3.7324         568725.16         4148490.16         568725.16_4148490.16         4.25797         1.5787         8.69349           567325.16         4148510.16         567325.16_4148510.16         0.05820         0.12424         0.05677         567325.16         4148510.16         567345.16_4148510.16	568565.16	4148490.16	568565.16_4148490.16	3.21795	2.01836	3.3216	568565.16	4148490.16	568565.16_4148490.16	3.75211	2.21497	6.93664
568625.16         4148490.16         568625.16_4148490.16         3.52432         1.78597         3.66257         568625.16         4148490.16         568625.16_4148490.16         4.12413         1.95086         7.83492           568685.16         4148490.16         568685.16_4148490.16         3.66284         1.57945         3.79835         568685.16         4148490.16         568685.16_4148490.16         4.3025         1.71701         8.48775           568705.16         4148490.16         568705.16_4148490.16         3.64781         1.51535         3.77386         568705.16         4148490.16         568705.16_4148490.16         4.29307         1.64594         8.60704           568725.16         4148490.16         568725.16_4148490.16         3.61782         1.45618         3.7324         568725.16         4148490.16         568725.16_4148490.16         4.25797         1.5787         8.69349           567325.16         4148510.16         567325.16_4148510.16         0.05622         0.12424         0.05677         567325.16         4148510.16         567325.16_4148510.16         0.05874         0.1344         0.09512           567345.16         4148510.16         567345.16_4148510.16         0.05806         0.13267         0.05829         567345.16         4148510.16         567365.16_4148510.16	568585.16	4148490.16	568585.16_4148490.16	3.32047	1.93518	3.43612	568585.16	4148490.16	568585.16_4148490.16	3.88264	2.12333	7.2403
568685.16         4148490.16         568685.16_4148490.16         3.66284         1.57945         3.79835         568685.16         4148490.16         568685.16_4148490.16         4.3025         1.71701         8.48775           568705.16         4148490.16         568705.16_4148490.16         3.64781         1.51535         3.77386         568705.16         4148490.16         568705.16_4148490.16         4.29307         1.64594         8.60704           568725.16         4148490.16         568725.16_4148490.16         3.61782         1.45618         3.7324         568725.16         4148490.16         568725.16_4148490.16         4.25797         1.5787         8.69349           567325.16         4148510.16         567325.16_4148510.16         0.05622         0.12424         0.05677         567325.16         4148510.16         567325.16_4148510.16         0.05874         0.1344         0.09512           567345.16         4148510.16         567345.16_4148510.16         0.05806         0.13267         0.05829         567345.16         4148510.16         567345.16_4148510.16         0.06078         0.14343         0.09835           567385.16         4148510.16         567365.16_4148510.16         0.06197         0.15177         0.06143         567385.16         4148510.16         567385.16_4148510.16	568605.16	4148490.16	568605.16_4148490.16	3.41499	1.85467	3.54256	568605.16	4148490.16	568605.16_4148490.16	4.00501	2.03464	7.53709
568705.16         4148490.16         568705.16_4148490.16         3.64781         1.51535         3.77386         568705.16         4148490.16         568705.16_4148490.16         4.29307         1.64594         8.60704           568725.16         4148490.16         568725.16_4148490.16         3.61782         1.45618         3.7324         568725.16         4148490.16         568725.16_4148490.16         4.25797         1.5787         8.69349           567325.16         4148510.16         567325.16_4148510.16         0.05622         0.12424         0.05677         567325.16         4148510.16         567325.16_4148510.16         0.05874         0.1344         0.09512           567345.16         4148510.16         567345.16_4148510.16         0.05806         0.13267         0.05829         567345.16         4148510.16         567345.16_4148510.16         0.06078         0.14343         0.09835           567365.16         4148510.16         567365.16_4148510.16         0.05994         0.14172         0.0598         567365.16         4148510.16         567365.16_4148510.16         0.06291         0.15331         0.10172           567385.16         4148510.16         567385.16_4148510.16         0.06197         0.15177         0.06143         567385.16         4148510.16         567405.16_4148510.16	568625.16	4148490.16	568625.16_4148490.16	3.52432	1.78597	3.66257	568625.16	4148490.16	568625.16_4148490.16	4.12413	1.95086	7.83492
568725.16         4148490.16         568725.16_4148490.16         3.61782         1.45618         3.7324         568725.16         4148490.16         568725.16_4148490.16         4.25797         1.5787         8.69349           567325.16         4148510.16         567325.16_4148510.16         0.05622         0.12424         0.05677         567325.16         4148510.16         567325.16_4148510.16         0.05874         0.1344         0.09512           567345.16         4148510.16         567345.16_4148510.16         0.05806         0.13267         0.05829         567345.16         4148510.16         567345.16_4148510.16         0.06078         0.14343         0.09835           567365.16         4148510.16         567365.16_4148510.16         0.05994         0.14172         0.0598         567365.16         4148510.16         567365.16_4148510.16         0.06291         0.15331         0.10172           567385.16         4148510.16         567385.16_4148510.16         0.06197         0.15177         0.06143         567385.16         4148510.16         567385.16_4148510.16         0.06521         0.16431         0.10532           567405.16         4148510.16         567405.16_4148510.16         0.06779         0.17689         0.10924           567425.16         4148510.16         567425.16_	568685.16	4148490.16	568685.16_4148490.16	3.66284	1.57945	3.79835	568685.16	4148490.16	568685.16_4148490.16	4.3025	1.71701	8.48775
567325.16         4148510.16         567325.16_4148510.16         0.05622         0.12424         0.05677         567325.16         4148510.16         567325.16_4148510.16         0.05874         0.1344         0.09512           567345.16         4148510.16         567345.16_4148510.16         0.05806         0.13267         0.05829         567345.16         4148510.16         567345.16_4148510.16         0.06078         0.14343         0.09835           567365.16         4148510.16         567365.16_4148510.16         0.05994         0.14172         0.0598         567365.16         4148510.16         567365.16_4148510.16         0.06291         0.15331         0.10172           567385.16         4148510.16         567385.16_4148510.16         0.06197         0.15177         0.06143         567385.16         4148510.16         567385.16_4148510.16         0.06521         0.16431         0.10532           567405.16         4148510.16         567405.16_4148510.16         0.06779         0.17689         0.10924           567425.16         4148510.16         567425.16_4148510.16         0.07047         0.19071         0.11334	568705.16	4148490.16	568705.16_4148490.16	3.64781	1.51535	3.77386	568705.16	4148490.16	568705.16_4148490.16	4.29307	1.64594	8.60704
567345.16       4148510.16       567345.16_4148510.16       0.05806       0.13267       0.05829       567345.16       4148510.16       567345.16_4148510.16       0.06078       0.14343       0.09835         567365.16       4148510.16       567365.16_4148510.16       0.05994       0.14172       0.0598       567365.16       4148510.16       567365.16_4148510.16       0.06291       0.15331       0.10172         567385.16       4148510.16       567385.16_4148510.16       0.06197       0.15177       0.06143       567385.16       4148510.16       567385.16_4148510.16       0.06521       0.16431       0.10532         567405.16       4148510.16       567405.16_4148510.16       0.06779       0.17689       0.10924         567425.16       4148510.16       567425.16_4148510.16       0.07047       0.19071       0.11334	568725.16	4148490.16	568725.16_4148490.16	3.61782	1.45618	3.7324	568725.16	4148490.16	568725.16_4148490.16	4.25797	1.5787	8.69349
567365.16       4148510.16       567365.16_4148510.16       0.05994       0.14172       0.0598       567365.16       4148510.16       567365.16_4148510.16       0.06291       0.15331       0.10172         567385.16       4148510.16       567385.16_4148510.16       0.06197       0.15177       0.06143       567385.16       4148510.16       567385.16_4148510.16       0.06521       0.16431       0.10532         567405.16       4148510.16       567405.16_4148510.16       0.06779       0.17689       0.10924         567425.16       4148510.16       567425.16_4148510.16       0.07047       0.19071       0.11334	567325.16	4148510.16	567325.16_4148510.16	0.05622	0.12424	0.05677	567325.16	4148510.16	567325.16_4148510.16	0.05874	0.1344	0.09512
567385.16       4148510.16       567385.16_4148510.16       0.06197       0.15177       0.06143       567385.16       4148510.16       567385.16_4148510.16       0.06521       0.16431       0.10532         567405.16       4148510.16       567405.16_4148510.16       0.0643       0.16347       0.06333       567405.16       4148510.16       567405.16_4148510.16       0.06779       0.17689       0.10924         567425.16       4148510.16       567425.16_4148510.16       0.07047       0.19071       0.11334	567345.16	4148510.16	567345.16_4148510.16	0.05806	0.13267	0.05829	567345.16	4148510.16	567345.16_4148510.16	0.06078	0.14343	0.09835
567405.16       4148510.16       567405.16_4148510.16       0.0643       0.16347       0.06333       567405.16       4148510.16       567405.16_4148510.16       0.06779       0.17689       0.10924         567425.16       4148510.16       567425.16_4148510.16       0.07047       0.19071       0.11334	567365.16	4148510.16	567365.16_4148510.16	0.05994	0.14172	0.0598	567365.16	4148510.16	567365.16_4148510.16	0.06291	0.15331	0.10172
567425.16 4148510.16 567425.16_4148510.16 0.06668 0.17601 0.06532 567425.16 4148510.16 567425.16_4148510.16 0.07047 0.19071 0.11334	567385.16	4148510.16	567385.16_4148510.16	0.06197	0.15177	0.06143	567385.16	4148510.16	567385.16_4148510.16	0.06521	0.16431	0.10532
<del>-</del>	567405.16	4148510.16	567405.16_4148510.16	0.0643	0.16347	0.06333	567405.16	4148510.16	567405.16_4148510.16	0.06779	0.17689	0.10924
567445.16 4148510.16 567445.16_4148510.16 0.06935 0.19028 0.06765 567445.16 4148510.16 567445.16_4148510.16 0.07341 0.20637 0.11775	567425.16	4148510.16	567425.16_4148510.16	0.06668	0.17601	0.06532	567425.16	4148510.16	567425.16_4148510.16	0.07047	0.19071	0.11334
	567445.16	4148510.16	567445.16_4148510.16	0.06935	0.19028	0.06765	567445.16	4148510.16	567445.16_4148510.16	0.07341	0.20637	0.11775

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567465.16	4148510.16	567465.16_4148510.16	0.07237	0.20669	0.07042	567465.16	4148510.16	567465.16_4148510.16	0.07666	0.22432	0.12256
567485.16	4148510.16	567485.16_4148510.16	0.07552	0.2246	0.07346	567485.16	4148510.16	567485.16_4148510.16	0.08012	0.2443	0.12763
567505.16	4148510.16	567505.16_4148510.16	0.079	0.24491	0.07697	567505.16	4148510.16	567505.16_4148510.16	0.0839	0.26707	0.1331
567525.16	4148510.16	567525.16_4148510.16	0.08294	0.2685	0.08107	567525.16	4148510.16	567525.16_4148510.16	0.0881	0.29344	0.13911
567545.16	4148510.16	567545.16_4148510.16	0.08724	0.29529	0.08564	567545.16	4148510.16	567545.16_4148510.16	0.09268	0.32362	0.14559
567565.16	4148510.16	567565.16_4148510.16	0.09186	0.3255	0.0906	567565.16	4148510.16	567565.16_4148510.16	0.09764	0.35807	0.15255
567585.16	4148510.16	567585.16_4148510.16	0.09697	0.36046	0.0961	567585.16	4148510.16	567585.16_4148510.16	0.10312	0.39805	0.16012
567605.16	4148510.16	567605.16_4148510.16	0.10305	0.40341	0.10248	567605.16	4148510.16	567605.16_4148510.16	0.1094	0.44608	0.16869
567625.16	4148510.16	567625.16_4148510.16	0.10951	0.45215	0.10922	567625.16	4148510.16	567625.16_4148510.16	0.11621	0.50123	0.17788
567645.16	4148510.16	567645.16_4148510.16	0.11633	0.50707	0.11626	567645.16	4148510.16	567645.16_4148510.16	0.1236	0.56426	0.18772
567665.16	4148510.16	567665.16_4148510.16	0.12434	0.57424	0.12426	567665.16	4148510.16	567665.16_4148510.16	0.13209	0.63971	0.19893
567685.16	4148510.16	567685.16_4148510.16	0.13284	0.64952	0.13243	567685.16	4148510.16	567685.16_4148510.16	0.14135	0.72549	0.21114
567705.16	4148510.16	567705.16_4148510.16	0.14275	0.73974	0.1415	567705.16	4148510.16	567705.16_4148510.16	0.15201	0.82663	0.22535
567725.16	4148510.16	567725.16_4148510.16	0.15347	0.84002	0.15101	567725.16	4148510.16	567725.16_4148510.16	0.16377	0.94063	0.24152
567745.16	4148510.16	567745.16_4148510.16	0.16535	0.95195	0.1616	567745.16	4148510.16	567745.16_4148510.16	0.17696	1.06909	0.26044
567765.16	4148510.16	567765.16_4148510.16	0.17875	1.07645	0.17409	567765.16	4148510.16	567765.16_4148510.16	0.1919	1.21301	0.28281
567785.16	4148510.16	567785.16_4148510.16	0.19476	1.22076	0.18969	567785.16	4148510.16	567785.16_4148510.16	0.20948	1.3768	0.30947
567805.16	4148510.16	567805.16_4148510.16	0.21304	1.37892	0.2076	567805.16	4148510.16	567805.16_4148510.16	0.22969	1.55662	0.33926
567825.16	4148510.16	567825.16_4148510.16	0.23351	1.54532	0.22704	567825.16	4148510.16	567825.16_4148510.16	0.25274	1.74884	0.37091
567845.16	4148510.16	567845.16_4148510.16	0.25751	1.72588	0.24915	567845.16	4148510.16	567845.16_4148510.16	0.27985	1.95611	0.40474
567885.16	4148510.16	567885.16_4148510.16	0.31949	2.11403	0.3068	567885.16	4148510.16	567885.16_4148510.16	0.3502	2.40174	0.48746
567905.16	4148510.16	567905.16_4148510.16	0.3589	2.30416	0.3457	567905.16	4148510.16	567905.16_4148510.16	0.39534	2.62657	0.54413
567925.16	4148510.16	567925.16_4148510.16	0.40793	2.50085	0.39611	567925.16	4148510.16	567925.16_4148510.16	0.4508	2.85318	0.61742
567945.16	4148510.16	567945.16_4148510.16	0.46523	2.67345	0.45574	567945.16	4148510.16	567945.16_4148510.16	0.51627	3.06189	0.70572
567965.16	4148510.16	567965.16_4148510.16	0.53341	2.82627	0.52586	567965.16	4148510.16	567965.16_4148510.16	0.59425	3.25027	0.81129
567985.16	4148510.16	567985.16_4148510.16	0.61356	2.95566	0.60929	567985.16	4148510.16	567985.16_4148510.16	0.68575	3.41186	0.93742
568005.16	4148510.16	568005.16_4148510.16	0.70566	3.05949	0.70892	568005.16	4148510.16	568005.16_4148510.16	0.79072	3.54204	1.08744
568025.16	4148510.16	568025.16_4148510.16	0.80535	3.12305	0.81926	568025.16	4148510.16	568025.16_4148510.16	0.90579	3.63295	1.25916
568045.16	4148510.16	568045.16_4148510.16	0.91133	3.15649	0.93432	568045.16	4148510.16	568045.16_4148510.16	1.02874	3.69042	1.45104
568065.16	4148510.16	568065.16_4148510.16	1.01829	3.15557	1.0486	568065.16	4148510.16	568065.16_4148510.16	1.15407	3.71615	1.65801
568085.16	4148510.16	568085.16_4148510.16	1.12756	3.14652	1.166	568085.16	4148510.16	568085.16_4148510.16	1.28018	3.7256	1.87387
568105.16	4148510.16	568105.16_4148510.16	1.23003	3.12073	1.27377	568105.16	4148510.16	568105.16_4148510.16	1.40042	3.72049	2.07666
568125.16	4148510.16	568125.16_4148510.16	1.3328	3.11738	1.37613	568125.16	4148510.16	568125.16_4148510.16	1.51836	3.71911	2.26502
568145.16	4148510.16	568145.16_4148510.16	1.42391	3.10634	1.46458	568145.16	4148510.16	568145.16_4148510.16	1.62654	3.71291	2.43335
568165.16	4148510.16	568165.16_4148510.16	1.50309	3.08783	1.54221	568165.16	4148510.16	568165.16_4148510.16	1.72459	3.70354	2.58485
568185.16	4148510.16	568185.16_4148510.16	1.57535	3.07131	1.61567	568185.16	4148510.16	568185.16_4148510.16	1.81564	3.69386	2.725
568205.16	4148510.16	568205.16_4148510.16	1.65926	3.09258	1.70207	568205.16	4148510.16	568205.16_4148510.16	1.91045	3.69262	2.87115
568225.16	4148510.16	568225.16_4148510.16	1.73542	3.09878	1.77909	568225.16	4148510.16	568225.16_4148510.16	2.00085	3.68255	3.01678
568285.16	4148510.16	568285.16_4148510.16	1.97088	3.08014	2.01032	568285.16	4148510.16	568285.16_4148510.16	2.28773	3.59959	3.57083

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568305.16	4148510.16	568305.16_4148510.16	2.08073	3.09222	2.12038	568305.16	4148510.16	568305.16_4148510.16	2.40333	3.55792	3.82323
568325.16	4148510.16	568325.16_4148510.16	2.17281	3.05735	2.21602	568325.16	4148510.16	568325.16_4148510.16	2.51192	3.49611	4.0821
568345.16	4148510.16	568345.16_4148510.16	2.24676	2.98381	2.29657	568345.16	4148510.16	568345.16_4148510.16	2.61357	3.41712	4.34025
568385.16	4148510.16	568385.16_4148510.16	2.52641	2.94145	2.58888	568385.16	4148510.16	568385.16_4148510.16	2.88407	3.25795	4.95493
568405.16	4148510.16	568405.16_4148510.16	2.55188	2.78746	2.62407	568405.16	4148510.16	568405.16_4148510.16	2.97062	3.14329	5.18318
568425.16	4148510.16	568425.16_4148510.16	2.67812	2.72095	2.75573	568425.16	4148510.16	568425.16_4148510.16	3.10704	3.04178	5.478
568465.16	4148510.16	568465.16_4148510.16	2.90098	2.53801	2.98529	568465.16	4148510.16	568465.16_4148510.16	3.37719	2.8217	6.04888
568485.16	4148510.16	568485.16_4148510.16	3.01214	2.43948	3.099	568485.16	4148510.16	568485.16_4148510.16	3.51783	2.70931	6.3427
568505.16	4148510.16	568505.16_4148510.16	3.12534	2.33987	3.21593	568505.16	4148510.16	568505.16_4148510.16	3.66311	2.59745	6.6478
568525.16	4148510.16	568525.16_4148510.16	3.25227	2.2463	3.34916	568525.16	4148510.16	568525.16_4148510.16	3.81771	2.48837	6.97337
568565.16	4148510.16	568565.16_4148510.16	3.53481	2.07192	3.65352	568565.16	4148510.16	568565.16_4148510.16	4.14623	2.27994	7.67534
568585.16	4148510.16	568585.16_4148510.16	3.65349	1.98005	3.78609	568585.16	4148510.16	568585.16_4148510.16	4.30174	2.17944	8.02265
568605.16	4148510.16	568605.16_4148510.16	3.776	1.89556	3.92251	568605.16	4148510.16	568605.16_4148510.16	4.45561	2.08373	8.3734
568665.16	4148510.16	568665.16_4148510.16	4.06503	1.67201	4.22959	568665.16	4148510.16	568665.16_4148510.16	4.80752	1.82369	9.3147
568685.16	4148510.16	568685.16_4148510.16	4.07619	1.59968	4.23197	568685.16	4148510.16	568685.16_4148510.16	4.842	1.74468	9.52571
568705.16	4148510.16	568705.16_4148510.16	4.0599	1.53326	4.20631	568705.16	4148510.16	568705.16_4148510.16	4.83383	1.67024	9.67926
568725.16	4148510.16	568725.16_4148510.16	4.02644	1.47309	4.16323	568725.16	4148510.16	568725.16_4148510.16	4.7908	1.60029	9.78755
567325.16	4148530.16	567325.16_4148530.16	0.05701	0.12424	0.05805	567325.16	4148530.16	567325.16_4148530.16	0.05936	0.13455	0.09646
567345.16	4148530.16	567345.16_4148530.16	0.0588	0.13238	0.05969	567345.16	4148530.16	567345.16_4148530.16	0.06136	0.14342	0.09961
567365.16	4148530.16	567365.16_4148530.16	0.06069	0.14132	0.06134	567365.16	4148530.16	567365.16_4148530.16	0.06349	0.15322	0.10297
567385.16	4148530.16	567385.16_4148530.16	0.06278	0.15155	0.06312	567385.16	4148530.16	567385.16_4148530.16	0.06582	0.16431	0.10663
567405.16	4148530.16	567405.16_4148530.16	0.06503	0.16295	0.06498	567405.16	4148530.16	567405.16_4148530.16	0.06835	0.17672	0.11054
567425.16	4148530.16	567425.16_4148530.16	0.06738	0.17544	0.0669	567425.16	4148530.16	567425.16_4148530.16	0.071	0.19049	0.11467
567445.16	4148530.16	567445.16_4148530.16	0.07004	0.18993	0.06911	567445.16	4148530.16	567445.16_4148530.16	0.07394	0.20629	0.11919
567465.16	4148530.16	567465.16_4148530.16	0.07291	0.20608	0.07155	567465.16	4148530.16	567465.16_4148530.16	0.07711	0.22407	0.12399
567485.16	4148530.16	567485.16_4148530.16	0.076	0.22418	0.07428	567485.16	4148530.16	567485.16_4148530.16	0.08054	0.24417	0.12913
567505.16	4148530.16	567505.16_4148530.16	0.07942	0.24482	0.07744	567505.16	4148530.16	567505.16_4148530.16	0.08429	0.26718	0.13468
567525.16	4148530.16	567525.16_4148530.16	0.08312	0.2681	0.08103	567525.16	4148530.16	567525.16_4148530.16	0.08836	0.29341	0.14065
567545.16	4148530.16	567545.16_4148530.16	0.08727	0.29501	0.08523	567545.16	4148530.16	567545.16_4148530.16	0.09286	0.32376	0.14714
567565.16	4148530.16	567565.16_4148530.16	0.09179	0.32567	0.08995	567565.16	4148530.16	567565.16_4148530.16	0.09777	0.35868	0.15416
567585.16	4148530.16	567585.16_4148530.16	0.09705	0.3624	0.0955	567585.16	4148530.16	567585.16_4148530.16	0.10333	0.40009	0.16199
567605.16	4148530.16	567605.16_4148530.16	0.10291	0.40542	0.10173	567605.16	4148530.16	567605.16_4148530.16	0.10949	0.44861	0.17056
567625.16	4148530.16	567625.16_4148530.16	0.10915	0.45428	0.1084	567625.16	4148530.16	567625.16_4148530.16	0.11617	0.50448	0.17974
567645.16	4148530.16	567645.16_4148530.16	0.11646	0.51401	0.11606	567645.16	4148530.16	567645.16_4148530.16	0.12381	0.57164	0.19011
567665.16	4148530.16	567665.16_4148530.16	0.12416	0.58138	0.12409	567665.16	4148530.16	567665.16_4148530.16	0.1321	0.64858	0.20121
567685.16	4148530.16	567685.16_4148530.16	0.13267	0.65974	0.13274	567685.16	4148530.16	567685.16_4148530.16	0.14132	0.73826	0.21344
567705.16	4148530.16	567705.16_4148530.16	0.14416	0.76691	0.14373	567705.16	4148530.16	567705.16_4148530.16	0.15296	0.85336	0.22873
567725.16	4148530.16	567725.16_4148530.16	0.15304	0.85814	0.15222	567725.16	4148530.16	567725.16_4148530.16	0.16354	0.96466	0.24283
567745.16	4148530.16	567745.16_4148530.16	0.16557	0.98328	0.16346	567745.16	4148530.16	567745.16_4148530.16	0.17714	1.10612	0.26129

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567765.16	4148530.16	567765.16_4148530.16	0.17914	1.1195	0.17558	567765.16	4148530.16	567765.16_4148530.16	0.19225	1.26331	0.2826
567785.16	4148530.16	567785.16_4148530.16	0.19552	1.28005	0.19069	567785.16	4148530.16	567785.16_4148530.16	0.21014	1.44466	0.30878
567805.16	4148530.16	567805.16_4148530.16	0.21332	1.44847	0.20787	567805.16	4148530.16	567805.16_4148530.16	0.23011	1.64021	0.33872
567825.16	4148530.16	567825.16_4148530.16	0.23347	1.62779	0.22766	567825.16	4148530.16	567825.16_4148530.16	0.25299	1.85172	0.37241
567845.16	4148530.16	567845.16_4148530.16	0.25844	1.83521	0.25132	567845.16	4148530.16	567845.16_4148530.16	0.28086	2.08839	0.41022
567905.16	4148530.16	567905.16_4148530.16	0.36446	2.52232	0.35032	567905.16	4148530.16	567905.16_4148530.16	0.40079	2.87477	0.55389
567925.16	4148530.16	567925.16_4148530.16	0.41382	2.74254	0.39962	567925.16	4148530.16	567925.16_4148530.16	0.45739	3.13716	0.6256
567945.16	4148530.16	567945.16_4148530.16	0.4718	2.93425	0.45993	567945.16	4148530.16	567945.16_4148530.16	0.52477	3.38058	0.71512
567965.16	4148530.16	567965.16_4148530.16	0.54491	3.12601	0.53568	567965.16	4148530.16	567965.16_4148530.16	0.6084	3.61321	0.82778
567985.16	4148530.16	567985.16_4148530.16	0.63106	3.28102	0.62516	567985.16	4148530.16	567985.16_4148530.16	0.70745	3.81054	0.96315
568005.16	4148530.16	568005.16_4148530.16	0.73155	3.4022	0.73263	568005.16	4148530.16	568005.16_4148530.16	0.82301	3.96883	1.12606
568025.16	4148530.16	568025.16_4148530.16	0.8445	3.48576	0.85711	568025.16	4148530.16	568025.16_4148530.16	0.95339	4.08374	1.31782
568045.16	4148530.16	568045.16_4148530.16	0.96202	3.51276	0.98614	568045.16	4148530.16	568045.16_4148530.16	1.09214	4.14821	1.53205
568065.16	4148530.16	568065.16_4148530.16	1.08091	3.49877	1.11398	568065.16	4148530.16	568065.16_4148530.16	1.23456	4.17361	1.76489
568085.16	4148530.16	568085.16_4148530.16	1.20854	3.49901	1.2513	568085.16	4148530.16	568085.16_4148530.16	1.38175	4.18866	2.01459
568105.16	4148530.16	568105.16_4148530.16	1.33121	3.48886	1.38076	568105.16	4148530.16	568105.16_4148530.16	1.52333	4.18875	2.25184
568125.16	4148530.16	568125.16_4148530.16	1.44317	3.47386	1.4923	568125.16	4148530.16	568125.16_4148530.16	1.65507	4.18091	2.46216
568145.16	4148530.16	568145.16_4148530.16	1.54403	3.46126	1.58963	568145.16	4148530.16	568145.16_4148530.16	1.77629	4.17051	2.65013
568165.16	4148530.16	568165.16_4148530.16	1.6347	3.44968	1.67844	568165.16	4148530.16	568165.16_4148530.16	1.88718	4.15783	2.82088
568185.16	4148530.16	568185.16_4148530.16	1.71344	3.42793	1.7588	568185.16	4148530.16	568185.16_4148530.16	1.98749	4.13893	2.97592
568205.16	4148530.16	568205.16_4148530.16	1.79918	3.43311	1.84716	568205.16	4148530.16	568205.16_4148530.16	2.08898	4.1229	3.13434
568265.16	4148530.16	568265.16_4148530.16	2.04227	3.3821	2.08636	568265.16	4148530.16	568265.16_4148530.16	2.39254	4.00745	3.70133
568285.16	4148530.16	568285.16_4148530.16	2.13777	3.35851	2.18227	568285.16	4148530.16	568285.16_4148530.16	2.50653	3.94691	3.95761
568305.16	4148530.16	568305.16_4148530.16	2.30347	3.41617	2.34966	568305.16	4148530.16	568305.16_4148530.16	2.65592	3.89307	4.28343
568325.16	4148530.16	568325.16_4148530.16	2.39986	3.34736	2.45213	568325.16	4148530.16	568325.16_4148530.16	2.77338	3.80114	4.57818
568345.16	4148530.16	568345.16_4148530.16	2.47149	3.2352	2.53201	568345.16	4148530.16	568345.16_4148530.16	2.88077	3.69143	4.86137
568365.16	4148530.16	568365.16_4148530.16	2.56172	3.13564	2.63034	568365.16	4148530.16	568365.16_4148530.16	2.99852	3.57676	5.15441
568385.16	4148530.16	568385.16_4148530.16	2.70639	3.08034	2.78216	568385.16	4148530.16	568385.16_4148530.16	3.14433	3.4654	5.48116
568405.16	4148530.16	568405.16_4148530.16	2.84551	3.00211	2.92794	568405.16	4148530.16	568405.16_4148530.16	3.2905	3.34467	5.79859
568425.16	4148530.16	568425.16_4148530.16	2.93674	2.87456	3.02561	568425.16	4148530.16	568425.16_4148530.16	3.41887	3.21199	6.0806
568445.16	4148530.16	568445.16_4148530.16	3.04983	2.76001	3.14295	568445.16	4148530.16	568445.16_4148530.16	3.56186	3.08063	6.37789
568465.16	4148530.16	568465.16_4148530.16	3.1691	2.64591	3.26498	568465.16	4148530.16	568465.16_4148530.16	3.71259	2.94963	6.6854
568485.16	4148530.16	568485.16_4148530.16	3.29426	2.53266	3.3927	568485.16	4148530.16	568485.16_4148530.16	3.87121	2.82025	7.00862
568505.16	4148530.16	568505.16_4148530.16	3.41621	2.41643	3.51899	568505.16	4148530.16	568505.16_4148530.16	4.03386	2.6927	7.34542
568525.16	4148530.16	568525.16_4148530.16	3.56634	2.31383	3.67702	568525.16	4148530.16	568525.16_4148530.16	4.21406	2.57095	7.71832
568545.16	4148530.16	568545.16_4148530.16	3.73571	2.219	3.85808	568545.16	4148530.16	568545.16_4148530.16	4.40738	2.45434	8.11924
568565.16	4148530.16	568565.16_4148530.16	3.90997	2.12663	4.04676	568565.16	4148530.16	568565.16_4148530.16	4.60687	2.34224	8.53435
568585.16	4148530.16	568585.16_4148530.16	4.05015	2.02651	4.20244	568585.16	4148530.16	568585.16_4148530.16	4.79483	2.2331	8.9359
568625.16	4148530.16	568625.16_4148530.16	4.35241	1.85322	4.53234	568625.16	4148530.16	568625.16_4148530.16	5.17247	2.03312	9.7656

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568645.16	4148530.16	568645.16_4148530.16	4.47462	1.77271	4.66275	568645.16	4148530.16	568645.16_4148530.16	5.33161	1.9409	10.15899
568665.16	4148530.16	568665.16_4148530.16	4.56269	1.69669	4.75278	568665.16	4148530.16	568665.16_4148530.16	5.45099	1.85381	10.51518
568685.16	4148530.16	568685.16_4148530.16	4.60958	1.62574	4.79423	568685.16	4148530.16	568685.16_4148530.16	5.51622	1.77177	10.81168
568705.16	4148530.16	568705.16_4148530.16	4.57181	1.55337	4.74872	568705.16	4148530.16	568705.16_4148530.16	5.50496	1.69357	11.00513
568725.16	4148530.16	568725.16_4148530.16	4.50034	1.48728	4.6689	568725.16	4148530.16	568725.16_4148530.16	5.44004	1.62029	11.12334
567325.16	4148550.16	567325.16_4148550.16	0.05772	0.12424	0.05892	567325.16	4148550.16	567325.16_4148550.16	0.05995	0.13473	0.09814
567345.16	4148550.16	567345.16_4148550.16	0.05953	0.13221	0.06071	567345.16	4148550.16	567345.16_4148550.16	0.06196	0.1435	0.10116
567365.16	4148550.16	567365.16_4148550.16	0.06145	0.14107	0.06256	567365.16	4148550.16	567365.16_4148550.16	0.0641	0.15325	0.10444
567385.16	4148550.16	567385.16_4148550.16	0.06362	0.15146	0.06457	567385.16	4148550.16	567385.16_4148550.16	0.0665	0.16442	0.10809
567405.16	4148550.16	567405.16_4148550.16	0.06581	0.16255	0.06655	567405.16	4148550.16	567405.16_4148550.16	0.06897	0.17664	0.11193
567425.16	4148550.16	567425.16_4148550.16	0.06817	0.17498	0.06859	567425.16	4148550.16	567425.16_4148550.16	0.07162	0.19037	0.11606
567445.16	4148550.16	567445.16_4148550.16	0.07083	0.18949	0.07085	567445.16	4148550.16	567445.16_4148550.16	0.07456	0.20618	0.12061
567465.16	4148550.16	567465.16_4148550.16	0.07363	0.20554	0.07321	567465.16	4148550.16	567465.16_4148550.16	0.07769	0.22389	0.12544
567485.16	4148550.16	567485.16_4148550.16	0.07685	0.2244	0.07592	567485.16	4148550.16	567485.16_4148550.16	0.08119	0.24447	0.13075
567505.16	4148550.16	567505.16_4148550.16	0.08002	0.24444	0.07865	567505.16	4148550.16	567505.16_4148550.16	0.0848	0.26713	0.13625
567525.16	4148550.16	567525.16_4148550.16	0.08358	0.26767	0.08182	567525.16	4148550.16	567525.16_4148550.16	0.08879	0.29336	0.14224
567545.16	4148550.16	567545.16_4148550.16	0.08754	0.29448	0.08551	567545.16	4148550.16	567545.16_4148550.16	0.09319	0.32373	0.14874
567565.16	4148550.16	567565.16_4148550.16	0.09208	0.3262	0.08992	567565.16	4148550.16	567565.16_4148550.16	0.09813	0.35948	0.15593
567585.16	4148550.16	567585.16_4148550.16	0.09716	0.36326	0.09505	567585.16	4148550.16	567585.16_4148550.16	0.10359	0.40135	0.16378
567605.16	4148550.16	567605.16_4148550.16	0.10294	0.40728	0.10103	567605.16	4148550.16	567605.16_4148550.16	0.10971	0.45093	0.17247
567625.16	4148550.16	567625.16_4148550.16	0.1093	0.45857	0.10773	567625.16	4148550.16	567625.16_4148550.16	0.11646	0.50902	0.18193
567645.16	4148550.16	567645.16_4148550.16	0.11614	0.51753	0.11503	567645.16	4148550.16	567645.16_4148550.16	0.12382	0.57656	0.19214
567665.16	4148550.16	567665.16_4148550.16	0.12378	0.58705	0.12317	567665.16	4148550.16	567665.16_4148550.16	0.13205	0.65626	0.20338
567685.16	4148550.16	567685.16_4148550.16	0.13242	0.66976	0.13225	567685.16	4148550.16	567685.16_4148550.16	0.14132	0.75071	0.2159
567705.16	4148550.16	567705.16_4148550.16	0.14216	0.76732	0.14225	567705.16	4148550.16	567705.16_4148550.16	0.1518	0.86195	0.22985
567725.16	4148550.16	567725.16_4148550.16	0.1544	0.89264	0.15424	567725.16	4148550.16	567725.16_4148550.16	0.16449	0.99954	0.24654
567745.16	4148550.16	567745.16_4148550.16	0.16547	1.01334	0.16493	567745.16	4148550.16	567745.16_4148550.16	0.17713	1.14277	0.26331
567765.16	4148550.16	567765.16_4148550.16	0.17945	1.16431	0.1777	567765.16	4148550.16	567765.16_4148550.16	0.19251	1.31571	0.28397
567785.16	4148550.16	567785.16_4148550.16	0.19498	1.33084	0.19163	567785.16	4148550.16	567785.16_4148550.16	0.20988	1.50924	0.30811
567805.16	4148550.16	567805.16_4148550.16	0.21324	1.52039	0.20833	567805.16	4148550.16	567805.16_4148550.16	0.2302	1.72821	0.33745
567825.16	4148550.16	567825.16_4148550.16	0.23427	1.72814	0.22844	567825.16	4148550.16	567825.16_4148550.16	0.25381	1.96959	0.37229
567845.16	4148550.16	567845.16_4148550.16	0.25925	1.95779	0.2527	567845.16	4148550.16	567845.16_4148550.16	0.28176	2.23512	0.41274
567865.16	4148550.16	567865.16_4148550.16	0.28895	2.20649	0.28089	567865.16	4148550.16	567865.16_4148550.16	0.31515	2.52219	0.45768
567925.16	4148550.16	567925.16_4148550.16	0.41951	3.01973	0.40388	567925.16	4148550.16	567925.16_4148550.16	0.46359	3.46413	0.63606
567945.16	4148550.16	567945.16_4148550.16	0.47729	3.22951	0.4628	567945.16	4148550.16	567945.16_4148550.16	0.53217	3.74797	0.72399
567965.16	4148550.16	567965.16_4148550.16	0.55405	3.46221	0.54242	567965.16	4148550.16	567965.16_4148550.16	0.62068	4.03353	0.84172
567985.16	4148550.16	567985.16_4148550.16	0.64849	3.66814	0.6406	567985.16	4148550.16	567985.16_4148550.16	0.72912	4.28649	0.98856
568005.16	4148550.16	568005.16_4148550.16	0.75991	3.82347	0.75868	568005.16	4148550.16	568005.16_4148550.16	0.85754	4.48742	1.16721
568025.16	4148550.16	568025.16_4148550.16	0.88385	3.90813	0.8948	568025.16	4148550.16	568025.16_4148550.16	1.00291	4.62303	1.37832

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568045.16	4148550.16	568045.16_4148550.16	1.0185	3.94268	1.04348	568045.16	4148550.16	568045.16_4148550.16	1.16276	4.70352	1.62169
568065.16	4148550.16	568065.16_4148550.16	1.16182	3.95102	1.19814	568065.16	4148550.16	568065.16_4148550.16	1.33237	4.74433	1.89441
568085.16	4148550.16	568085.16_4148550.16	1.30877	3.94606	1.35681	568085.16	4148550.16	568085.16_4148550.16	1.50391	4.75824	2.18368
568105.16	4148550.16	568105.16_4148550.16	1.44452	3.91394	1.50108	568105.16	4148550.16	568105.16_4148550.16	1.66516	4.74791	2.45444
568125.16	4148550.16	568125.16_4148550.16	1.56876	3.88802	1.625	568125.16	4148550.16	568125.16_4148550.16	1.81461	4.73195	2.69276
568145.16	4148550.16	568145.16_4148550.16	1.6819	3.87548	1.73357	568145.16	4148550.16	568145.16_4148550.16	1.95192	4.71489	2.90498
568165.16	4148550.16	568165.16_4148550.16	1.78588	3.8709	1.83535	568165.16	4148550.16	568165.16_4148550.16	2.07784	4.69467	3.09851
568225.16	4148550.16	568225.16_4148550.16	2.05571	3.81698	2.10777	568225.16	4148550.16	568225.16_4148550.16	2.41179	4.5744	3.64183
568245.16	4148550.16	568245.16_4148550.16	2.14951	3.78968	2.19887	568245.16	4148550.16	568245.16_4148550.16	2.52678	4.51027	3.86945
568265.16	4148550.16	568265.16_4148550.16	2.22879	3.7145	2.27791	568265.16	4148550.16	568265.16_4148550.16	2.63763	4.42188	4.12553
568285.16	4148550.16	568285.16_4148550.16	2.33595	3.66729	2.38822	568285.16	4148550.16	568285.16_4148550.16	2.76554	4.32858	4.4338
568305.16	4148550.16	568305.16_4148550.16	2.48604	3.65964	2.54427	568305.16	4148550.16	568305.16_4148550.16	2.9157	4.2327	4.7909
568325.16	4148550.16	568325.16_4148550.16	2.61671	3.59741	2.68264	568325.16	4148550.16	568325.16_4148550.16	3.05676	4.11383	5.14026
568345.16	4148550.16	568345.16_4148550.16	2.70672	3.47005	2.78092	568345.16	4148550.16	568345.16_4148550.16	3.17968	3.97319	5.4581
568365.16	4148550.16	568365.16_4148550.16	2.80591	3.34462	2.88788	568365.16	4148550.16	568365.16_4148550.16	3.30853	3.82672	5.77297
568385.16	4148550.16	568385.16_4148550.16	2.92813	3.23322	3.01762	568385.16	4148550.16	568385.16_4148550.16	3.45112	3.67904	6.09545
568405.16	4148550.16	568405.16_4148550.16	3.13503	3.18052	3.23096	568405.16	4148550.16	568405.16_4148550.16	3.63627	3.53988	6.46897
568425.16	4148550.16	568425.16_4148550.16	3.2168	3.01668	3.31901	568425.16	4148550.16	568425.16_4148550.16	3.76942	3.37947	6.75433
568445.16	4148550.16	568445.16_4148550.16	3.34387	2.88412	3.44977	568445.16	4148550.16	568445.16_4148550.16	3.92895	3.22574	7.07343
568465.16	4148550.16	568465.16_4148550.16	3.48188	2.75536	3.59008	568465.16	4148550.16	568465.16_4148550.16	4.10004	3.07519	7.41183
568485.16	4148550.16	568485.16_4148550.16	3.6223	2.62589	3.7335	568485.16	4148550.16	568485.16_4148550.16	4.27947	2.92805	7.77139
568505.16	4148550.16	568505.16_4148550.16	3.76319	2.49647	3.88043	568505.16	4148550.16	568505.16_4148550.16	4.46682	2.78528	8.15515
568525.16	4148550.16	568525.16_4148550.16	3.93592	2.38201	4.06371	568525.16	4148550.16	568525.16_4148550.16	4.67595	2.65026	8.58372
568545.16	4148550.16	568545.16_4148550.16	4.1139	2.2707	4.25593	568545.16	4148550.16	568545.16_4148550.16	4.89552	2.52111	9.03512
568565.16	4148550.16	568565.16_4148550.16	4.31348	2.16931	4.47203	568565.16	4148550.16	568565.16_4148550.16	5.13205	2.39928	9.51433
568605.16	4148550.16	568605.16_4148550.16	4.69904	1.97505	4.88864	568605.16	4148550.16	568605.16_4148550.16	5.61667	2.17381	10.49824
568625.16	4148550.16	568625.16_4148550.16	4.87546	1.88411	5.07771	568625.16	4148550.16	568625.16_4148550.16	5.8524	2.07035	11.00134
568645.16	4148550.16	568645.16_4148550.16	5.03352	1.79899	5.24735	568645.16	4148550.16	568645.16_4148550.16	6.06844	1.97315	11.50515
568665.16	4148550.16	568665.16_4148550.16	5.14735	1.71813	5.3707	568665.16	4148550.16	568665.16_4148550.16	6.23859	1.88169	11.97792
568685.16	4148550.16	568685.16_4148550.16	5.20087	1.6422	5.42625	568685.16	4148550.16	568685.16_4148550.16	6.33706	1.79584	12.37757
568705.16	4148550.16	568705.16_4148550.16	5.20067	1.57345	5.42268	568705.16	4148550.16	568705.16_4148550.16	6.35117	1.71567	12.66988
568725.16	4148550.16	568725.16_4148550.16	5.10933	1.50581	5.32204	568725.16	4148550.16	568725.16_4148550.16	6.2684	1.63997	12.81862
567325.16	4148570.16	567325.16_4148570.16	0.05836	0.12434	0.05952	567325.16	4148570.16	567325.16_4148570.16	0.06051	0.135	0.10035
567345.16	4148570.16	567345.16_4148570.16	0.06021	0.13223	0.06141	567345.16	4148570.16	567345.16_4148570.16	0.06255	0.14372	0.10323
567365.16	4148570.16	567365.16_4148570.16	0.06226	0.14135	0.06349	567365.16	4148570.16	567365.16_4148570.16	0.0648	0.1536	0.10646
567385.16	4148570.16	567385.16_4148570.16	0.06439	0.15132	0.06561	567385.16	4148570.16	567385.16_4148570.16	0.06714	0.16453	0.10991
567405.16	4148570.16	567405.16_4148570.16	0.06661	0.1623	0.06777	567405.16	4148570.16	567405.16_4148570.16	0.06962	0.17668	0.11363
567425.16	4148570.16	567425.16_4148570.16	0.06903	0.1748	0.07005	567425.16	4148570.16	567425.16_4148570.16	0.07231	0.19044	0.1177
567445.16	4148570.16	567445.16_4148570.16	0.07171	0.18924	0.0725	567445.16	4148570.16	567445.16_4148570.16	0.07526	0.2062	0.1222

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567465.16	4148570.16	567465.16_4148570.16	0.0746	0.2056	0.07506	567465.16	4148570.16	567465.16_4148570.16	0.07845	0.2241	0.12707
567485.16	4148570.16	567485.16_4148570.16	0.0778	0.22449	0.07784	567485.16	4148570.16	567485.16_4148570.16	0.08194	0.24471	0.13239
567505.16	4148570.16	567505.16_4148570.16	0.08098	0.24477	0.08057	567505.16	4148570.16	567505.16_4148570.16	0.08556	0.26753	0.13794
567525.16	4148570.16	567525.16_4148570.16	0.08439	0.2677	0.08349	567525.16	4148570.16	567525.16_4148570.16	0.08946	0.29361	0.14391
567545.16	4148570.16	567545.16_4148570.16	0.08827	0.29475	0.08688	567545.16	4148570.16	567545.16_4148570.16	0.09381	0.32419	0.15048
567565.16	4148570.16	567565.16_4148570.16	0.09268	0.32665	0.09084	567565.16	4148570.16	567565.16_4148570.16	0.09868	0.36018	0.15771
567585.16	4148570.16	567585.16_4148570.16	0.09758	0.36396	0.09543	567585.16	4148570.16	567585.16_4148570.16	0.10405	0.40242	0.1656
567605.16	4148570.16	567605.16_4148570.16	0.10333	0.40931	0.10101	567605.16	4148570.16	567605.16_4148570.16	0.11018	0.45325	0.17445
567625.16	4148570.16	567625.16_4148570.16	0.10927	0.46014	0.10702	567625.16	4148570.16	567625.16_4148570.16	0.11669	0.51158	0.18381
567645.16	4148570.16	567645.16_4148570.16	0.11592	0.52026	0.11393	567645.16	4148570.16	567645.16_4148570.16	0.12394	0.58074	0.19408
567665.16	4148570.16	567665.16_4148570.16	0.12367	0.59352	0.12208	567665.16	4148570.16	567665.16_4148570.16	0.13222	0.66424	0.20564
567685.16	4148570.16	567685.16_4148570.16	0.13207	0.67847	0.13103	567685.16	4148570.16	567685.16_4148570.16	0.14134	0.76206	0.21822
567705.16	4148570.16	567705.16_4148570.16	0.14164	0.77988	0.14116	567705.16	4148570.16	567705.16_4148570.16	0.15167	0.87854	0.23226
567725.16	4148570.16	567725.16_4148570.16	0.15274	0.90198	0.15267	567725.16	4148570.16	567725.16_4148570.16	0.16358	1.01769	0.24819
567745.16	4148570.16	567745.16_4148570.16	0.16524	1.04442	0.16531	567745.16	4148570.16	567745.16_4148570.16	0.1771	1.18045	0.26608
567765.16	4148570.16	567765.16_4148570.16	0.17914	1.20631	0.17884	567765.16	4148570.16	567765.16_4148570.16	0.19238	1.36734	0.28625
567785.16	4148570.16	567785.16_4148570.16	0.1952	1.39344	0.19378	567785.16	4148570.16	567785.16_4148570.16	0.21008	1.58295	0.30986
567805.16	4148570.16	567805.16_4148570.16	0.21347	1.60251	0.2103	567805.16	4148570.16	567805.16_4148570.16	0.23044	1.82566	0.33776
567825.16	4148570.16	567825.16_4148570.16	0.23454	1.83363	0.22948	567825.16	4148570.16	567825.16_4148570.16	0.25413	2.09581	0.37138
567845.16	4148570.16	567845.16_4148570.16	0.2594	2.08866	0.253	567845.16	4148570.16	567845.16_4148570.16	0.28215	2.39447	0.41213
567865.16	4148570.16	567865.16_4148570.16	0.2891	2.36663	0.2817	567865.16	4148570.16	567865.16_4148570.16	0.31564	2.7205	0.46005
567885.16	4148570.16	567885.16_4148570.16	0.32477	2.66431	0.31562	567885.16	4148570.16	567885.16_4148570.16	0.35608	3.07078	0.51415
567945.16	4148570.16	567945.16_4148570.16	0.48261	3.57525	0.46606	567945.16	4148570.16	567945.16_4148570.16	0.53904	4.17918	0.73487
567965.16	4148570.16	567965.16_4148570.16	0.56353	3.86722	0.5486	567965.16	4148570.16	567965.16_4148570.16	0.63281	4.53702	0.85582
567985.16	4148570.16	567985.16_4148570.16	0.66373	4.11855	0.65299	567985.16	4148570.16	567985.16_4148570.16	0.7491	4.854	1.0114
568005.16	4148570.16	568005.16_4148570.16	0.78569	4.31336	0.78181	568005.16	4148570.16	568005.16_4148570.16	0.89082	5.11049	1.20623
568025.16	4148570.16	568025.16_4148570.16	0.92643	4.42787	0.93517	568025.16	4148570.16	568025.16_4148570.16	1.05634	5.28739	1.44293
568045.16	4148570.16	568045.16_4148570.16	1.08907	4.50966	1.11448	568045.16	4148570.16	568045.16_4148570.16	1.24651	5.40534	1.72728
568065.16	4148570.16	568065.16_4148570.16	1.25708	4.5165	1.29718	568065.16	4148570.16	568065.16_4148570.16	1.44657	5.45204	2.0448
568085.16	4148570.16	568085.16_4148570.16	1.42224	4.47699	1.47657	568085.16	4148570.16	568085.16_4148570.16	1.6455	5.45181	2.37924
568105.16	4148570.16	568105.16_4148570.16	1.585	4.45228	1.65045	568105.16	4148570.16	568105.16_4148570.16	1.83827	5.43947	2.70183
568125.16	4148570.16	568125.16_4148570.16	1.72191	4.40065	1.78715	568125.16	4148570.16	568125.16_4148570.16	2.00845	5.4056	2.97325
568145.16	4148570.16	568145.16_4148570.16	1.85153	4.38983	1.91122	568145.16	4148570.16	568145.16_4148570.16	2.16617	5.37647	3.21636
568205.16	4148570.16	568205.16_4148570.16	2.15773	4.29274	2.21725	568205.16	4148570.16	568205.16_4148570.16	2.55254	5.20335	3.82829
568225.16	4148570.16	568225.16_4148570.16	2.24641	4.22773	2.3031	568225.16	4148570.16	568225.16_4148570.16	2.67047	5.11073	4.05183
568245.16	4148570.16	568245.16_4148570.16	2.3651	4.20018	2.41979	568245.16	4148570.16	568245.16_4148570.16	2.80729	5.01369	4.34313
568265.16	4148570.16	568265.16_4148570.16	2.46215	4.10311	2.51925	568265.16	4148570.16	568265.16_4148570.16	2.93621	4.88522	4.66439
568285.16	4148570.16	568285.16_4148570.16	2.57974	4.01768	2.64374	568285.16	4148570.16	568285.16_4148570.16	3.07798	4.74729	5.02973
568305.16	4148570.16	568305.16_4148570.16	2.70814	3.92719	2.78138	568305.16	4148570.16	568305.16_4148570.16	3.22583	4.59733	5.41187

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568325.16	4148570.16	568325.16_4148570.16	2.82715	3.80755	2.90922	568325.16	4148570.16	568325.16_4148570.16	3.36897	4.43205	5.78072
568345.16	4148570.16	568345.16_4148570.16	2.91004	3.63591	2.99935	568345.16	4148570.16	568345.16_4148570.16	3.49474	4.24871	6.10713
568365.16	4148570.16	568365.16_4148570.16	3.07152	3.54203	3.16946	568365.16	4148570.16	568365.16_4148570.16	3.66073	4.07932	6.47886
568405.16	4148570.16	568405.16_4148570.16	3.39059	3.30198	3.50356	568405.16	4148570.16	568405.16_4148570.16	4.0005	3.72453	7.1812
568425.16	4148570.16	568425.16_4148570.16	3.69914	3.25846	3.81405	568425.16	4148570.16	568425.16_4148570.16	4.24231	3.54	7.6063
568445.16	4148570.16	568445.16_4148570.16	3.6723	3.00064	3.79182	568445.16	4148570.16	568445.16_4148570.16	4.34806	3.36629	7.85786
568465.16	4148570.16	568465.16_4148570.16	3.82009	2.85074	3.94116	568465.16	4148570.16	568465.16_4148570.16	4.53798	3.1944	8.22876
568485.16	4148570.16	568485.16_4148570.16	3.98147	2.70726	4.1068	568485.16	4148570.16	568485.16_4148570.16	4.74393	3.02967	8.63936
568505.16	4148570.16	568505.16_4148570.16	4.14819	2.56687	4.28281	568505.16	4148570.16	568505.16_4148570.16	4.96307	2.87208	9.08625
568525.16	4148570.16	568525.16_4148570.16	4.34753	2.44135	4.49668	568525.16	4148570.16	568525.16_4148570.16	5.20804	2.72411	9.58359
568585.16	4148570.16	568585.16_4148570.16	5.04138	2.11083	5.24182	568585.16	4148570.16	568585.16_4148570.16	6.05975	2.33027	11.25792
568605.16	4148570.16	568605.16_4148570.16	5.25069	2.00512	5.464	568605.16	4148570.16	568605.16_4148570.16	6.35836	2.21333	11.84711
568625.16	4148570.16	568625.16_4148570.16	5.49	1.91277	5.71825	568625.16	4148570.16	568625.16_4148570.16	6.67567	2.10497	12.4916
568645.16	4148570.16	568645.16_4148570.16	5.69981	1.82381	5.94753	568645.16	4148570.16	568645.16_4148570.16	6.97552	2.0032	13.15626
568665.16	4148570.16	568665.16_4148570.16	5.87845	1.74189	6.14966	568665.16	4148570.16	568665.16_4148570.16	7.23607	1.90829	13.81851
568685.16	4148570.16	568685.16_4148570.16	5.98492	1.6654	6.27212	568685.16	4148570.16	568685.16_4148570.16	7.40899	1.81958	14.40172
568705.16	4148570.16	568705.16_4148570.16	5.9844	1.5933	6.27001	568705.16	4148570.16	568705.16_4148570.16	7.44842	1.73654	14.81406
568725.16	4148570.16	568725.16_4148570.16	5.87372	1.52515	6.14507	568725.16	4148570.16	568725.16_4148570.16	7.3457	1.65876	15.01458
567325.16	4148590.16	567325.16_4148590.16	0.05897	0.12475	0.06011	567325.16	4148590.16	567325.16_4148590.16	0.06105	0.13545	0.1032
567345.16	4148590.16	567345.16_4148590.16	0.06092	0.13278	0.06209	567345.16	4148590.16	567345.16_4148590.16	0.06317	0.14424	0.10603
567365.16	4148590.16	567365.16_4148590.16	0.06297	0.14164	0.06418	567365.16	4148590.16	567365.16_4148590.16	0.06541	0.15398	0.10908
567385.16	4148590.16	567385.16_4148590.16	0.0651	0.15136	0.06635	567385.16	4148590.16	567385.16_4148590.16	0.06776	0.16477	0.11235
567405.16	4148590.16	567405.16_4148590.16	0.06736	0.16224	0.06865	567405.16	4148590.16	567405.16_4148590.16	0.07027	0.17686	0.11591
567425.16	4148590.16	567425.16_4148590.16	0.06989	0.17488	0.07116	567425.16	4148590.16	567425.16_4148590.16	0.07303	0.19069	0.11989
567445.16	4148590.16	567445.16_4148590.16	0.07257	0.18909	0.07378	567445.16	4148590.16	567445.16_4148590.16	0.07598	0.20631	0.12422
567465.16	4148590.16	567465.16_4148590.16	0.07546	0.20521	0.07653	567465.16	4148590.16	567465.16_4148590.16	0.07916	0.22406	0.12894
567485.16	4148590.16	567485.16_4148590.16	0.07841	0.22286	0.07927	567485.16	4148590.16	567485.16_4148590.16	0.0825	0.2439	0.13396
567505.16	4148590.16	567505.16_4148590.16	0.08204	0.24509	0.08254	567505.16	4148590.16	567505.16_4148590.16	0.0864	0.26794	0.13978
567525.16	4148590.16	567525.16_4148590.16	0.08553	0.26846	0.08562	567525.16	4148590.16	567525.16_4148590.16	0.09035	0.29432	0.14579
567545.16	4148590.16	567545.16_4148590.16	0.08907	0.29418	0.08872	567545.16	4148590.16	567545.16_4148590.16	0.0945	0.3241	0.15213
567565.16	4148590.16	567565.16_4148590.16	0.09357	0.32711	0.09264	567565.16	4148590.16	567565.16_4148590.16	0.09943	0.36085	0.15951
567585.16	4148590.16	567585.16_4148590.16	0.09865	0.36626	0.09714	567585.16	4148590.16	567585.16_4148590.16	0.10492	0.40451	0.16765
567605.16	4148590.16	567605.16_4148590.16	0.1038	0.40971	0.10182	567605.16	4148590.16	567605.16_4148590.16	0.1107	0.45435	0.17622
567625.16	4148590.16	567625.16_4148590.16	0.1095	0.46087	0.10718	567625.16	4148590.16	567625.16_4148590.16	0.11708	0.51337	0.18559
567645.16	4148590.16	567645.16_4148590.16	0.11589	0.52174	0.11341	567645.16	4148590.16	567645.16_4148590.16	0.12419	0.58383	0.1959
567665.16	4148590.16	567665.16_4148590.16	0.1236	0.59804	0.12116	567665.16	4148590.16	567665.16_4148590.16	0.13247	0.67063	0.20768
567685.16	4148590.16	567685.16_4148590.16	0.13173	0.68546	0.1296	567685.16	4148590.16	567685.16_4148590.16	0.14142	0.77196	0.22031
567705.16	4148590.16	567705.16_4148590.16	0.14117	0.79174	0.13953	567705.16	4148590.16	567705.16_4148590.16	0.15167	0.89444	0.23454
567725.16	4148590.16	567725.16_4148590.16	0.15231	0.92212	0.15123	567725.16	4148590.16	567725.16_4148590.16	0.16358	1.04305	0.25079

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567745.16	4148590.16	567745.16_4148590.16	0.16476	1.07455	0.16426	567745.16	4148590.16	567745.16_4148590.16	0.17702	1.21788	0.26887
567765.16	4148590.16	567765.16_4148590.16	0.17859	1.24916	0.1785	567765.16	4148590.16	567765.16_4148590.16	0.19219	1.4205	0.28905
567785.16	4148590.16	567785.16_4148590.16	0.19453	1.45212	0.19434	567785.16	4148590.16	567785.16_4148590.16	0.20977	1.65627	0.31224
567805.16	4148590.16	567805.16_4148590.16	0.21312	1.68635	0.21198	567805.16	4148590.16	567805.16_4148590.16	0.2303	1.92786	0.33947
567825.16	4148590.16	567825.16_4148590.16	0.23424	1.94458	0.23129	567825.16	4148590.16	567825.16_4148590.16	0.25404	2.23124	0.37156
567845.16	4148590.16	567845.16_4148590.16	0.25954	2.23676	0.25431	567845.16	4148590.16	567845.16_4148590.16	0.28243	2.57292	0.41116
567865.16	4148590.16	567865.16_4148590.16	0.28922	2.55099	0.28212	567865.16	4148590.16	567865.16_4148590.16	0.31607	2.94568	0.45932
567885.16	4148590.16	567885.16_4148590.16	0.32521	2.89167	0.31664	567885.16	4148590.16	567885.16_4148590.16	0.3569	3.35154	0.51708
567905.16	4148590.16	567905.16_4148590.16	0.36827	3.24434	0.35769	567905.16	4148590.16	567905.16_4148590.16	0.40641	3.7805	0.5829
567965.16	4148590.16	567965.16_4148590.16	0.57194	4.346	0.55374	567965.16	4148590.16	567965.16_4148590.16	0.64368	5.13967	0.87065
567985.16	4148590.16	567985.16_4148590.16	0.67606	4.6447	0.66132	567985.16	4148590.16	567985.16_4148590.16	0.76661	5.53735	1.03107
568005.16	4148590.16	568005.16_4148590.16	0.80829	4.89206	0.80071	568005.16	4148590.16	568005.16_4148590.16	0.92208	5.87125	1.24185
568025.16	4148590.16	568025.16_4148590.16	0.96964	5.06274	0.97522	568025.16	4148590.16	568025.16_4148590.16	1.11193	6.11365	1.50901
568045.16	4148590.16	568045.16_4148590.16	1.15515	5.14887	1.18042	568045.16	4148590.16	568045.16_4148590.16	1.33211	6.25672	1.83366
568065.16	4148590.16	568065.16_4148590.16	1.35696	5.17422	1.40117	568065.16	4148590.16	568065.16_4148590.16	1.57296	6.31962	2.20981
568085.16	4148590.16	568085.16_4148590.16	1.5573	5.13832	1.61924	568085.16	4148590.16	568085.16_4148590.16	1.81498	6.31824	2.61232
568105.16	4148590.16	568105.16_4148590.16	1.74202	5.07489	1.81794	568105.16	4148590.16	568105.16_4148590.16	2.04133	6.28142	2.99207
568125.16	4148590.16	568125.16_4148590.16	1.91232	5.04652	1.98916	568125.16	4148590.16	568125.16_4148590.16	2.24853	6.23983	3.32081
568185.16	4148590.16	568185.16_4148590.16	2.27501	4.87461	2.34199	568185.16	4148590.16	568185.16_4148590.16	2.71805	5.98884	4.05457
568205.16	4148590.16	568205.16_4148590.16	2.38256	4.81017	2.4486	568205.16	4148590.16	568205.16_4148590.16	2.85473	5.86956	4.29507
568225.16	4148590.16	568225.16_4148590.16	2.49584	4.73696	2.5588	568225.16	4148590.16	568225.16_4148590.16	2.99526	5.73101	4.58591
568245.16	4148590.16	568245.16_4148590.16	2.62125	4.65415	2.68476	568245.16	4148590.16	568245.16_4148590.16	3.14533	5.5741	4.94453
568265.16	4148590.16	568265.16_4148590.16	2.73123	4.51308	2.80123	568265.16	4148590.16	568265.16_4148590.16	3.29066	5.38909	5.33765
568285.16	4148590.16	568285.16_4148590.16	2.87632	4.4049	2.95734	568285.16	4148590.16	568285.16_4148590.16	3.45515	5.20072	5.77386
568305.16	4148590.16	568305.16_4148590.16	3.00574	4.25551	3.09772	568305.16	4148590.16	568305.16_4148590.16	3.61134	4.99393	6.19163
568325.16	4148590.16	568325.16_4148590.16	3.10488	4.06053	3.20519	568325.16	4148590.16	568325.16_4148590.16	3.75164	4.77104	6.56425
568345.16	4148590.16	568345.16_4148590.16	3.25413	3.91817	3.36338	568345.16	4148590.16	568345.16_4148590.16	3.91651	4.55705	6.95031
568365.16	4148590.16	568365.16_4148590.16	3.39256	3.75461	3.51024	568365.16	4148590.16	568365.16_4148590.16	4.07771	4.3378	7.30541
568385.16	4148590.16	568385.16_4148590.16	3.5376	3.58978	3.66282	568385.16	4148590.16	568385.16_4148590.16	4.24612	4.12021	7.64902
568405.16	4148590.16	568405.16_4148590.16	3.69325	3.42692	3.82415	568405.16	4148590.16	568405.16_4148590.16	4.42599	3.90705	7.99459
568425.16	4148590.16	568425.16_4148590.16	4.03048	3.36704	4.1641	568425.16	4148590.16	568425.16_4148590.16	4.69905	3.70924	8.4609
568445.16	4148590.16	568445.16_4148590.16	4.01227	3.09285	4.14583	568445.16	4148590.16	568445.16_4148590.16	4.81703	3.49796	8.73132
568465.16	4148590.16	568465.16_4148590.16	4.18723	2.93135	4.32255	568465.16	4148590.16	568465.16_4148590.16	5.03708	3.30619	9.1597
568485.16	4148590.16	568485.16_4148590.16	4.38809	2.78119	4.53069	568485.16	4148590.16	568485.16_4148590.16	5.2823	3.12524	9.6489
568565.16	4148590.16	568565.16_4148590.16	5.37615	2.2597	5.59103	568565.16	4148590.16	568565.16_4148590.16	6.51003	2.50439	12.05646
568585.16	4148590.16	568585.16_4148590.16	5.64466	2.14488	5.87365	568585.16	4148590.16	568585.16_4148590.16	6.87651	2.37308	12.74694
568605.16	4148590.16	568605.16_4148590.16	5.93535	2.03983	6.17922	568605.16	4148590.16	568605.16_4148590.16	7.27477	2.25108	13.50483
568625.16	4148590.16	568625.16_4148590.16	6.20803	1.93807	6.47238	568625.16	4148590.16	568625.16_4148590.16	7.6849	2.13688	14.32104
568645.16	4148590.16	568645.16_4148590.16	6.49909	1.84722	6.79599	568645.16	4148590.16	568645.16_4148590.16	8.11237	2.0312	15.22368

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568665.16	4148590.16	568665.16_4148590.16	6.76372	1.76356	7.1017	568665.16	4148590.16	568665.16_4148590.16	8.51271	1.93296	16.1635
568685.16	4148590.16	568685.16_4148590.16	6.91574	1.68293	7.28458	568685.16	4148590.16	568685.16_4148590.16	8.80192	1.84105	17.01619
568705.16	4148590.16	568705.16_4148590.16	6.94626	1.61007	7.31675	568705.16	4148590.16	568705.16_4148590.16	8.91101	1.75575	17.65454
568725.16	4148590.16	568725.16_4148590.16	6.8071	1.5415	7.15388	568725.16	4148590.16	568725.16_4148590.16	8.78449	1.67609	17.94947
567325.16	4148610.16	567325.16_4148610.16	0.05955	0.12545	0.06091	567325.16	4148610.16	567325.16_4148610.16	0.06155	0.13604	0.1066
567345.16	4148610.16	567345.16_4148610.16	0.06153	0.13337	0.06286	567345.16	4148610.16	567345.16_4148610.16	0.06368	0.14479	0.10939
567365.16	4148610.16	567365.16_4148610.16	0.06357	0.142	0.0649	567365.16	4148610.16	567365.16_4148610.16	0.06593	0.15441	0.11234
567385.16	4148610.16	567385.16_4148610.16	0.06575	0.15162	0.06708	567385.16	4148610.16	567385.16_4148610.16	0.06833	0.16515	0.11552
567405.16	4148610.16	567405.16_4148610.16	0.06807	0.1624	0.06941	567405.16	4148610.16	567405.16_4148610.16	0.07089	0.17718	0.11895
567425.16	4148610.16	567425.16_4148610.16	0.07071	0.17522	0.07207	567425.16	4148610.16	567425.16_4148610.16	0.07373	0.19111	0.12286
567445.16	4148610.16	567445.16_4148610.16	0.07347	0.18943	0.07483	567445.16	4148610.16	567445.16_4148610.16	0.07673	0.20672	0.12704
567465.16	4148610.16	567465.16_4148610.16	0.07612	0.20425	0.07749	567465.16	4148610.16	567465.16_4148610.16	0.07978	0.22369	0.13133
567485.16	4148610.16	567485.16_4148610.16	0.07917	0.22199	0.08047	567485.16	4148610.16	567485.16_4148610.16	0.08318	0.24358	0.13622
567505.16	4148610.16	567505.16_4148610.16	0.08261	0.24307	0.08377	567505.16	4148610.16	567505.16_4148610.16	0.08696	0.26689	0.14172
567525.16	4148610.16	567525.16_4148610.16	0.08668	0.26903	0.08756	567525.16	4148610.16	567525.16_4148610.16	0.09128	0.29491	0.14804
567545.16	4148610.16	567545.16_4148610.16	0.09037	0.29538	0.09095	567545.16	4148610.16	567545.16_4148610.16	0.09552	0.32514	0.15434
567565.16	4148610.16	567565.16_4148610.16	0.09486	0.32856	0.09498	567565.16	4148610.16	567565.16_4148610.16	0.10046	0.36215	0.16165
567585.16	4148610.16	567585.16_4148610.16	0.09963	0.36664	0.09921	567585.16	4148610.16	567585.16_4148610.16	0.10577	0.40522	0.16955
567605.16	4148610.16	567605.16_4148610.16	0.10441	0.40886	0.10345	567605.16	4148610.16	567605.16_4148610.16	0.11133	0.45444	0.17789
567625.16	4148610.16	567625.16_4148610.16	0.11013	0.46148	0.10856	567625.16	4148610.16	567625.16_4148610.16	0.11773	0.51489	0.18739
567645.16	4148610.16	567645.16_4148610.16	0.11675	0.52589	0.1146	567645.16	4148610.16	567645.16_4148610.16	0.125	0.5885	0.19802
567665.16	4148610.16	567665.16_4148610.16	0.12377	0.60086	0.12123	567665.16	4148610.16	567665.16_4148610.16	0.13288	0.67553	0.2095
567685.16	4148610.16	567685.16_4148610.16	0.13197	0.69337	0.12922	567685.16	4148610.16	567685.16_4148610.16	0.1419	0.78216	0.22246
567705.16	4148610.16	567705.16_4148610.16	0.14136	0.80596	0.13865	567705.16	4148610.16	567705.16_4148610.16	0.15215	0.91168	0.23696
567725.16	4148610.16	567725.16_4148610.16	0.15217	0.94274	0.14977	567725.16	4148610.16	567725.16_4148610.16	0.16385	1.06866	0.25329
567745.16	4148610.16	567745.16_4148610.16	0.16408	1.10226	0.16223	567745.16	4148610.16	567745.16_4148610.16	0.17693	1.25393	0.2713
567765.16	4148610.16	567765.16_4148610.16	0.17949	1.30968	0.17814	567765.16	4148610.16	567765.16_4148610.16	0.19311	1.48688	0.29305
567785.16	4148610.16	567785.16_4148610.16	0.19391	1.51626	0.19333	567785.16	4148610.16	567785.16_4148610.16	0.2096	1.73527	0.31521
567805.16	4148610.16	567805.16_4148610.16	0.2122	1.77215	0.21183	567805.16	4148610.16	567805.16_4148610.16	0.22989	2.03528	0.342
567825.16	4148610.16	567825.16_4148610.16	0.23424	2.07312	0.23315	567825.16	4148610.16	567825.16_4148610.16	0.25419	2.38432	0.37401
567845.16	4148610.16	567845.16_4148610.16	0.25891	2.39469	0.25609	567845.16	4148610.16	567845.16_4148610.16	0.28214	2.76769	0.41138
567865.16	4148610.16	567865.16_4148610.16	0.28818	2.74737	0.2828	567865.16	4148610.16	567865.16_4148610.16	0.31556	3.19308	0.45734
567885.16	4148610.16	567885.16_4148610.16	0.32494	3.1489	0.31693	567885.16	4148610.16	567885.16_4148610.16	0.35712	3.6712	0.51575
567905.16	4148610.16	567905.16_4148610.16	0.36915	3.56971	0.35905	567905.16	4148610.16	567905.16_4148610.16	0.40768	4.18366	0.58642
567925.16	4148610.16	567925.16_4148610.16	0.42357	4.01024	0.41087	567925.16	4148610.16	567925.16_4148610.16	0.4706	4.72854	0.66924
567965.16	4148610.16	567965.16_4148610.16	0.57821	4.90591	0.55806	567965.16	4148610.16	567965.16_4148610.16	0.65224	5.86295	0.88761
567985.16	4148610.16	567985.16_4148610.16	0.68879	5.30358	0.66921	567985.16	4148610.16	567985.16_4148610.16	0.78375	6.39092	1.05185
568005.16	4148610.16	568005.16_4148610.16	0.83221	5.63295	0.81892	568005.16	4148610.16	568005.16_4148610.16	0.95415	6.84044	1.27719
568025.16	4148610.16	568025.16_4148610.16	1.01202	5.84844	1.01248	568025.16	4148610.16	568025.16_4148610.16	1.16852	7.16142	1.57412

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568045.16	4148610.16	568045.16_4148610.16	1.22919	5.9674	1.25277	568045.16	4148610.16	568045.16_4148610.16	1.4281	7.35123	1.95091
568065.16	4148610.16	568065.16_4148610.16	1.46677	5.97651	1.51512	568065.16	4148610.16	568065.16_4148610.16	1.71699	7.41527	2.39566
568085.16	4148610.16	568085.16_4148610.16	1.71104	5.93784	1.78177	568085.16	4148610.16	568085.16_4148610.16	2.01531	7.4049	2.88628
568105.16	4148610.16	568105.16_4148610.16	1.9454	5.89833	2.03492	568105.16	4148610.16	568105.16_4148610.16	2.29969	7.35739	3.36031
568165.16	4148610.16	568165.16_4148610.16	2.4277	5.64746	2.50667	568165.16	4148610.16	568165.16_4148610.16	2.92251	7.00633	4.33812
568185.16	4148610.16	568185.16_4148610.16	2.53484	5.51285	2.61138	568185.16	4148610.16	568185.16_4148610.16	3.07344	6.82692	4.59144
568205.16	4148610.16	568205.16_4148610.16	2.65418	5.40213	2.72793	568205.16	4148610.16	568205.16_4148610.16	3.22713	6.63478	4.8919
568225.16	4148610.16	568225.16_4148610.16	2.79974	5.31303	2.87266	568225.16	4148610.16	568225.16_4148610.16	3.39545	6.43039	5.27983
568245.16	4148610.16	568245.16_4148610.16	2.93842	5.16785	3.01676	568245.16	4148610.16	568245.16_4148610.16	3.56273	6.19647	5.72753
568265.16	4148610.16	568265.16_4148610.16	3.0626	4.96977	3.15216	568265.16	4148610.16	568265.16_4148610.16	3.72494	5.9388	6.19749
568285.16	4148610.16	568285.16_4148610.16	3.21092	4.79147	3.31413	568285.16	4148610.16	568285.16_4148610.16	3.89934	5.67807	6.68077
568325.16	4148610.16	568325.16_4148610.16	3.45227	4.34547	3.57581	568325.16	4148610.16	568325.16_4148610.16	4.21491	5.1261	7.50981
568345.16	4148610.16	568345.16_4148610.16	3.59269	4.14436	3.72505	568345.16	4148610.16	568345.16_4148610.16	4.38117	4.85632	7.88451
568365.16	4148610.16	568365.16_4148610.16	3.76942	3.97206	3.9107	568365.16	4148610.16	568365.16_4148610.16	4.56757	4.59704	8.2603
568385.16	4148610.16	568385.16_4148610.16	3.94087	3.7864	4.08846	568385.16	4148610.16	568385.16_4148610.16	4.75632	4.34139	8.61561
568405.16	4148610.16	568405.16_4148610.16	4.08041	3.57436	4.23019	568405.16	4148610.16	568405.16_4148610.16	4.93899	4.08942	8.95073
568425.16	4148610.16	568425.16_4148610.16	4.27954	3.39841	4.42978	568425.16	4148610.16	568425.16_4148610.16	5.16111	3.8545	9.35313
568445.16	4148610.16	568445.16_4148610.16	4.42005	3.18855	4.56897	568445.16	4148610.16	568445.16_4148610.16	5.37153	3.62455	9.75834
568465.16	4148610.16	568465.16_4148610.16	4.62405	3.01269	4.77766	568465.16	4148610.16	568465.16_4148610.16	5.62763	3.41251	10.26404
568485.16	4148610.16	568485.16_4148610.16	4.84602	2.84516	5.01177	568485.16	4148610.16	568485.16_4148610.16	5.91047	3.21369	10.83763
568525.16	4148610.16	568525.16_4148610.16	5.40171	2.55515	5.61092	568525.16	4148610.16	568525.16_4148610.16	6.59065	2.85821	12.18339
568545.16	4148610.16	568545.16_4148610.16	5.67521	2.41445	5.90511	568545.16	4148610.16	568545.16_4148610.16	6.967	2.69739	12.89771
568565.16	4148610.16	568565.16_4148610.16	6.03017	2.29699	6.27897	568565.16	4148610.16	568565.16_4148610.16	7.40996	2.5505	13.70654
568585.16	4148610.16	568585.16_4148610.16	6.3802	2.18107	6.64616	568585.16	4148610.16	568585.16_4148610.16	7.88619	2.41323	14.57816
568605.16	4148610.16	568605.16_4148610.16	6.75406	2.07294	7.04385	568605.16	4148610.16	568605.16_4148610.16	8.41276	2.28596	15.56235
568625.16	4148610.16	568625.16_4148610.16	7.10688	1.9671	7.43011	568625.16	4148610.16	568625.16_4148610.16	8.97187	2.16716	16.65407
568645.16	4148610.16	568645.16_4148610.16	7.49788	1.87289	7.86988	568645.16	4148610.16	568645.16_4148610.16	9.58488	2.05765	17.90085
568665.16	4148610.16	568665.16_4148610.16	7.87032	1.78586	8.30039	568665.16	4148610.16	568665.16_4148610.16	10.20286	1.9561	19.25415
568685.16	4148610.16	568685.16_4148610.16	8.12207	1.70286	8.60151	568685.16	4148610.16	568685.16_4148610.16	10.71606	1.86148	20.57987
568705.16	4148610.16	568705.16_4148610.16	8.21037	1.62845	8.70166	568705.16	4148610.16	568705.16_4148610.16	10.98054	1.77396	21.65171
568725.16	4148610.16	568725.16_4148610.16	7.97975	1.55617	8.42633	568725.16	4148610.16	568725.16_4148610.16	10.81257	1.69205	22.11014
567325.16	4148630.16	567325.16_4148630.16	0.05998	0.1261	0.06189	567325.16	4148630.16	567325.16_4148630.16	0.06188	0.1366	0.11018
567345.16	4148630.16	567345.16_4148630.16	0.06202	0.13402	0.06384	567345.16	4148630.16	567345.16_4148630.16	0.06409	0.14536	0.11309
567365.16	4148630.16	567365.16_4148630.16	0.0641	0.14256	0.06585	567365.16	4148630.16	567365.16_4148630.16	0.06638	0.15495	0.1161
567385.16	4148630.16	567385.16_4148630.16	0.06632	0.1521	0.06802	567385.16	4148630.16	567385.16_4148630.16	0.06882	0.16564	0.1193
567405.16	4148630.16	567405.16_4148630.16	0.06869	0.16277	0.07033	567405.16	4148630.16	567405.16_4148630.16	0.07142	0.17762	0.12271
567425.16	4148630.16	567425.16_4148630.16	0.07141	0.17559	0.07302	567425.16	4148630.16	567425.16_4148630.16	0.07432	0.19155	0.12659
567445.16	4148630.16	567445.16_4148630.16	0.07406	0.189	0.07565	567445.16	4148630.16	567445.16_4148630.16	0.07728	0.20669	0.13051
567465.16	4148630.16	567465.16_4148630.16	0.07691	0.20425	0.07848	567465.16	4148630.16	567465.16_4148630.16	0.08046	0.22391	0.13479

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567485.16	4148630.16	567485.16_4148630.16	0.07998	0.22171	0.08154	567485.16	4148630.16	567485.16_4148630.16	0.0839	0.24363	0.13948
567505.16	4148630.16	567505.16_4148630.16	0.08336	0.24209	0.08487	567505.16	4148630.16	567505.16_4148630.16	0.08765	0.26649	0.14467
567525.16	4148630.16	567525.16_4148630.16	0.08751	0.26805	0.08891	567525.16	4148630.16	567525.16_4148630.16	0.09202	0.2945	0.15086
567545.16	4148630.16	567545.16_4148630.16	0.09163	0.29631	0.09286	567545.16	4148630.16	567545.16_4148630.16	0.09654	0.32598	0.15729
567565.16	4148630.16	567565.16_4148630.16	0.09592	0.32834	0.09691	567565.16	4148630.16	567565.16_4148630.16	0.10135	0.36227	0.16421
567585.16	4148630.16	567585.16_4148630.16	0.10036	0.36465	0.10103	567585.16	4148630.16	567585.16_4148630.16	0.10647	0.40423	0.17167
567605.16	4148630.16	567605.16_4148630.16	0.1054	0.40857	0.10562	567605.16	4148630.16	567605.16_4148630.16	0.1122	0.45478	0.18005
567625.16	4148630.16	567625.16_4148630.16	0.11104	0.46152	0.11069	567625.16	4148630.16	567625.16_4148630.16	0.11857	0.51579	0.18941
567645.16	4148630.16	567645.16_4148630.16	0.11753	0.5267	0.1165	567645.16	4148630.16	567645.16_4148630.16	0.12579	0.59055	0.19996
567665.16	4148630.16	567665.16_4148630.16	0.12456	0.60422	0.12285	567665.16	4148630.16	567665.16_4148630.16	0.13369	0.68041	0.21151
567685.16	4148630.16	567685.16_4148630.16	0.13259	0.6996	0.13024	567685.16	4148630.16	567685.16_4148630.16	0.14263	0.79076	0.22448
567705.16	4148630.16	567705.16_4148630.16	0.14174	0.81679	0.13889	567705.16	4148630.16	567705.16_4148630.16	0.15277	0.9262	0.23904
567725.16	4148630.16	567725.16_4148630.16	0.15206	0.95886	0.14895	567725.16	4148630.16	567725.16_4148630.16	0.16419	1.0909	0.25531
567745.16	4148630.16	567745.16_4148630.16	0.16348	1.12706	0.16042	567745.16	4148630.16	567745.16_4148630.16	0.17698	1.28808	0.27332
567765.16	4148630.16	567765.16_4148630.16	0.17748	1.33738	0.17472	567765.16	4148630.16	567765.16_4148630.16	0.19222	1.53141	0.29435
567785.16	4148630.16	567785.16_4148630.16	0.19292	1.57879	0.1908	567785.16	4148630.16	567785.16_4148630.16	0.20937	1.81547	0.31775
567805.16	4148630.16	567805.16_4148630.16	0.21102	1.86219	0.20962	567805.16	4148630.16	567805.16_4148630.16	0.22946	2.14981	0.34468
567825.16	4148630.16	567825.16_4148630.16	0.23284	2.19776	0.23189	567825.16	4148630.16	567825.16_4148630.16	0.25353	2.54264	0.37646
567845.16	4148630.16	567845.16_4148630.16	0.25777	2.56746	0.25657	567845.16	4148630.16	567845.16_4148630.16	0.28158	2.98374	0.41329
567865.16	4148630.16	567865.16_4148630.16	0.28673	2.96783	0.28404	567865.16	4148630.16	567865.16_4148630.16	0.31475	3.47297	0.4572
567885.16	4148630.16	567885.16_4148630.16	0.32329	3.42975	0.31763	567885.16	4148630.16	567885.16_4148630.16	0.35622	4.03087	0.51319
567905.16	4148630.16	567905.16_4148630.16	0.36794	3.92836	0.35888	567905.16	4148630.16	567905.16_4148630.16	0.40735	4.64297	0.5839
567925.16	4148630.16	567925.16_4148630.16	0.42244	4.44454	0.4105	567925.16	4148630.16	567925.16_4148630.16	0.47062	5.29809	0.67129
567945.16	4148630.16	567945.16_4148630.16	0.4921	4.99774	0.47678	567945.16	4148630.16	567945.16_4148630.16	0.55206	6.00486	0.77761
567985.16	4148630.16	567985.16_4148630.16	0.7001	6.1189	0.67659	567985.16	4148630.16	567985.16_4148630.16	0.79885	7.4649	1.07528
568005.16	4148630.16	568005.16_4148630.16	0.85353	6.56072	0.83314	568005.16	4148630.16	568005.16_4148630.16	0.98375	8.08496	1.31013
568025.16	4148630.16	568025.16_4148630.16	1.0524	6.84266	1.04496	568025.16	4148630.16	568025.16_4148630.16	1.22488	8.52611	1.63607
568045.16	4148630.16	568045.16_4148630.16	1.30457	6.99268	1.32355	568045.16	4148630.16	568045.16_4148630.16	1.53059	8.77508	2.0725
568065.16	4148630.16	568065.16_4148630.16	1.59203	6.99953	1.64402	568065.16	4148630.16	568065.16_4148630.16	1.88503	8.84294	2.60943
568085.16	4148630.16	568085.16_4148630.16	1.89823	6.96801	1.97978	568085.16	4148630.16	568085.16_4148630.16	2.26274	8.81451	3.22204
568145.16	4148630.16	568145.16_4148630.16	2.58206	6.59053	2.68147	568145.16	4148630.16	568145.16_4148630.16	3.14837	8.32747	4.64935
568165.16	4148630.16	568165.16_4148630.16	2.72264	6.42001	2.81582	568165.16	4148630.16	568165.16_4148630.16	3.34407	8.07788	4.9647
568185.16	4148630.16	568185.16_4148630.16	2.8719	6.2942	2.96029	568185.16	4148630.16	568185.16_4148630.16	3.53192	7.81597	5.30166
568205.16	4148630.16	568205.16_4148630.16	2.99816	6.09555	3.08281	568205.16	4148630.16	568205.16_4148630.16	3.70109	7.51288	5.69118
568225.16	4148630.16	568225.16_4148630.16	3.15067	5.91386	3.23921	568225.16	4148630.16	568225.16_4148630.16	3.88382	7.20048	6.18575
568245.16	4148630.16	568245.16_4148630.16	3.29028	5.67286	3.38985	568245.16	4148630.16	568245.16_4148630.16	4.0613	6.86378	6.72213
568265.16	4148630.16	568265.16_4148630.16	3.46379	5.46146	3.57984	568265.16	4148630.16	568265.16_4148630.16	4.25623	6.52901	7.28596
568305.16	4148630.16	568305.16_4148630.16	3.74323	4.92274	3.88694	568305.16	4148630.16	568305.16_4148630.16	4.60524	5.83249	8.24139
568325.16	4148630.16	568325.16_4148630.16	3.86308	4.64042	4.0159	568325.16	4148630.16	568325.16_4148630.16	4.7659	5.4883	8.62278

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568345.16	4148630.16	568345.16_4148630.16	4.00082	4.3847	4.16048	568345.16	4148630.16	568345.16_4148630.16	4.93568	5.15866	8.9753
568365.16	4148630.16	568365.16_4148630.16	4.1548	4.14726	4.31971	568365.16	4148630.16	568365.16_4148630.16	5.11724	4.84407	9.31535
568385.16	4148630.16	568385.16_4148630.16	4.37401	3.95603	4.54432	568385.16	4148630.16	568385.16_4148630.16	5.338	4.5516	9.70085
568405.16	4148630.16	568405.16_4148630.16	4.87948	4.03443	5.05389	568405.16	4148630.16	568405.16_4148630.16	5.65918	4.23816	10.23225
568425.16	4148630.16	568425.16_4148630.16	4.73856	3.51096	4.90646	568425.16	4148630.16	568425.16_4148630.16	5.78508	3.99823	10.50303
568445.16	4148630.16	568445.16_4148630.16	4.90746	3.285	5.07618	568445.16	4148630.16	568445.16_4148630.16	6.03202	3.74437	10.9894
568465.16	4148630.16	568465.16_4148630.16	5.15348	3.09645	5.33313	568465.16	4148630.16	568465.16_4148630.16	6.33727	3.51273	11.6053
568505.16	4148630.16	568505.16_4148630.16	5.70611	2.74913	5.93065	568505.16	4148630.16	568505.16_4148630.16	7.05539	3.09863	13.05268
568525.16	4148630.16	568525.16_4148630.16	6.08039	2.60867	6.33305	568525.16	4148630.16	568525.16_4148630.16	7.50581	2.91767	13.89949
568545.16	4148630.16	568545.16_4148630.16	6.41956	2.46311	6.69257	568545.16	4148630.16	568545.16_4148630.16	7.97962	2.74825	14.76484
568565.16	4148630.16	568565.16_4148630.16	6.80184	2.33125	7.09374	568565.16	4148630.16	568565.16_4148630.16	8.51973	2.59257	15.73341
568585.16	4148630.16	568585.16_4148630.16	7.2491	2.21348	7.56887	568585.16	4148630.16	568585.16_4148630.16	9.14602	2.44971	16.86397
568605.16	4148630.16	568605.16_4148630.16	7.69259	2.09839	8.051	568605.16	4148630.16	568605.16_4148630.16	9.83868	2.31697	18.15423
568625.16	4148630.16	568625.16_4148630.16	8.24343	1.99899	8.66128	568625.16	4148630.16	568625.16_4148630.16	10.65999	2.19553	19.71435
568645.16	4148630.16	568645.16_4148630.16	8.73704	1.89871	9.21869	568645.16	4148630.16	568645.16_4148630.16	11.54263	2.08207	21.46978
568665.16	4148630.16	568665.16_4148630.16	9.23914	1.80729	9.79396	568665.16	4148630.16	568665.16_4148630.16	12.50729	1.97732	23.48571
568685.16	4148630.16	568685.16_4148630.16	9.65197	1.72251	10.27648	568685.16	4148630.16	568685.16_4148630.16	13.44207	1.88029	25.66164
568705.16	4148630.16	568705.16_4148630.16	9.83641	1.64537	10.48715	568705.16	4148630.16	568705.16_4148630.16	14.06819	1.79052	27.63383
568725.16	4148630.16	568725.16_4148630.16	9.5615	1.57328	10.13693	568725.16	4148630.16	568725.16_4148630.16	13.92734	1.70709	28.57489
567325.16	4148650.16	567325.16_4148650.16	0.06025	0.12676	0.06292	567325.16	4148650.16	567325.16_4148650.16	0.06209	0.13714	0.11365
567345.16	4148650.16	567345.16_4148650.16	0.06236	0.13477	0.06492	567345.16	4148650.16	567345.16_4148650.16	0.06435	0.14596	0.1168
567365.16	4148650.16	567365.16_4148650.16	0.06451	0.1433	0.06697	567365.16	4148650.16	567365.16_4148650.16	0.0667	0.15556	0.12
567385.16	4148650.16	567385.16_4148650.16	0.06678	0.15275	0.06915	567385.16	4148650.16	567385.16_4148650.16	0.06919	0.16623	0.12336
567405.16	4148650.16	567405.16_4148650.16	0.06922	0.16342	0.07149	567405.16	4148650.16	567405.16_4148650.16	0.07185	0.17821	0.12693
567425.16	4148650.16	567425.16_4148650.16	0.07188	0.17567	0.07406	567425.16	4148650.16	567425.16_4148650.16	0.07474	0.19182	0.13078
567445.16	4148650.16	567445.16_4148650.16	0.07462	0.18902	0.07672	567445.16	4148650.16	567445.16_4148650.16	0.07776	0.20693	0.13478
567465.16	4148650.16	567465.16_4148650.16	0.07772	0.20497	0.07976	567465.16	4148650.16	567465.16_4148650.16	0.08112	0.22456	0.13925
567485.16	4148650.16	567485.16_4148650.16	0.08078	0.22198	0.08277	567485.16	4148650.16	567485.16_4148650.16	0.08457	0.244	0.14382
567505.16	4148650.16	567505.16_4148650.16	0.08417	0.24193	0.0861	567505.16	4148650.16	567505.16_4148650.16	0.08835	0.26661	0.14885
567525.16	4148650.16	567525.16_4148650.16	0.08794	0.26553	0.0898	567525.16	4148650.16	567525.16_4148650.16	0.0925	0.29311	0.15447
567545.16	4148650.16	567545.16_4148650.16	0.0923	0.29443	0.09407	567545.16	4148650.16	567545.16_4148650.16	0.09718	0.32496	0.1609
567565.16	4148650.16	567565.16_4148650.16	0.0971	0.32871	0.09872	567565.16	4148650.16	567565.16_4148650.16	0.10233	0.36275	0.16803
567585.16	4148650.16	567585.16_4148650.16	0.10166	0.36535	0.10311	567585.16	4148650.16	567585.16_4148650.16	0.10753	0.40498	0.17527
567605.16	4148650.16	567605.16_4148650.16	0.10664	0.4089	0.10783	567605.16	4148650.16	567605.16_4148650.16	0.11324	0.45542	0.18332
567625.16	4148650.16	567625.16_4148650.16	0.11249	0.46338	0.11328	567625.16	4148650.16	567625.16_4148650.16	0.11976	0.51775	0.19258
567645.16	4148650.16	567645.16_4148650.16	0.11886	0.52864	0.11912	567645.16	4148650.16	567645.16_4148650.16	0.12692	0.59308	0.20281
567665.16	4148650.16	567665.16_4148650.16	0.12603	0.60903	0.12564	567665.16	4148650.16	567665.16_4148650.16	0.13494	0.68592	0.21432
567685.16	4148650.16	567685.16_4148650.16	0.13395	0.70704	0.13282	567685.16	4148650.16	567685.16_4148650.16	0.14385	0.79977	0.22713
567705.16	4148650.16	567705.16_4148650.16	0.14239	0.82406	0.14052	567705.16	4148650.16	567705.16_4148650.16	0.15356	0.9376	0.24115

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567725.16	4148650.16	567725.16_4148650.16	0.15227	0.97097	0.14966	567725.16	4148650.16	567725.16_4148650.16	0.16474	1.1098	0.25719
567745.16	4148650.16	567745.16_4148650.16	0.16393	1.15523	0.16071	567745.16	4148650.16	567745.16_4148650.16	0.17774	1.32453	0.27561
567765.16	4148650.16	567765.16_4148650.16	0.17717	1.37794	0.1736	567765.16	4148650.16	567765.16_4148650.16	0.19253	1.58564	0.29642
567785.16	4148650.16	567785.16_4148650.16	0.19407	1.66502	0.19036	567785.16	4148650.16	567785.16_4148650.16	0.21067	1.91464	0.32139
567805.16	4148650.16	567805.16_4148650.16	0.21027	1.96122	0.20701	567805.16	4148650.16	567805.16_4148650.16	0.2295	2.27516	0.34736
567825.16	4148650.16	567825.16_4148650.16	0.23071	2.32275	0.22812	567825.16	4148650.16	567825.16_4148650.16	0.2526	2.70974	0.37848
567845.16	4148650.16	567845.16_4148650.16	0.25633	2.75805	0.25434	567845.16	4148650.16	567845.16_4148650.16	0.28102	3.22543	0.41605
567865.16	4148650.16	567865.16_4148650.16	0.28628	3.23989	0.28441	567865.16	4148650.16	567865.16_4148650.16	0.31479	3.80699	0.46023
567885.16	4148650.16	567885.16_4148650.16	0.32187	3.7641	0.31884	567885.16	4148650.16	567885.16_4148650.16	0.35555	4.4552	0.51357
567905.16	4148650.16	567905.16_4148650.16	0.36478	4.32334	0.35881	567905.16	4148650.16	567905.16_4148650.16	0.40545	5.16945	0.57996
567925.16	4148650.16	567925.16_4148650.16	0.41993	4.95236	0.40971	567925.16	4148650.16	567925.16_4148650.16	0.46944	5.97478	0.66703
567945.16	4148650.16	567945.16_4148650.16	0.49074	5.63416	0.47639	567945.16	4148650.16	567945.16_4148650.16	0.55221	6.86285	0.77958
567965.16	4148650.16	567965.16_4148650.16	0.5823	6.34464	0.56353	567965.16	4148650.16	567965.16_4148650.16	0.66081	7.81525	0.92008
568005.16	4148650.16	568005.16_4148650.16	0.87168	7.74463	0.84471	568005.16	4148650.16	568005.16_4148650.16	1.00971	9.72566	1.3436
568025.16	4148650.16	568025.16_4148650.16	1.09034	8.14229	1.07248	568025.16	4148650.16	568025.16_4148650.16	1.27972	10.36857	1.69461
568045.16	4148650.16	568045.16_4148650.16	1.37786	8.29779	1.3876	568045.16	4148650.16	568045.16_4148650.16	1.63725	10.6831	2.19349
568065.16	4148650.16	568065.16_4148650.16	1.73919	8.36706	1.79318	568065.16	4148650.16	568065.16_4148650.16	2.0854	10.77131	2.85945
568125.16	4148650.16	568125.16_4148650.16	2.75019	7.89903	2.88029	568125.16	4148650.16	568125.16_4148650.16	3.39497	10.14211	4.97986
568145.16	4148650.16	568145.16_4148650.16	2.95091	7.63576	3.07158	568145.16	4148650.16	568145.16_4148650.16	3.6768	9.76986	5.4233
568165.16	4148650.16	568165.16_4148650.16	3.112	7.37577	3.22345	568165.16	4148650.16	568165.16_4148650.16	3.90413	9.36415	5.80843
568185.16	4148650.16	568185.16_4148650.16	3.27526	7.14937	3.37761	568185.16	4148650.16	568185.16_4148650.16	4.115	8.94688	6.24938
568225.16	4148650.16	568225.16_4148650.16	3.56762	6.54461	3.67939	568225.16	4148650.16	568225.16_4148650.16	4.4942	8.04303	7.39655
568245.16	4148650.16	568245.16_4148650.16	3.74891	6.26091	3.87822	568245.16	4148650.16	568245.16_4148650.16	4.69801	7.59572	8.03925
568265.16	4148650.16	568265.16_4148650.16	3.93862	5.97078	4.08808	568265.16	4148650.16	568265.16_4148650.16	4.90314	7.1516	8.64281
568285.16	4148650.16	568285.16_4148650.16	4.06076	5.59591	4.22487	568285.16	4148650.16	568285.16_4148650.16	5.07137	6.69787	9.12553
568305.16	4148650.16	568305.16_4148650.16	4.21839	5.27579	4.39714	568305.16	4148650.16	568305.16_4148650.16	5.25471	6.26867	9.5642
568325.16	4148650.16	568325.16_4148650.16	4.34268	4.93679	4.52822	568325.16	4148650.16	568325.16_4148650.16	5.42008	5.85077	9.91453
568345.16	4148650.16	568345.16_4148650.16	4.49346	4.63767	4.68291	568345.16	4148650.16	568345.16_4148650.16	5.60046	5.45923	10.24731
568365.16	4148650.16	568365.16_4148650.16	4.6542	4.35614	4.84523	568365.16	4148650.16	568365.16_4148650.16	5.79186	5.09092	10.5739
568385.16	4148650.16	568385.16_4148650.16	4.86143	4.11008	5.05357	568385.16	4148650.16	568385.16_4148650.16	6.01732	4.75022	10.9511
568405.16	4148650.16	568405.16_4148650.16	5.07411	3.86581	5.26448	568405.16	4148650.16	568405.16_4148650.16	6.26277	4.43084	11.37909
568425.16	4148650.16	568425.16_4148650.16	5.24647	3.60393	5.43509	568425.16	4148650.16	568425.16_4148650.16	6.51386	4.12962	11.86084
568485.16	4148650.16	568485.16_4148650.16	6.11699	2.98955	6.36493	568485.16	4148650.16	568485.16_4148650.16	7.61567	3.37485	14.10602
568505.16	4148650.16	568505.16_4148650.16	6.41576	2.80048	6.69206	568505.16	4148650.16	568505.16_4148650.16	8.06175	3.16144	14.9768
568525.16	4148650.16	568525.16_4148650.16	6.85491	2.6515	7.16141	568525.16	4148650.16	568525.16_4148650.16	8.61972	2.97025	15.98843
568545.16	4148650.16	568545.16_4148650.16	7.32223	2.51006	7.65541	568545.16	4148650.16	568545.16_4148650.16	9.24949	2.79431	17.09561
568565.16	4148650.16	568565.16_4148650.16	7.77517	2.3699	8.13714	568565.16	4148650.16	568565.16_4148650.16	9.94668	2.63146	18.33118
568585.16	4148650.16	568585.16_4148650.16	8.32048	2.246	8.72923	568585.16	4148650.16	568585.16_4148650.16	10.77926	2.48283	19.83128
568605.16	4148650.16	568605.16_4148650.16	8.90039	2.12888	9.3703	568605.16	4148650.16	568605.16_4148650.16	11.74499	2.34584	21.62219

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568625.16	4148650.16	568625.16_4148650.16	9.55664	2.02212	10.10324	568625.16	4148650.16	568625.16_4148650.16	12.89302	2.21999	23.80421
568645.16	4148650.16	568645.16_4148650.16	10.22413	1.92078	10.85265	568645.16	4148650.16	568645.16_4148650.16	14.22758	2.10361	26.42701
568665.16	4148650.16	568665.16_4148650.16	10.87045	1.82548	11.57572	568665.16	4148650.16	568665.16_4148650.16	15.76479	1.99596	29.5892
568685.16	4148650.16	568685.16_4148650.16	11.49087	1.73934	12.2517	568685.16	4148650.16	568685.16_4148650.16	17.49004	1.89677	33.3861
568705.16	4148650.16	568705.16_4148650.16	11.85174	1.66008	12.5678	568705.16	4148650.16	568705.16_4148650.16	19.02043	1.80502	37.42757
568725.16	4148650.16	568725.16_4148650.16	11.57245	1.58821	12.08849	568725.16	4148650.16	568725.16_4148650.16	19.18878	1.72019	39.85271
567325.16	4148670.16	567325.16_4148670.16	0.06035	0.12766	0.06375	567325.16	4148670.16	567325.16_4148670.16	0.06217	0.13777	0.11668
567345.16	4148670.16	567345.16_4148670.16	0.06242	0.13526	0.06575	567345.16	4148670.16	567345.16_4148670.16	0.06441	0.1464	0.12002
567365.16	4148670.16	567365.16_4148670.16	0.06472	0.14413	0.06797	567365.16	4148670.16	567365.16_4148670.16	0.06685	0.1562	0.1236
567385.16	4148670.16	567385.16_4148670.16	0.06706	0.15354	0.07022	567385.16	4148670.16	567385.16_4148670.16	0.06939	0.16687	0.12725
567405.16	4148670.16	567405.16_4148670.16	0.06958	0.16427	0.07266	567405.16	4148670.16	567405.16_4148670.16	0.07213	0.17889	0.13111
567425.16	4148670.16	567425.16_4148670.16	0.07217	0.17584	0.07516	567425.16	4148670.16	567425.16_4148670.16	0.07499	0.19214	0.13509
567445.16	4148670.16	567445.16_4148670.16	0.07518	0.18998	0.07807	567445.16	4148670.16	567445.16_4148670.16	0.0782	0.2077	0.13951
567465.16	4148670.16	567465.16_4148670.16	0.07816	0.20499	0.08097	567465.16	4148670.16	567465.16_4148670.16	0.0815	0.22479	0.14399
567485.16	4148670.16	567485.16_4148670.16	0.08158	0.22311	0.0843	567485.16	4148670.16	567485.16_4148670.16	0.08519	0.2449	0.14899
567505.16	4148670.16	567505.16_4148670.16	0.08491	0.24229	0.08755	567505.16	4148670.16	567505.16_4148670.16	0.08896	0.26703	0.15401
567525.16	4148670.16	567525.16_4148670.16	0.08865	0.26517	0.09121	567525.16	4148670.16	567525.16_4148670.16	0.09312	0.29309	0.15956
567545.16	4148670.16	567545.16_4148670.16	0.09278	0.2923	0.09526	567545.16	4148670.16	567545.16_4148670.16	0.09768	0.32379	0.16568
567565.16	4148670.16	567565.16_4148670.16	0.09753	0.32554	0.0999	567565.16	4148670.16	567565.16_4148670.16	0.10281	0.36084	0.17261
567585.16	4148670.16	567585.16_4148670.16	0.103	0.36666	0.10521	567585.16	4148670.16	567585.16_4148670.16	0.1086	0.40611	0.18051
567605.16	4148670.16	567605.16_4148670.16	0.10788	0.40906	0.10995	567605.16	4148670.16	567605.16_4148670.16	0.11426	0.45581	0.18815
567625.16	4148670.16	567625.16_4148670.16	0.11381	0.46383	0.11564	567625.16	4148670.16	567625.16_4148670.16	0.12086	0.51853	0.1972
567645.16	4148670.16	567645.16_4148670.16	0.12035	0.5304	0.12184	567645.16	4148670.16	567645.16_4148670.16	0.12815	0.59519	0.20726
567665.16	4148670.16	567665.16_4148670.16	0.12745	0.61111	0.12848	567665.16	4148670.16	567665.16_4148670.16	0.13615	0.68903	0.21839
567685.16	4148670.16	567685.16_4148670.16	0.13503	0.70841	0.13548	567685.16	4148670.16	567685.16_4148670.16	0.14487	0.8037	0.23061
567705.16	4148670.16	567705.16_4148670.16	0.14352	0.82969	0.14325	567705.16	4148670.16	567705.16_4148670.16	0.15464	0.94707	0.24439
567725.16	4148670.16	567725.16_4148670.16	0.15336	0.98394	0.15225	567725.16	4148670.16	567725.16_4148670.16	0.16585	1.1286	0.26021
567745.16	4148670.16	567745.16_4148670.16	0.16463	1.17735	0.1626	567745.16	4148670.16	567745.16_4148670.16	0.17865	1.3563	0.27824
567765.16	4148670.16	567765.16_4148670.16	0.17793	1.42124	0.17498	567765.16	4148670.16	567765.16_4148670.16	0.19354	1.64237	0.29912
567785.16	4148670.16	567785.16_4148670.16	0.19261	1.71146	0.18895	567785.16	4148670.16	567785.16_4148670.16	0.21029	1.98792	0.32257
567805.16	4148670.16	567805.16_4148670.16	0.21232	2.09699	0.20799	567805.16	4148670.16	567805.16_4148670.16	0.23152	2.43184	0.35165
567825.16	4148670.16	567825.16_4148670.16	0.23072	2.48445	0.2264	567825.16	4148670.16	567825.16_4148670.16	0.25327	2.91126	0.38174
567845.16	4148670.16	567845.16_4148670.16	0.25521	2.97178	0.25113	567845.16	4148670.16	567845.16_4148670.16	0.28092	3.49941	0.41902
567865.16	4148670.16	567865.16_4148670.16	0.28349	3.50736	0.28003	567865.16	4148670.16	567865.16_4148670.16	0.31348	4.16524	0.46226
567885.16	4148670.16	567885.16_4148670.16	0.31899	4.12745	0.31593	567885.16	4148670.16	567885.16_4148670.16	0.35405	4.93812	0.51524
567905.16	4148670.16	567905.16_4148670.16	0.36154	4.79282	0.35788	567905.16	4148670.16	567905.16_4148670.16	0.40362	5.79985	0.5796
567925.16	4148670.16	567925.16_4148670.16	0.41602	5.54334	0.40945	567925.16	4148670.16	567925.16_4148670.16	0.46718	6.78522	0.66272
567945.16	4148670.16	567945.16_4148670.16	0.48683	6.38193	0.47516	567945.16	4148670.16	567945.16_4148670.16	0.55025	7.90684	0.77347
567965.16	4148670.16	567965.16_4148670.16	0.58118	7.31313	0.56374	567965.16	4148670.16	567965.16_4148670.16	0.66176	9.1756	0.92252

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568025.16	4148670.16	568025.16_4148670.16	1.12027	9.84445	1.09196	568025.16	4148670.16	568025.16_4148670.16	1.32749	12.93203	1.74844
568125.16	4148670.16	568125.16_4148670.16	3.21123	9.38235	3.37314	568125.16	4148670.16	568125.16_4148670.16	4.06338	12.17592	5.94936
568145.16	4148670.16	568145.16_4148670.16	3.44661	8.94144	3.59785	568145.16	4148670.16	568145.16_4148670.16	4.40533	11.5381	6.49838
568165.16	4148670.16	568165.16_4148670.16	3.61059	8.48666	3.74481	568165.16	4148670.16	568165.16_4148670.16	4.65763	10.87589	6.98314
568185.16	4148670.16	568185.16_4148670.16	3.76046	8.0589	3.88096	568185.16	4148670.16	568185.16_4148670.16	4.87601	10.22237	7.58223
568205.16	4148670.16	568205.16_4148670.16	3.93675	7.67515	4.06521	568205.16	4148670.16	568205.16_4148670.16	5.09089	9.59214	8.32077
568225.16	4148670.16	568225.16_4148670.16	4.11205	7.26994	4.25796	568225.16	4148670.16	568225.16_4148670.16	5.29189	8.9719	9.05862
568245.16	4148670.16	568245.16_4148670.16	4.27292	6.83913	4.43713	568245.16	4148670.16	568245.16_4148670.16	5.4773	8.36508	9.70609
568265.16	4148670.16	568265.16_4148670.16	4.40339	6.37922	4.58446	568265.16	4148670.16	568265.16_4148670.16	5.64289	7.77377	10.22718
568285.16	4148670.16	568285.16_4148670.16	4.55996	5.96824	4.75865	568285.16	4148670.16	568285.16_4148670.16	5.82151	7.21828	10.67696
568305.16	4148670.16	568305.16_4148670.16	4.73615	5.59432	4.94853	568305.16	4148670.16	568305.16_4148670.16	6.01182	6.69728	11.07261
568325.16	4148670.16	568325.16_4148670.16	4.86506	5.19836	5.08001	568325.16	4148670.16	568325.16_4148670.16	6.18035	6.19951	11.37791
568345.16	4148670.16	568345.16_4148670.16	5.06399	4.88024	5.28262	568345.16	4148670.16	568345.16_4148670.16	6.39006	5.74767	11.72155
568365.16	4148670.16	568365.16_4148670.16	5.23871	4.55685	5.45551	568365.16	4148670.16	568365.16_4148670.16	6.59654	5.32443	12.04867
568385.16	4148670.16	568385.16_4148670.16	5.42437	4.25165	5.63802	568385.16	4148670.16	568385.16_4148670.16	6.8254	4.93452	12.42718
568405.16	4148670.16	568405.16_4148670.16	5.61874	3.95976	5.82958	568405.16	4148670.16	568405.16_4148670.16	7.08459	4.57605	12.90073
568445.16	4148670.16	568445.16_4148670.16	6.18739	3.46761	6.42737	568445.16	4148670.16	568445.16_4148670.16	7.79548	3.95596	14.36326
568465.16	4148670.16	568465.16_4148670.16	6.53616	3.2497	6.8099	568465.16	4148670.16	568465.16_4148670.16	8.24488	3.68704	15.30428
568485.16	4148670.16	568485.16_4148670.16	6.88245	3.03933	7.19235	568485.16	4148670.16	568485.16_4148670.16	8.74288	3.44082	16.30266
568505.16	4148670.16	568505.16_4148670.16	7.26626	2.84849	7.60848	568505.16	4148670.16	568505.16_4148670.16	9.31605	3.21724	17.37135
568525.16	4148670.16	568525.16_4148670.16	7.78342	2.69109	8.16078	568525.16	4148670.16	568525.16_4148670.16	10.02406	3.01669	18.61211
568545.16	4148670.16	568545.16_4148670.16	8.37746	2.54776	8.79889	568545.16	4148670.16	568545.16_4148670.16	10.86093	2.83398	20.05735
568565.16	4148670.16	568565.16_4148670.16	8.95221	2.40434	9.42581	568565.16	4148670.16	568565.16_4148670.16	11.80958	2.66538	21.73589
568585.16	4148670.16	568585.16_4148670.16	9.56421	2.26987	10.10293	568585.16	4148670.16	568585.16_4148670.16	12.93213	2.51083	23.78679
568605.16	4148670.16	568605.16_4148670.16	10.35596	2.15456	10.98515	568605.16	4148670.16	568605.16_4148670.16	14.3495	2.37057	26.42614
568625.16	4148670.16	568625.16_4148670.16	11.17513	2.04422	11.89414	568625.16	4148670.16	568625.16_4148670.16	16.05466	2.24125	29.71037
568645.16	4148670.16	568645.16_4148670.16	12.01806	1.94067	12.80668	568645.16	4148670.16	568645.16_4148670.16	18.14237	2.12209	33.8794
568665.16	4148670.16	568665.16_4148670.16	12.83084	1.84372	13.60413	568665.16	4148670.16	568665.16_4148670.16	20.71665	2.01211	39.25524
568685.16	4148670.16	568685.16_4148670.16	13.70515	1.75782	14.2632	568685.16	4148670.16	568685.16_4148670.16	24.00125	1.91121	46.4636
568705.16	4148670.16	568705.16_4148670.16	14.3252	1.67729	14.17627	568705.16	4148670.16	568705.16_4148670.16	27.80371	1.81776	55.89167
568725.16	4148670.16	568725.16_4148670.16	14.1372	1.60298	13.09682	568725.16	4148670.16	568725.16_4148670.16	29.78077	1.73125	64.68763
567325.16	4148690.16	567325.16_4148690.16	0.06016	0.1285	0.06398	567325.16	4148690.16	567325.16_4148690.16	0.06204	0.13833	0.11883
567345.16	4148690.16	567345.16_4148690.16	0.06229	0.1361	0.06611	567345.16	4148690.16	567345.16_4148690.16	0.06432	0.14698	0.12249
567365.16	4148690.16	567365.16_4148690.16	0.06461	0.1448	0.06842	567365.16	4148690.16	567365.16_4148690.16	0.06677	0.15672	0.12637
567385.16	4148690.16	567385.16_4148690.16	0.06706	0.15442	0.07085	567385.16	4148690.16	567385.16_4148690.16	0.06939	0.16752	0.13043
567405.16	4148690.16	567405.16_4148690.16	0.06961	0.16492	0.07338	567405.16	4148690.16	567405.16_4148690.16	0.07216	0.17945	0.13463
567425.16	4148690.16	567425.16_4148690.16	0.07229	0.17653	0.07602	567425.16	4148690.16	567425.16_4148690.16	0.07509	0.19273	0.13901
567445.16	4148690.16	567445.16_4148690.16	0.07521	0.18989	0.0789	567445.16	4148690.16	567445.16_4148690.16	0.07827	0.20786	0.14366
567465.16	4148690.16	567465.16_4148690.16	0.07854	0.20597	0.08216	567465.16	4148690.16	567465.16_4148690.16	0.08179	0.22558	0.14875

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567485.16	4148690.16	567485.16_4148690.16	0.08181	0.2229	0.08538	567485.16	4148690.16	567485.16_4148690.16	0.08541	0.24498	0.15389
567505.16	4148690.16	567505.16_4148690.16	0.08569	0.24411	0.08917	567505.16	4148690.16	567505.16_4148690.16	0.08953	0.26835	0.15968
567525.16	4148690.16	567525.16_4148690.16	0.08955	0.26702	0.09298	567525.16	4148690.16	567525.16_4148690.16	0.09379	0.29443	0.16556
567545.16	4148690.16	567545.16_4148690.16	0.09357	0.29291	0.09695	567545.16	4148690.16	567545.16_4148690.16	0.09831	0.32437	0.17173
567565.16	4148690.16	567565.16_4148690.16	0.0982	0.32478	0.1015	567565.16	4148690.16	567565.16_4148690.16	0.10339	0.36053	0.17864
567585.16	4148690.16	567585.16_4148690.16	0.10325	0.36264	0.10647	567585.16	4148690.16	567585.16_4148690.16	0.10895	0.40357	0.18616
567605.16	4148690.16	567605.16_4148690.16	0.10936	0.41165	0.11243	567605.16	4148690.16	567605.16_4148690.16	0.11541	0.45786	0.19497
567625.16	4148690.16	567625.16_4148690.16	0.11516	0.46494	0.11811	567625.16	4148690.16	567625.16_4148690.16	0.12194	0.51965	0.20378
567645.16	4148690.16	567645.16_4148690.16	0.12163	0.53059	0.12439	567645.16	4148690.16	567645.16_4148690.16	0.12921	0.59589	0.21361
567665.16	4148690.16	567665.16_4148690.16	0.12865	0.61051	0.13114	567665.16	4148690.16	567665.16_4148690.16	0.13719	0.68969	0.2244
567685.16	4148690.16	567685.16_4148690.16	0.13632	0.7092	0.13844	567685.16	4148690.16	567685.16_4148690.16	0.146	0.80654	0.23637
567705.16	4148690.16	567705.16_4148690.16	0.14514	0.83574	0.14671	567705.16	4148690.16	567705.16_4148690.16	0.15602	0.95598	0.25008
567725.16	4148690.16	567725.16_4148690.16	0.15513	0.99719	0.15599	567725.16	4148690.16	567725.16_4148690.16	0.16737	1.14672	0.26565
567745.16	4148690.16	567745.16_4148690.16	0.1662	1.1998	0.16618	567745.16	4148690.16	567745.16_4148690.16	0.18008	1.38766	0.28316
567765.16	4148690.16	567765.16_4148690.16	0.1795	1.46373	0.17841	567765.16	4148690.16	567765.16_4148690.16	0.19504	1.69886	0.30374
567785.16	4148690.16	567785.16_4148690.16	0.19433	1.78752	0.19214	567785.16	4148690.16	567785.16_4148690.16	0.21197	2.08459	0.32705
567805.16	4148690.16	567805.16_4148690.16	0.21104	2.1767	0.20778	567805.16	4148690.16	567805.16_4148690.16	0.23129	2.55451	0.35369
567825.16	4148690.16	567825.16_4148690.16	0.23721	2.75594	0.23253	567825.16	4148690.16	567825.16_4148690.16	0.25875	3.17417	0.38973
567845.16	4148690.16	567845.16_4148690.16	0.2547	3.20573	0.24979	567845.16	4148690.16	567845.16_4148690.16	0.28138	3.80786	0.42215
567865.16	4148690.16	567865.16_4148690.16	0.28212	3.82661	0.27691	567865.16	4148690.16	567865.16_4148690.16	0.31339	4.59091	0.46537
567885.16	4148690.16	567885.16_4148690.16	0.31736	4.56696	0.31211	567885.16	4148690.16	567885.16_4148690.16	0.35376	5.52198	0.51886
567905.16	4148690.16	567905.16_4148690.16	0.35981	5.37792	0.35478	567905.16	4148690.16	567905.16_4148690.16	0.40316	6.58099	0.58336
567925.16	4148690.16	567925.16_4148690.16	0.41244	6.26421	0.40712	567925.16	4148690.16	567925.16_4148690.16	0.46532	7.78964	0.66352
567945.16	4148690.16	567945.16_4148690.16	0.48267	7.30368	0.47475	567945.16	4148690.16	567945.16_4148690.16	0.54804	9.22287	0.76999
567965.16	4148690.16	567965.16_4148690.16	0.57633	8.47641	0.56261	567965.16	4148690.16	567965.16_4148690.16	0.65948	10.89711	0.91547
567985.16	4148690.16	567985.16_4148690.16	0.70164	9.70741	0.68051	567985.16	4148690.16	567985.16_4148690.16	0.81219	12.78564	1.11656
568085.16	4148690.16	568085.16_4148690.16	2.69691	12.21945	2.82749	568085.16	4148690.16	568085.16_4148690.16	3.4561	16.54302	4.81337
568105.16	4148690.16	568105.16_4148690.16	3.33076	11.73704	3.5273	568105.16	4148690.16	568105.16_4148690.16	4.3361	15.68376	6.26411
568145.16	4148690.16	568145.16_4148690.16	4.07958	10.43111	4.2707	568145.16	4148690.16	568145.16_4148690.16	5.4245	13.641	8.03573
568165.16	4148690.16	568165.16_4148690.16	4.25943	9.75543	4.42431	568165.16	4148690.16	568165.16_4148690.16	5.71173	12.6292	8.74103
568185.16	4148690.16	568185.16_4148690.16	4.43384	9.15902	4.58856	568185.16	4148690.16	568185.16_4148690.16	5.95011	11.68629	9.6336
568205.16	4148690.16	568205.16_4148690.16	4.60158	8.57751	4.76912	568205.16	4148690.16	568205.16_4148690.16	6.14554	10.79678	10.52812
568225.16	4148690.16	568225.16_4148690.16	4.74863	7.99134	4.9339	568225.16	4148690.16	568225.16_4148690.16	6.30214	9.95557	11.24798
568245.16	4148690.16	568245.16_4148690.16	4.86371	7.39426	5.06413	568245.16	4148690.16	568245.16_4148690.16	6.4294	9.15937	11.76078
568265.16	4148690.16	568265.16_4148690.16	5.00869	6.86106	5.22756	568265.16	4148690.16	568265.16_4148690.16	6.57429	8.42461	12.16944
568285.16	4148690.16	568285.16_4148690.16	5.17225	6.36959	5.40639	568285.16	4148690.16	568285.16_4148690.16	6.7394	7.74442	12.5173
568305.16	4148690.16	568305.16_4148690.16	5.33757	5.90481	5.58012	568305.16	4148690.16	568305.16_4148690.16	6.9178	7.1149	12.8265
568325.16	4148690.16	568325.16_4148690.16	5.49342	5.46332	5.73746	568325.16	4148690.16	568325.16_4148690.16	7.10198	6.53508	13.10745
568345.16	4148690.16	568345.16_4148690.16	5.7222	5.10154	5.9695	568345.16	4148690.16	568345.16_4148690.16	7.33515	6.01548	13.45575

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568365.16	4148690.16	568365.16_4148690.16	5.90814	4.73242	6.1518	568365.16	4148690.16	568365.16_4148690.16	7.55987	5.5364	13.79827
568385.16	4148690.16	568385.16_4148690.16	6.09748	4.38468	6.33718	568385.16	4148690.16	568385.16_4148690.16	7.8107	5.10149	14.22727
568425.16	4148690.16	568425.16_4148690.16	6.64925	3.79724	6.91292	568425.16	4148690.16	568425.16_4148690.16	8.51746	4.35941	15.6843
568445.16	4148690.16	568445.16_4148690.16	6.97234	3.53214	7.27108	568445.16	4148690.16	568445.16_4148690.16	8.97236	4.04098	16.6887
568465.16	4148690.16	568465.16_4148690.16	7.43182	3.31348	7.78129	568465.16	4148690.16	568465.16_4148690.16	9.55309	3.75787	17.88468
568485.16	4148690.16	568485.16_4148690.16	7.80535	3.08519	8.19234	568485.16	4148690.16	568485.16_4148690.16	10.16451	3.49761	19.06697
568505.16	4148690.16	568505.16_4148690.16	8.4372	2.91601	8.87789	568505.16	4148690.16	568505.16_4148690.16	10.98645	3.26877	20.50889
568525.16	4148690.16	568525.16_4148690.16	8.98711	2.73779	9.47282	568525.16	4148690.16	568525.16_4148690.16	11.88586	3.05777	22.05325
568545.16	4148690.16	568545.16_4148690.16	9.59726	2.57475	10.14155	568545.16	4148690.16	568545.16_4148690.16	12.96841	2.86632	23.93758
568565.16	4148690.16	568565.16_4148690.16	10.37534	2.43358	11.0057	568565.16	4148690.16	568565.16_4148690.16	14.34059	2.69347	26.39218
568585.16	4148690.16	568585.16_4148690.16	11.14377	2.29608	11.85691	568585.16	4148690.16	568585.16_4148690.16	15.98728	2.53472	29.47716
568605.16	4148690.16	568605.16_4148690.16	12.03996	2.173	12.83133	568605.16	4148690.16	568605.16_4148690.16	18.08359	2.39019	33.54263
568625.16	4148690.16	568625.16_4148690.16	13.10783	2.06362	13.9384	568625.16	4148690.16	568625.16_4148690.16	20.82077	2.25844	39.00822
568645.16	4148690.16	568645.16_4148690.16	14.13195	1.95907	14.79832	568645.16	4148690.16	568645.16_4148690.16	24.33182	2.13698	46.36805
568665.16	4148690.16	568665.16_4148690.16	15.00323	1.85989	14.99344	568665.16	4148690.16	568665.16_4148690.16	28.94371	2.02486	56.6938
568685.16	4148690.16	568685.16_4148690.16	15.58588	1.76681	14.04707	568685.16	4148690.16	568685.16_4148690.16	35.17391	1.92128	72.05909
568705.16	4148690.16	568705.16_4148690.16	16.34861	1.68763	12.73043	568705.16	4148690.16	568705.16_4148690.16	44.28522	1.82674	98.53759
567325.16	4148710.16	567325.16_4148710.16	0.05956	0.12898	0.06329	567325.16	4148710.16	567325.16_4148710.16	0.06163	0.13866	0.11973
567345.16	4148710.16	567345.16_4148710.16	0.06178	0.13679	0.06561	567345.16	4148710.16	567345.16_4148710.16	0.06397	0.14745	0.12375
567365.16	4148710.16	567365.16_4148710.16	0.0641	0.1453	0.06802	567365.16	4148710.16	567365.16_4148710.16	0.06644	0.1571	0.12792
567385.16	4148710.16	567385.16_4148710.16	0.06665	0.15506	0.07063	567385.16	4148710.16	567385.16_4148710.16	0.06911	0.168	0.13237
567405.16	4148710.16	567405.16_4148710.16	0.06925	0.16549	0.0733	567405.16	4148710.16	567405.16_4148710.16	0.07192	0.17991	0.13696
567425.16	4148710.16	567425.16_4148710.16	0.07203	0.1772	0.07612	567425.16	4148710.16	567425.16_4148710.16	0.07491	0.19328	0.14178
567445.16	4148710.16	567445.16_4148710.16	0.07498	0.19035	0.07912	567445.16	4148710.16	567445.16_4148710.16	0.07813	0.20832	0.14687
567465.16	4148710.16	567465.16_4148710.16	0.07827	0.20576	0.08242	567465.16	4148710.16	567465.16_4148710.16	0.08164	0.22566	0.15232
567485.16	4148710.16	567485.16_4148710.16	0.08188	0.22374	0.08603	567485.16	4148710.16	567485.16_4148710.16	0.08547	0.24569	0.15816
567505.16	4148710.16	567505.16_4148710.16	0.0858	0.24461	0.08995	567505.16	4148710.16	567505.16_4148710.16	0.08963	0.26887	0.16439
567525.16	4148710.16	567525.16_4148710.16	0.08979	0.26752	0.09395	567525.16	4148710.16	567525.16_4148710.16	0.094	0.29495	0.17082
567545.16	4148710.16	567545.16_4148710.16	0.09394	0.29333	0.09812	567545.16	4148710.16	567545.16_4148710.16	0.09862	0.32483	0.17754
567565.16	4148710.16	567565.16_4148710.16	0.09856	0.32428	0.10274	567565.16	4148710.16	567565.16_4148710.16	0.10372	0.36039	0.18482
567585.16	4148710.16	567585.16_4148710.16	0.10356	0.3609	0.10775	567585.16	4148710.16	567585.16_4148710.16	0.10927	0.40259	0.19266
567605.16	4148710.16	567605.16_4148710.16	0.10962	0.40846	0.11375	567605.16	4148710.16	567605.16_4148710.16	0.11572	0.45581	0.2017
567625.16	4148710.16	567625.16_4148710.16	0.11593	0.46396	0.12002	567625.16	4148710.16	567625.16_4148710.16	0.12261	0.51919	0.21124
567645.16	4148710.16	567645.16_4148710.16	0.12237	0.52831	0.12644	567645.16	4148710.16	567645.16_4148710.16	0.12988	0.59461	0.22119
567665.16	4148710.16	567665.16_4148710.16	0.1296	0.60893	0.13359	567665.16	4148710.16	567665.16_4148710.16	0.13802	0.68929	0.23229
567685.16	4148710.16	567685.16_4148710.16	0.13767	0.71047	0.1415	567685.16	4148710.16	567685.16_4148710.16	0.14711	0.80913	0.24464
567705.16	4148710.16	567705.16_4148710.16	0.14659	0.839	0.15017	567705.16	4148710.16	567705.16_4148710.16	0.15723	0.96192	0.25838
567725.16	4148710.16	567725.16_4148710.16	0.15663	1.00448	0.15979	567725.16	4148710.16	567725.16_4148710.16	0.16864	1.15932	0.27384
567745.16	4148710.16	567745.16_4148710.16	0.16832	1.2229	0.17086	567745.16	4148710.16	567745.16_4148710.16	0.18181	1.4187	0.29168

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567765.16	4148710.16	567765.16_4148710.16	0.18111	1.4987	0.18284	567765.16	4148710.16	567765.16_4148710.16	0.1965	1.74969	0.31156
567785.16	4148710.16	567785.16_4148710.16	0.19607	1.85479	0.19672	567785.16	4148710.16	567785.16_4148710.16	0.21357	2.17706	0.33463
567805.16	4148710.16	567805.16_4148710.16	0.21219	2.28206	0.21163	567805.16	4148710.16	567805.16_4148710.16	0.23259	2.70178	0.36038
567825.16	4148710.16	567825.16_4148710.16	0.23341	2.84742	0.23138	567825.16	4148710.16	567825.16_4148710.16	0.25645	3.38065	0.39242
567845.16	4148710.16	567845.16_4148710.16	0.25482	3.45444	0.25153	567845.16	4148710.16	567845.16_4148710.16	0.28225	4.15227	0.42734
567865.16	4148710.16	567865.16_4148710.16	0.28189	4.18705	0.27737	567865.16	4148710.16	567865.16_4148710.16	0.31415	5.08778	0.47021
567885.16	4148710.16	567885.16_4148710.16	0.31619	5.06064	0.31056	567885.16	4148710.16	567885.16_4148710.16	0.35397	6.21069	0.52328
567905.16	4148710.16	567905.16_4148710.16	0.35887	6.068	0.35236	567905.16	4148710.16	567905.16_4148710.16	0.40361	7.53661	0.58876
567925.16	4148710.16	567925.16_4148710.16	0.41017	7.14809	0.40309	567925.16	4148710.16	567925.16_4148710.16	0.4648	9.057	0.66858
567945.16	4148710.16	567945.16_4148710.16	0.47734	8.39436	0.46953	567945.16	4148710.16	567945.16_4148710.16	0.54522	10.88041	0.77183
567965.16	4148710.16	567965.16_4148710.16	0.56663	9.81081	0.55654	567965.16	4148710.16	567965.16_4148710.16	0.65347	13.06848	0.9097
567985.16	4148710.16	567985.16_4148710.16	0.69161	11.49673	0.67551	567985.16	4148710.16	567985.16_4148710.16	0.80662	15.73672	1.10601
568065.16	4148710.16	568065.16_4148710.16	2.19404	16.14628	2.21614	568065.16	4148710.16	568065.16_4148710.16	2.84712	22.54884	3.75389
568085.16	4148710.16	568085.16_4148710.16	3.06648	15.22548	3.21926	568085.16	4148710.16	568085.16_4148710.16	4.12708	21.15398	5.69704
568105.16	4148710.16	568105.16_4148710.16	3.96732	14.26562	4.22653	568105.16	4148710.16	568105.16_4148710.16	5.47575	19.48257	7.91894
568125.16	4148710.16	568125.16_4148710.16	4.60756	13.25729	4.88021	568125.16	4148710.16	568125.16_4148710.16	6.43692	17.77558	9.46008
568165.16	4148710.16	568165.16_4148710.16	5.1505	11.23435	5.36295	568165.16	4148710.16	568165.16_4148710.16	7.27916	14.64728	11.64506
568185.16	4148710.16	568185.16_4148710.16	5.29926	10.33574	5.50041	568185.16	4148710.16	568185.16_4148710.16	7.46514	13.30118	12.80154
568205.16	4148710.16	568205.16_4148710.16	5.4469	9.54409	5.66301	568205.16	4148710.16	568205.16_4148710.16	7.57398	12.09723	13.64415
568225.16	4148710.16	568225.16_4148710.16	5.57147	8.79779	5.80805	568225.16	4148710.16	568225.16_4148710.16	7.62983	11.00226	14.12058
568245.16	4148710.16	568245.16_4148710.16	5.61824	8.01976	5.86041	568245.16	4148710.16	568245.16_4148710.16	7.6412	9.98579	14.31327
568265.16	4148710.16	568265.16_4148710.16	5.66814	7.29309	5.91297	568265.16	4148710.16	568265.16_4148710.16	7.6774	9.05988	14.41923
568285.16	4148710.16	568285.16_4148710.16	5.86609	6.74223	6.12881	568285.16	4148710.16	568285.16_4148710.16	7.83422	8.24906	14.66548
568305.16	4148710.16	568305.16_4148710.16	6.08218	6.22966	6.35807	568305.16	4148710.16	568305.16_4148710.16	8.03367	7.51434	14.9429
568325.16	4148710.16	568325.16_4148710.16	6.25686	5.72337	6.53475	568325.16	4148710.16	568325.16_4148710.16	8.23466	6.84581	15.19938
568345.16	4148710.16	568345.16_4148710.16	6.4929	5.29568	6.77393	568345.16	4148710.16	568345.16_4148710.16	8.48744	6.25409	15.54813
568405.16	4148710.16	568405.16_4148710.16	7.21736	4.17683	7.51234	568405.16	4148710.16	568405.16_4148710.16	9.42949	4.82526	17.33134
568425.16	4148710.16	568425.16_4148710.16	7.56894	3.875	7.90276	568425.16	4148710.16	568425.16_4148710.16	9.90835	4.4493	18.43591
568445.16	4148710.16	568445.16_4148710.16	7.99386	3.60476	8.38329	568445.16	4148710.16	568445.16_4148710.16	10.49972	4.1142	19.74579
568465.16	4148710.16	568465.16_4148710.16	8.53539	3.37191	8.98641	568465.16	4148710.16	568465.16_4148710.16	11.23535	3.81636	21.20872
568485.16	4148710.16	568485.16_4148710.16	9.09901	3.15344	9.60521	568485.16	4148710.16	568485.16_4148710.16	12.09051	3.54815	22.75076
568505.16	4148710.16	568505.16_4148710.16	9.67853	2.94919	10.23922	568505.16	4148710.16	568505.16_4148710.16	13.09819	3.30615	24.46708
568525.16	4148710.16	568525.16_4148710.16	10.34888	2.76656	10.97748	568525.16	4148710.16	568525.16_4148710.16	14.34854	3.08848	26.59851
568545.16	4148710.16	568545.16_4148710.16	11.05122	2.59624	11.74879	568545.16	4148710.16	568545.16_4148710.16	15.88613	2.89109	29.34616
568565.16	4148710.16	568565.16_4148710.16	12.02109	2.45325	12.8112	568565.16	4148710.16	568565.16_4148710.16	17.94444	2.71413	33.17968
568585.16	4148710.16	568585.16_4148710.16	13.06802	2.31936	13.90438	568585.16	4148710.16	568585.16_4148710.16	20.58428	2.55276	38.34624
568605.16	4148710.16	568605.16_4148710.16	13.95178	2.18758	14.619	568605.16	4148710.16	568605.16_4148710.16	23.90475	2.40431	45.26711
568625.16	4148710.16	568625.16_4148710.16	15.16154	2.07679	15.30799	568625.16	4148710.16	568625.16_4148710.16	28.6112	2.27022	55.46671
568645.16	4148710.16	568645.16_4148710.16	16.35418	1.97352	15.15865	568645.16	4148710.16	568645.16_4148710.16	35.16354	2.14715	71.04703

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568665.16	4148710.16	568665.16_4148710.16	17.25111	1.87484	13.83322	568665.16	4148710.16	568665.16_4148710.16	44.46993	2.03361	97.07671
568685.16	4148710.16	568685.16_4148710.16	17.74787	1.78123	12.38387	568685.16	4148710.16	568685.16_4148710.16	59.50974	1.9287	144.4109
567325.16	4148730.16	567325.16_4148730.16	0.05854	0.12904	0.0616	567325.16	4148730.16	567325.16_4148730.16	0.0611	0.13873	0.11922
567345.16	4148730.16	567345.16_4148730.16	0.06087	0.13717	0.06411	567345.16	4148730.16	567345.16_4148730.16	0.06336	0.1477	0.12353
567365.16	4148730.16	567365.16_4148730.16	0.06321	0.14563	0.06661	567365.16	4148730.16	567365.16_4148730.16	0.06584	0.15735	0.12797
567385.16	4148730.16	567385.16_4148730.16	0.06582	0.15549	0.06938	567385.16	4148730.16	567385.16_4148730.16	0.06854	0.16832	0.13274
567405.16	4148730.16	567405.16_4148730.16	0.06843	0.16581	0.07216	567405.16	4148730.16	567405.16_4148730.16	0.07136	0.1802	0.13766
567425.16	4148730.16	567425.16_4148730.16	0.07128	0.1776	0.07515	567425.16	4148730.16	567425.16_4148730.16	0.07441	0.19363	0.14289
567445.16	4148730.16	567445.16_4148730.16	0.07436	0.19098	0.07837	567445.16	4148730.16	567445.16_4148730.16	0.07769	0.20883	0.14845
567465.16	4148730.16	567465.16_4148730.16	0.07765	0.20608	0.08178	567465.16	4148730.16	567465.16_4148730.16	0.08122	0.22602	0.15433
567485.16	4148730.16	567485.16_4148730.16	0.08121	0.2234	0.08545	567485.16	4148730.16	567485.16_4148730.16	0.08504	0.24568	0.16057
567505.16	4148730.16	567505.16_4148730.16	0.08509	0.24348	0.08943	567505.16	4148730.16	567505.16_4148730.16	0.08919	0.26838	0.16726
567525.16	4148730.16	567525.16_4148730.16	0.08934	0.26703	0.09376	567525.16	4148730.16	567525.16_4148730.16	0.09371	0.29486	0.17442
567545.16	4148730.16	567545.16_4148730.16	0.09379	0.29365	0.09829	567545.16	4148730.16	567545.16_4148730.16	0.09854	0.32525	0.18194
567565.16	4148730.16	567565.16_4148730.16	0.09858	0.32476	0.10317	567565.16	4148730.16	567565.16_4148730.16	0.10377	0.36091	0.18996
567585.16	4148730.16	567585.16_4148730.16	0.1038	0.36172	0.10848	567585.16	4148730.16	567585.16_4148730.16	0.10948	0.40334	0.19857
567605.16	4148730.16	567605.16_4148730.16	0.10949	0.40597	0.11426	567605.16	4148730.16	567605.16_4148730.16	0.11573	0.45431	0.20785
567625.16	4148730.16	567625.16_4148730.16	0.11586	0.46049	0.12072	567625.16	4148730.16	567625.16_4148730.16	0.12267	0.51695	0.21802
567645.16	4148730.16	567645.16_4148730.16	0.12323	0.53011	0.12813	567645.16	4148730.16	567645.16_4148730.16	0.13056	0.59629	0.22941
567665.16	4148730.16	567665.16_4148730.16	0.13027	0.60815	0.13532	567665.16	4148730.16	567665.16_4148730.16	0.13861	0.68925	0.24088
567685.16	4148730.16	567685.16_4148730.16	0.13831	0.70849	0.14347	567685.16	4148730.16	567685.16_4148730.16	0.14772	0.80878	0.25371
567705.16	4148730.16	567705.16_4148730.16	0.14748	0.83908	0.1527	567705.16	4148730.16	567705.16_4148730.16	0.15803	0.9646	0.26812
567725.16	4148730.16	567725.16_4148730.16	0.15815	1.01315	0.16333	567725.16	4148730.16	567725.16_4148730.16	0.16988	1.17187	0.28459
567745.16	4148730.16	567745.16_4148730.16	0.16956	1.23536	0.17464	567745.16	4148730.16	567745.16_4148730.16	0.1829	1.44043	0.3025
567765.16	4148730.16	567765.16_4148730.16	0.18208	1.52209	0.18689	567765.16	4148730.16	567765.16_4148730.16	0.19745	1.79111	0.32237
567785.16	4148730.16	567785.16_4148730.16	0.1974	1.91215	0.20163	567785.16	4148730.16	567785.16_4148730.16	0.21481	2.26397	0.34601
567805.16	4148730.16	567805.16_4148730.16	0.21409	2.39722	0.21751	567805.16	4148730.16	567805.16_4148730.16	0.23427	2.86345	0.37232
567825.16	4148730.16	567825.16_4148730.16	0.23382	3.01018	0.23607	567825.16	4148730.16	567825.16_4148730.16	0.25722	3.62594	0.40318
567845.16	4148730.16	567845.16_4148730.16	0.25929	3.81083	0.25995	567845.16	4148730.16	567845.16_4148730.16	0.28588	4.60691	0.44133
567865.16	4148730.16	567865.16_4148730.16	0.28338	4.61053	0.28253	567865.16	4148730.16	567865.16_4148730.16	0.3159	5.68634	0.4814
567885.16	4148730.16	567885.16_4148730.16	0.31608	5.62086	0.31348	567885.16	4148730.16	567885.16_4148730.16	0.35482	7.03904	0.5328
567905.16	4148730.16	567905.16_4148730.16	0.35835	6.84797	0.35394	567905.16	4148730.16	567905.16_4148730.16	0.40437	8.70141	0.59772
567925.16	4148730.16	567925.16_4148730.16	0.4113	8.271	0.40511	567925.16	4148730.16	567925.16_4148730.16	0.46691	10.71178	0.67919
567945.16	4148730.16	567945.16_4148730.16	0.47496	9.77305	0.46716	567945.16	4148730.16	567945.16_4148730.16	0.54496	13.06499	0.78026
567965.16	4148730.16	567965.16_4148730.16	0.56008	11.55534	0.55034	567965.16	4148730.16	567965.16_4148730.16	0.65017	15.97767	0.91496
568085.16	4148730.16	568085.16_4148730.16	3.46194	19.25399	3.6247	568085.16	4148730.16	568085.16_4148730.16	5.03511	27.10046	6.89994
568105.16	4148730.16	568105.16_4148730.16	4.80329	17.38939	5.13042	568105.16	4148730.16	568105.16_4148730.16	7.32765	24.18796	10.69947
568125.16	4148730.16	568125.16_4148730.16	5.68841	15.72594	6.03145	568125.16	4148730.16	568125.16_4148730.16	8.80573	21.44956	13.14869
568145.16	4148730.16	568145.16_4148730.16	6.12717	14.21616	6.43015	568145.16	4148730.16	568145.16_4148730.16	9.46414	19.01619	14.95327

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568165.16	4148730.16	568165.16_4148730.16	6.36156	12.85999	6.62738	568165.16	4148730.16	568165.16_4148730.16	9.71267	16.89919	16.73315
568185.16	4148730.16	568185.16_4148730.16	6.46636	11.63635	6.7215	568185.16	4148730.16	568185.16_4148730.16	9.68339	15.06165	17.67518
568205.16	4148730.16	568205.16_4148730.16	6.51466	10.55887	6.78094	568205.16	4148730.16	568205.16_4148730.16	9.51478	13.46554	17.87193
568225.16	4148730.16	568225.16_4148730.16	6.49444	9.54056	6.7663	568225.16	4148730.16	568225.16_4148730.16	9.29373	12.04943	17.67023
568245.16	4148730.16	568245.16_4148730.16	6.56482	8.6889	6.85353	568245.16	4148730.16	568245.16_4148730.16	9.17287	10.81265	17.47782
568265.16	4148730.16	568265.16_4148730.16	6.45605	7.72522	6.72339	568265.16	4148730.16	568265.16_4148730.16	9.02507	9.66924	17.12753
568285.16	4148730.16	568285.16_4148730.16	6.65316	7.0708	6.94173	568285.16	4148730.16	568285.16_4148730.16	9.14474	8.7096	17.20815
568305.16	4148730.16	568305.16_4148730.16	6.89775	6.48193	7.20634	568305.16	4148730.16	568305.16_4148730.16	9.36062	7.86164	17.4322
568325.16	4148730.16	568325.16_4148730.16	7.18392	5.95995	7.50983	568325.16	4148730.16	568325.16_4148730.16	9.64685	7.11598	17.77691
568365.16	4148730.16	568365.16_4148730.16	7.62454	4.99753	7.95351	568365.16	4148730.16	568365.16_4148730.16	10.23147	5.8711	18.6476
568385.16	4148730.16	568385.16_4148730.16	8.16806	4.68463	8.5359	568385.16	4148730.16	568385.16_4148730.16	10.74109	5.37322	19.65595
568405.16	4148730.16	568405.16_4148730.16	8.31485	4.26646	8.6969	568405.16	4148730.16	568405.16_4148730.16	11.12428	4.91634	20.66518
568425.16	4148730.16	568425.16_4148730.16	8.7143	3.94225	9.15602	568425.16	4148730.16	568425.16_4148730.16	11.72118	4.51919	22.11934
568465.16	4148730.16	568465.16_4148730.16	9.78306	3.4042	10.35533	568465.16	4148730.16	568465.16_4148730.16	13.40386	3.85724	25.50009
568485.16	4148730.16	568485.16_4148730.16	10.48549	3.1841	11.13699	568485.16	4148730.16	568485.16_4148730.16	14.57799	3.58097	27.4911
568505.16	4148730.16	568505.16_4148730.16	11.18517	2.97573	11.90932	568505.16	4148730.16	568505.16_4148730.16	16.00812	3.33224	29.87902
568525.16	4148730.16	568525.16_4148730.16	12.08359	2.79572	12.89146	568525.16	4148730.16	568525.16_4148730.16	17.90967	3.11017	33.20524
568545.16	4148730.16	568545.16_4148730.16	12.79137	2.61393	13.58886	568545.16	4148730.16	568545.16_4148730.16	20.2237	2.90722	37.64765
568565.16	4148730.16	568565.16_4148730.16	14.06944	2.47369	14.81742	568565.16	4148730.16	568565.16_4148730.16	23.62985	2.72764	44.41624
568585.16	4148730.16	568585.16_4148730.16	14.94534	2.32674	15.16942	568585.16	4148730.16	568585.16_4148730.16	27.92067	2.56183	53.7356
568605.16	4148730.16	568605.16_4148730.16	15.95941	2.19869	14.95594	568605.16	4148730.16	568605.16_4148730.16	34.05355	2.41195	68.04515
568625.16	4148730.16	568625.16_4148730.16	17.07435	2.08499	14.01882	568625.16	4148730.16	568625.16_4148730.16	43.07031	2.27578	92.1299
568645.16	4148730.16	568645.16_4148730.16	18.29588	1.98148	13.07024	568645.16	4148730.16	568645.16_4148730.16	57.45157	2.15133	138.26925
568705.16	4148730.16	568705.16_4148730.16	15.16703	1.70258	12.12647	568705.16	4148730.16	568705.16_4148730.16	40.22389	1.83329	114.26307
568725.16	4148730.16	568725.16_4148730.16	13.05733	1.6221	11.76501	568725.16	4148730.16	568725.16_4148730.16	28.2286	1.74312	74.05424
567325.16	4148750.16	567325.16_4148750.16	0.05729	0.12904	0.05918	567325.16	4148750.16	567325.16_4148750.16	0.06011	0.13873	0.11738
567345.16	4148750.16	567345.16_4148750.16	0.05955	0.13695	0.06165	567345.16	4148750.16	567345.16_4148750.16	0.06247	0.14759	0.12178
567365.16	4148750.16	567365.16_4148750.16	0.06195	0.14565	0.06426	567365.16	4148750.16	567365.16_4148750.16	0.06498	0.15739	0.12644
567385.16	4148750.16	567385.16_4148750.16	0.06452	0.15537	0.06706	567385.16	4148750.16	567385.16_4148750.16	0.06766	0.1683	0.13139
567405.16	4148750.16	567405.16_4148750.16	0.06719	0.16584	0.06994	567405.16	4148750.16	567405.16_4148750.16	0.07051	0.18028	0.13658
567425.16	4148750.16	567425.16_4148750.16	0.07004	0.17755	0.07301	567425.16	4148750.16	567425.16_4148750.16	0.07356	0.19369	0.14207
567445.16	4148750.16	567445.16_4148750.16	0.07318	0.19105	0.07637	567445.16	4148750.16	567445.16_4148750.16	0.07689	0.20898	0.14797
567465.16	4148750.16	567465.16_4148750.16	0.07667	0.20681	0.08007	567465.16	4148750.16	567465.16_4148750.16	0.08053	0.22657	0.15434
567485.16	4148750.16	567485.16_4148750.16	0.08015	0.22353	0.08376	567485.16	4148750.16	567485.16_4148750.16	0.08431	0.24592	0.16092
567505.16	4148750.16	567505.16_4148750.16	0.08402	0.24323	0.08783	567505.16	4148750.16	567505.16_4148750.16	0.08847	0.26842	0.16803
567525.16	4148750.16	567525.16_4148750.16	0.08821	0.26597	0.0922	567525.16	4148750.16	567525.16_4148750.16	0.09296	0.29441	0.17562
567545.16	4148750.16	567545.16_4148750.16	0.09268	0.29214	0.09686	567545.16	4148750.16	567545.16_4148750.16	0.09782	0.32452	0.1837
567565.16	4148750.16	567565.16_4148750.16	0.09766	0.32345	0.102	567565.16	4148750.16	567565.16_4148750.16	0.10317	0.3603	0.19245
567585.16	4148750.16	567585.16_4148750.16	0.10288	0.35952	0.10741	567585.16	4148750.16	567585.16_4148750.16	0.1089	0.40212	0.20173

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567605.16	4148750.16	567605.16_4148750.16	0.10892	0.40478	0.11362	567605.16	4148750.16	567605.16_4148750.16	0.11538	0.45373	0.21197
567625.16	4148750.16	567625.16_4148750.16	0.11553	0.45965	0.12039	567625.16	4148750.16	567625.16_4148750.16	0.12247	0.51662	0.22305
567645.16	4148750.16	567645.16_4148750.16	0.1224	0.52433	0.12746	567645.16	4148750.16	567645.16_4148750.16	0.13009	0.59234	0.23479
567665.16	4148750.16	567665.16_4148750.16	0.13039	0.60816	0.13564	567665.16	4148750.16	567665.16_4148750.16	0.13876	0.68975	0.24792
567685.16	4148750.16	567685.16_4148750.16	0.13819	0.70542	0.14374	567685.16	4148750.16	567685.16_4148750.16	0.14777	0.80729	0.26146
567705.16	4148750.16	567705.16_4148750.16	0.14786	0.83991	0.15365	567705.16	4148750.16	567705.16_4148750.16	0.15843	0.96719	0.2772
567725.16	4148750.16	567725.16_4148750.16	0.15819	1.01146	0.16427	567725.16	4148750.16	567725.16_4148750.16	0.17011	1.17513	0.29424
567745.16	4148750.16	567745.16_4148750.16	0.16966	1.23862	0.17606	567745.16	4148750.16	567745.16_4148750.16	0.1832	1.4534	0.31312
567765.16	4148750.16	567765.16_4148750.16	0.18282	1.54685	0.18947	567765.16	4148750.16	567765.16_4148750.16	0.1982	1.83261	0.33451
567785.16	4148750.16	567785.16_4148750.16	0.19807	1.96526	0.20489	567785.16	4148750.16	567785.16_4148750.16	0.21555	2.34922	0.35905
567805.16	4148750.16	567805.16_4148750.16	0.21622	2.53095	0.22299	567805.16	4148750.16	567805.16_4148750.16	0.23602	3.04809	0.38774
567825.16	4148750.16	567825.16_4148750.16	0.2355	3.2205	0.24211	567825.16	4148750.16	567825.16_4148750.16	0.25873	3.92785	0.41922
567845.16	4148750.16	567845.16_4148750.16	0.26011	4.12804	0.26607	567845.16	4148750.16	567845.16_4148750.16	0.28686	5.0791	0.45789
567865.16	4148750.16	567865.16_4148750.16	0.28541	5.10922	0.29051	567865.16	4148750.16	567865.16_4148750.16	0.31781	6.41958	0.49996
567885.16	4148750.16	567885.16_4148750.16	0.31745	6.30111	0.32117	567885.16	4148750.16	567885.16_4148750.16	0.35641	8.08634	0.55186
567905.16	4148750.16	567905.16_4148750.16	0.35755	7.71649	0.35949	567905.16	4148750.16	567905.16_4148750.16	0.40461	10.1425	0.61587
567925.16	4148750.16	567925.16_4148750.16	0.4107	9.50926	0.41054	567925.16	4148750.16	567925.16_4148750.16	0.46753	12.77645	0.69822
567945.16	4148750.16	567945.16_4148750.16	0.47618	11.57674	0.47382	567945.16	4148750.16	567945.16_4148750.16	0.54713	16.00034	0.80125
568085.16	4148750.16	568085.16_4148750.16	3.76817	24.64138	3.84708	568085.16	4148750.16	568085.16_4148750.16	6.19443	33.81739	8.48679
568105.16	4148750.16	568105.16_4148750.16	5.85463	21.18712	5.98578	568105.16	4148750.16	568105.16_4148750.16	10.75859	29.64146	16.22233
568125.16	4148750.16	568125.16_4148750.16	7.15979	18.60797	7.32304	568125.16	4148750.16	568125.16_4148750.16	13.29985	25.675	21.00824
568165.16	4148750.16	568165.16_4148750.16	7.90712	14.48968	8.13763	568165.16	4148750.16	568165.16_4148750.16	13.5831	19.30296	25.43189
568185.16	4148750.16	568185.16_4148750.16	7.91724	12.92859	8.1858	568185.16	4148750.16	568185.16_4148750.16	12.88494	16.88836	24.70132
568205.16	4148750.16	568205.16_4148750.16	7.79079	11.54164	8.0816	568205.16	4148750.16	568205.16_4148750.16	12.10638	14.83789	23.45301
568225.16	4148750.16	568225.16_4148750.16	7.67694	10.33562	7.99245	568225.16	4148750.16	568225.16_4148750.16	11.46273	13.0847	22.26746
568245.16	4148750.16	568245.16_4148750.16	7.34345	9.04242	7.62349	568245.16	4148750.16	568245.16_4148750.16	10.855	11.5144	20.98914
568265.16	4148750.16	568265.16_4148750.16	7.3108	8.06773	7.59633	568265.16	4148750.16	568265.16_4148750.16	10.61634	10.19968	20.3093
568285.16	4148750.16	568285.16_4148750.16	7.57134	7.35404	7.89605	568285.16	4148750.16	568285.16_4148750.16	10.73801	9.10185	20.26922
568305.16	4148750.16	568305.16_4148750.16	7.9995	6.76491	8.37474	568305.16	4148750.16	568305.16_4148750.16	11.08826	8.16037	20.63164
568345.16	4148750.16	568345.16_4148750.16	8.58244	5.59844	8.99001	568345.16	4148750.16	568345.16_4148750.16	11.82899	6.60786	21.54808
568365.16	4148750.16	568365.16_4148750.16	8.69987	5.06069	9.09838	568365.16	4148750.16	568365.16_4148750.16	12.15741	5.97581	22.19705
568385.16	4148750.16	568385.16_4148750.16	9.27697	4.70976	9.73425	568385.16	4148750.16	568385.16_4148750.16	12.78438	5.44879	23.64621
568405.16	4148750.16	568405.16_4148750.16	9.54982	4.30493	10.04824	568405.16	4148750.16	568405.16_4148750.16	13.32896	4.97343	25.19385
568425.16	4148750.16	568425.16_4148750.16	10.01494	3.97084	10.58641	568425.16	4148750.16	568425.16_4148750.16	14.09427	4.56109	27.07832
568445.16	4148750.16	568445.16_4148750.16	10.59933	3.68067	11.24527	568445.16	4148750.16	568445.16_4148750.16	15.08824	4.19944	29.09132
568465.16	4148750.16	568465.16_4148750.16	11.26664	3.42282	11.99263	568465.16	4148750.16	568465.16_4148750.16	16.35592	3.87995	31.28108
568485.16	4148750.16	568485.16_4148750.16	12.07727	3.19758	12.88912	568485.16	4148750.16	568485.16_4148750.16	18.03729	3.59718	34.02536
568505.16	4148750.16	568505.16_4148750.16	13.02021	2.99556	13.88139	568505.16	4148750.16	568505.16_4148750.16	20.29482	3.34505	37.92661
568525.16	4148750.16	568525.16_4148750.16	13.89799	2.80224	14.6538	568525.16	4148750.16	568525.16_4148750.16	23.25317	3.11758	43.63075

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568545.16	4148750.16	568545.16_4148750.16	15.09568	2.63794	15.4779	568545.16	4148750.16	568545.16_4148750.16	27.50386	2.91471	52.48455
568565.16	4148750.16	568565.16_4148750.16	16.29078	2.4848	15.5871	568565.16	4148750.16	568565.16_4148750.16	33.44157	2.73105	66.10633
568585.16	4148750.16	568585.16_4148750.16	17.01602	2.3356	14.26732	568585.16	4148750.16	568585.16_4148750.16	41.69758	2.56331	87.86781
568605.16	4148750.16	568605.16_4148750.16	18.14402	2.20916	13.1993	568605.16	4148750.16	568605.16_4148750.16	54.97815	2.41241	129.37672
568665.16	4148750.16	568665.16_4148750.16	15.67492	1.87498	12.43489	568665.16	4148750.16	568665.16_4148750.16	43.69155	2.03188	123.67264
568685.16	4148750.16	568685.16_4148750.16	14.31546	1.78879	12.63913	568685.16	4148750.16	568685.16_4148750.16	31.99926	1.92671	86.82006
568705.16	4148750.16	568705.16_4148750.16	12.3873	1.69921	11.83882	568705.16	4148750.16	568705.16_4148750.16	24.31541	1.82831	62.84268
568725.16	4148750.16	568725.16_4148750.16	10.81571	1.61757	10.90533	568725.16	4148750.16	568725.16_4148750.16	18.96289	1.73766	47.33355
567325.16	4148770.16	567325.16_4148770.16	0.05574	0.12838	0.05622	567325.16	4148770.16	567325.16_4148770.16	0.05915	0.13835	0.11434
567345.16	4148770.16	567345.16_4148770.16	0.05795	0.13626	0.05861	567345.16	4148770.16	567345.16_4148770.16	0.06138	0.14721	0.11876
567365.16	4148770.16	567365.16_4148770.16	0.06039	0.14521	0.06125	567365.16	4148770.16	567365.16_4148770.16	0.06391	0.15714	0.12352
567385.16	4148770.16	567385.16_4148770.16	0.0629	0.15479	0.06396	567385.16	4148770.16	567385.16_4148770.16	0.06658	0.16798	0.12852
567405.16	4148770.16	567405.16_4148770.16	0.06556	0.16532	0.06684	567405.16	4148770.16	567405.16_4148770.16	0.06942	0.18001	0.13382
567425.16	4148770.16	567425.16_4148770.16	0.06845	0.17724	0.06996	567425.16	4148770.16	567425.16_4148770.16	0.07246	0.19355	0.13951
567445.16	4148770.16	567445.16_4148770.16	0.07159	0.19077	0.07335	567445.16	4148770.16	567445.16_4148770.16	0.07578	0.20888	0.14559
567465.16	4148770.16	567465.16_4148770.16	0.07504	0.2063	0.07704	567465.16	4148770.16	567465.16_4148770.16	0.0794	0.22636	0.15213
567485.16	4148770.16	567485.16_4148770.16	0.07859	0.22328	0.08085	567485.16	4148770.16	567485.16_4148770.16	0.08322	0.24589	0.15902
567505.16	4148770.16	567505.16_4148770.16	0.08219	0.24165	0.08472	567505.16	4148770.16	567505.16_4148770.16	0.08724	0.26763	0.16624
567525.16	4148770.16	567525.16_4148770.16	0.0865	0.2647	0.08929	567525.16	4148770.16	567525.16_4148770.16	0.0918	0.29381	0.17426
567545.16	4148770.16	567545.16_4148770.16	0.09117	0.29146	0.09421	567545.16	4148770.16	567545.16_4148770.16	0.09677	0.3243	0.18288
567565.16	4148770.16	567565.16_4148770.16	0.09591	0.32113	0.09922	567565.16	4148770.16	567565.16_4148770.16	0.10201	0.35906	0.19194
567585.16	4148770.16	567585.16_4148770.16	0.10128	0.35729	0.10484	567585.16	4148770.16	567585.16_4148770.16	0.10783	0.40093	0.20183
567605.16	4148770.16	567605.16_4148770.16	0.10757	0.40316	0.11138	567605.16	4148770.16	567605.16_4148770.16	0.11444	0.4529	0.21283
567625.16	4148770.16	567625.16_4148770.16	0.11385	0.45489	0.11793	567625.16	4148770.16	567625.16_4148770.16	0.12138	0.51359	0.22434
567645.16	4148770.16	567645.16_4148770.16	0.12072	0.51816	0.12507	567645.16	4148770.16	567645.16_4148770.16	0.12901	0.58826	0.23683
567665.16	4148770.16	567665.16_4148770.16	0.12909	0.60315	0.13369	567665.16	4148770.16	567665.16_4148770.16	0.13792	0.68645	0.25103
567685.16	4148770.16	567685.16_4148770.16	0.13747	0.70386	0.14237	567685.16	4148770.16	567685.16_4148770.16	0.14731	0.8068	0.26597
567705.16	4148770.16	567705.16_4148770.16	0.14668	0.8332	0.15191	567705.10	4148770.16	567705.16_4148770.16	0.15774	0.96337	0.28234
567725.16	4148770.16	567725.16_4148770.16	0.15677	1.00219	0.1624	567725.16	4148770.16	567725.16_4148770.16	0.16932	1.17121	0.30027
567745.16	4148770.16	567745.16_4148770.16	0.16877	1.23852	0.17482	567745.16	4148770.16	567745.16_4148770.16	0.18278	1.46191	0.32074
567765.16	4148770.16	567765.16_4148770.16	0.18234	1.56484	0.18886	567765.16	4148770.16	567765.16_4148770.16	0.1981	1.86732	0.34375
567785.16	4148770.16	567785.16_4148770.16	0.19764	2.01459	0.20469	567785.16	4148770.16	567785.16_4148770.16	0.21553	2.43283	0.36965
567805.16	4148770.16	567805.16_4148770.16	0.21602	2.64693	0.22359	567805.16	4148770.16	567805.16_4148770.16	0.23618	3.22937	0.39997
567825.16	4148770.16	567825.16_4148770.16	0.23588	3.45248	0.24404	567825.16	4148770.16	567825.16_4148770.16	0.25933	4.27525	0.43367
567845.16	4148770.16	567845.16_4148770.16	0.26087	4.52998	0.26944	567845.16	4148770.16	567845.16_4148770.16	0.28775	5.67723	0.47461
567865.16	4148770.16	567865.16_4148770.16	0.28657	5.71709	0.29562	567865.16	4148770.16	567865.16_4148770.16	0.31906	7.35054	0.51932
567885.16	4148770.16	567885.16_4148770.16	0.31833	7.14537	0.32752	567885.16	4148770.16	567885.16_4148770.16	0.35754	9.45187	0.57368
567905.16	4148770.16	567905.16_4148770.16	0.35838	8.88357	0.36726	567905.16	4148770.16	567905.16_4148770.16	0.40578	12.11074	0.64107
567925.16	4148770.16	567925.16_4148770.16	0.40987	11.08569	0.41803	567925.10	4148770.16	567925.16_4148770.16	0.46762	15.5219	0.72627

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568105.16	4148770.16	568105.16_4148770.16	6.84359	25.55971	5.28537	568105.16	4148770.16	568105.16_4148770.16	18.33494	35.25961	31.18544
568145.16	4148770.16	568145.16_4148770.16	9.81565	18.67984	9.03642	568145.16	4148770.16	568145.16_4148770.16	22.39143	25.63202	44.87465
568165.16	4148770.16	568165.16_4148770.16	9.80824	16.11934	9.67565	568165.16	4148770.16	568165.16_4148770.16	19.78527	21.78636	39.51504
568185.16	4148770.16	568185.16_4148770.16	9.71607	14.22151	9.906	568185.16	4148770.16	568185.16_4148770.16	17.49774	18.71462	34.9014
568205.16	4148770.16	568205.16_4148770.16	9.34008	12.49683	9.64069	568205.16	4148770.16	568205.16_4148770.16	15.5707	16.14872	31.02945
568225.16	4148770.16	568225.16_4148770.16	8.95593	10.98115	9.30022	568225.16	4148770.16	568225.16_4148770.16	14.13848	13.99758	28.02527
568245.16	4148770.16	568245.16_4148770.16	8.78399	9.73475	9.15654	568245.16	4148770.16	568245.16_4148770.16	13.27657	12.20476	26.00145
568265.16	4148770.16	568265.16_4148770.16	8.40945	8.42697	8.74176	568265.16	4148770.16	568265.16_4148770.16	12.62595	10.64217	24.28845
568285.16	4148770.16	568285.16_4148770.16	8.73191	7.6265	9.12266	568285.16	4148770.16	568285.16_4148770.16	12.75997	9.40648	24.10511
568325.16	4148770.16	568325.16_4148770.16	9.69384	6.2949	10.19995	568325.16	4148770.16	568325.16_4148770.16	13.82925	7.46795	25.26051
568345.16	4148770.16	568345.16_4148770.16	9.89922	5.6538	10.40462	568345.16	4148770.16	568345.16_4148770.16	14.34297	6.69442	26.06946
568365.16	4148770.16	568365.16_4148770.16	10.37294	5.17492	10.92336	568365.16	4148770.16	568365.16_4148770.16	15.03793	6.04684	27.61581
568385.16	4148770.16	568385.16_4148770.16	10.51669	4.68227	11.07427	568385.16	4148770.16	568385.16_4148770.16	15.57281	5.47722	29.37406
568405.16	4148770.16	568405.16_4148770.16	11.10864	4.32525	11.75899	568405.16	4148770.16	568405.16_4148770.16	16.4334	4.99741	31.81035
568445.16	4148770.16	568445.16_4148770.16	12.31021	3.69321	13.1177	568445.16	4148770.16	568445.16_4148770.16	18.77708	4.20692	36.55397
568465.16	4148770.16	568465.16_4148770.16	13.07022	3.43289	13.92918	568465.16	4148770.16	568465.16_4148770.16	20.63925	3.88249	39.54288
568485.16	4148770.16	568485.16_4148770.16	13.8339	3.19457	14.59971	568485.16	4148770.16	568485.16_4148770.16	23.20343	3.59435	43.947
568505.16	4148770.16	568505.16_4148770.16	15.14365	3.00354	15.63661	568505.16	4148770.16	568505.16_4148770.16	27.18402	3.34156	51.65695
568525.16	4148770.16	568525.16_4148770.16	15.75922	2.79764	15.17809	568525.16	4148770.16	568525.16_4148770.16	32.33544	3.11047	63.32896
568545.16	4148770.16	568545.16_4148770.16	16.88702	2.6306	14.46604	568545.16	4148770.16	568545.16_4148770.16	40.35025	2.906	83.71736
568565.16	4148770.16	568565.16_4148770.16	18.24468	2.48199	13.55626	568565.16	4148770.16	568565.16_4148770.16	52.76136	2.72217	122.12513
568625.16	4148770.16	568625.16_4148770.16	16.69685	2.085	13.02461	568625.16	4148770.16	568625.16_4148770.16	46.86598	2.26398	136.37069
568645.16	4148770.16	568645.16_4148770.16	15.09113	1.97825	13.2374	568645.16	4148770.16	568645.16_4148770.16	34.14601	2.13812	93.77148
568665.16	4148770.16	568665.16_4148770.16	13.20945	1.87255	12.56725	568665.16	4148770.16	568665.16_4148770.16	26.34736	2.02175	69.18996
568685.16	4148770.16	568685.16_4148770.16	11.77462	1.78039	11.80888	568685.16	4148770.16	568685.16_4148770.16	21.05609	1.91569	53.88557
568705.16	4148770.16	568705.16_4148770.16	10.44214	1.69421	10.79818	568705.16	4148770.16	568705.16_4148770.16	17.13484	1.81791	42.97205
568725.16	4148770.16	568725.16_4148770.16	9.12118	1.6092	9.57074	568725.16	4148770.16	568725.16_4148770.16	14.09718	1.72686	34.71514
567325.16	4148790.16	567325.16_4148790.16	0.05414	0.12737	0.05321	567325.16	4148790.16	567325.16_4148790.16	0.05796	0.13777	0.11058
567345.16	4148790.16	567345.16_4148790.16	0.05633	0.13534	0.05551	567345.16	4148790.16	567345.16_4148790.16	0.0602	0.14667	0.11497
567365.16	4148790.16	567365.16_4148790.16	0.05859	0.14392	0.0579	567365.16	4148790.16	567365.16_4148790.16	0.06265	0.15641	0.11963
567385.16	4148790.16	567385.16_4148790.16	0.0611	0.15368	0.06056	567385.16	4148790.16	567385.16_4148790.16	0.06531	0.16735	0.12463
567405.16	4148790.16	567405.16_4148790.16	0.06383	0.16463	0.06344	567405.16	4148790.16	567405.16_4148790.16	0.06818	0.17961	0.12999
567425.16	4148790.16	567425.16_4148790.16	0.06673	0.17678	0.06652	567425.16	4148790.16	567425.16_4148790.16	0.07122	0.19329	0.13571
567445.16	4148790.16	567445.16_4148790.16	0.0698	0.19022	0.06979	567445.16	4148790.16	567445.16_4148790.16	0.07449	0.20858	0.14181
567465.16	4148790.16	567465.16_4148790.16	0.0729	0.20457	0.0731	567465.16	4148790.16	567465.16_4148790.16	0.07793	0.22541	0.14821
567485.16	4148790.16	567485.16_4148790.16	0.07651	0.2219	0.07695	567485.16	4148790.16	567485.16_4148790.16	0.08178	0.24515	0.15524
567505.16	4148790.16	567505.16_4148790.16	0.08029	0.24115	0.08098	567505.16	4148790.16	567505.16_4148790.16	0.08588	0.26742	0.16273
567525.16	4148790.16	567525.16_4148790.16	0.08422	0.26252	0.08519	567525.16	4148790.16	567525.16_4148790.16	0.09025	0.29265	0.17067
567545.16	4148790.16	567545.16_4148790.16	0.089	0.2896	0.09022	567545.16	4148790.16	567545.16_4148790.16	0.09526	0.32333	0.17957

567765.16   4148790.16   567565.16   4148790.16   0.09818   0.09	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
\$56765.16   4148790.16   \$56765.15, 4148790.16   0.1046   0.3955   0.10673   \$56765.16   4148790.16   \$56765.16   0.11956   0.21945   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$56765.15   414879.016   \$0.1354   \$0.2392   \$56765.15   414879.016   \$56765.15   414879.016   \$0.1354   \$0.8392   \$0.2393   \$56765.15   414879.016   \$56765.15   414879.016   \$0.14574   \$0.8011   \$0.5589   \$56765.15   414879.016   \$56765.15   414879.016   \$0.14574   \$0.8011   \$0.5589   \$56765.15   414879.016   \$56765.15   414879.016   \$0.14574   \$0.8011   \$0.5589   \$56765.15   414879.016   \$56765.15   414879.016   \$0.14574   \$0.8011   \$0.5589   \$56765.15   414879.016   \$56765.15   414879.016   \$0.14574   \$0.8011   \$0.5589   \$56765.15   414879.016   \$56765.15   414879.016   \$0.16572   \$0.14574   \$0.8011   \$0.5589   \$56765.15   414879.016   \$0.16727   \$0.20218   \$56765.15   414879.016   \$0.16727   \$0.20218   \$56765.15   414879.016   \$0.16727   \$0.20218   \$56765.15   414879.016   \$0.16727   \$0.20218   \$0.24572   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218   \$0.20218	567565.16	4148790.16	567565.16_4148790.16	0.09381	0.31946	0.09532	567565.16	4148790.16	567565.16_4148790.16	0.10053	0.35822	0.18895
S67825.16   4148790.16   S67825.16   4148790.16   O.1187   O.22425   O.5183   O.1218   S67865.16   4148790.16   S67865.16   O.1275   O.585.34   O.22425   S67865.16   4148790.16   S67865.16   4148790.16   S67865.16   O.1275   O.585.34   O.22425   S67865.16   O.1276   S67865.16   O.1276   O.1276   O.1286   O.1276   O.1286   O.1276   O.1286   O	567585.16	4148790.16	567585.16_4148790.16	0.09894	0.3541	0.10076	567585.16	4148790.16	567585.16_4148790.16	0.10623	0.39915	0.19902
\$67645.16   \$448790.16   \$67645.16   \$418790.16   \$0.11854   \$0.1315   \$0.12128   \$567645.16   \$418790.16   \$0.1275   \$0.5834   \$0.23949	567605.16	4148790.16	567605.16_4148790.16	0.1046	0.39565	0.10673	567605.16	4148790.16	567605.16_4148790.16	0.11251	0.44826	0.20998
\$56765.16   4148790.16   \$57665.16   4148790.16   \$57665.16   4148790.16   \$57665.16   4148790.16   \$57665.16   4148790.16   \$57665.16   4148790.16   \$57665.16   4148790.16   \$57665.16   4148790.16   \$57665.16   4148790.16   \$5776.16   4148790.	567625.16	4148790.16	567625.16_4148790.16	0.11167	0.4512	0.11409	567625.16	4148790.16	567625.16_4148790.16	0.11985	0.51137	0.22245
56785.16   4148790.16   56785.16   4148790.16   0.13519   0.9554   0.13859   0.13859   56785.16   4148790.16   0.15644   0.95995   0.28339   56775.16   4148790.16   567705.16   4148790.16   5677	567645.16	4148790.16	567645.16_4148790.16	0.11854	0.5135	0.12128	567645.16	4148790.16	567645.16_4148790.16	0.1275	0.58534	0.23549
S67705.16   4148790.16   S67705.16   4148790.16   O.15444   O.95991   O.15848   S67705.16   4148790.16   O.15775   O.15644   O.95991   O.15848   S67705.16   4148790.16   O.15775   O.16622   O.15474   O.9991   O.15888   S67705.16   4148790.16   S67705.16   4148790.16   O.16777   O.102128   S67705.16   4148790.16   S67705.16   4148790.16   S67705.16   A148790.16   O.16775   O.18139   O.18248   O.3235   S67705.16   4148790.16   S67705.16   4148790.16   O.16787   O.18139   O.181399   O.181399   O.181399   O.181399   O.1813	567665.16	4148790.16	567665.16_4148790.16	0.12618	0.59172	0.12926	567665.16	4148790.16	567665.16_4148790.16	0.136	0.67849	0.24982
567725.16         4148790.16         567725.16         4148790.16         567725.16         4148790.16         567745.16         4148790.16         567745.16         4148790.16         567745.16         4148790.16         567745.16         4148790.16         567745.16         4148790.16         567745.16         4148790.16         567745.16         4148790.16         567765.16         0.1839         1.8918         0.348           567785.16         4148790.16         567785.16         4148790.16         567785.16         4148790.16         567785.16         4148790.16         567785.16         4148790.16         0.18139         1.89118         0.348           56785.16         4148790.16         567785.16         4148790.16         56785.16         4148790.16         56785.16         0.21487         0.2442         0.2042         0.2042         0.2042         56785.16         4148790.16         567825.16         4148790.16         0.23427         0.24629         5.5856.16         4148790.16         567825.16         4148790.16         0.28829         6.46611         0.46631           56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         0.32719         58211         56785.16         4148790.16 <t< td=""><td>567685.16</td><td>4148790.16</td><td>567685.16_4148790.16</td><td>0.13519</td><td>0.69554</td><td>0.13859</td><td>567685.16</td><td>4148790.16</td><td>567685.16_4148790.16</td><td>0.14574</td><td>0.8011</td><td>0.26589</td></t<>	567685.16	4148790.16	567685.16_4148790.16	0.13519	0.69554	0.13859	567685.16	4148790.16	567685.16_4148790.16	0.14574	0.8011	0.26589
567745.16	567705.16	4148790.16	567705.16_4148790.16	0.14484	0.82742	0.1486	567705.16	4148790.16	567705.16_4148790.16	0.15644	0.95995	0.28339
\$67785.16	567725.16	4148790.16	567725.16_4148790.16	0.15474	0.9941	0.15888	567725.16	4148790.16	567725.16_4148790.16	0.16797	1.16722	0.30218
56785.16   4148790.16   56785.16.4148790.16   0.1959   2.04.22   0.20142   567785.16   4148790.16   567785.16.4148790.16   0.21447   2.50924   0.37522     56785.16   4148790.16   56785.16.4148790.16   0.23412   3.69216   0.24093   56785.16   4148790.16   56785.16.4148790.16   0.28437   4.66767   0.44211     567845.16   4148790.16   56785.16.4148790.16   0.24028   5.6925.16   4148790.16   56785.16.4148790.16   0.28029   0.26857   567845.16   4148790.16   56785.16.4148790.16   0.28029   6.46211   0.48631     56785.16   4148790.16   56785.16.4148790.16   0.31706   8.21366   0.32652   567885.16   4148790.16   56785.16.4148790.16   0.35779   11.27689   0.5885     567805.16   4148790.16   56785.16.4148790.16   0.35577   0.3593   0.36616   567905.16   4148790.16   56785.16.4148790.16   0.35779   11.27689   0.5885     568125.16   4148790.16   568125.16.4148790.16   0.35577   0.3593   0.36616   567905.16   4148790.16   568125.16.4148790.16   0.40462   4172213   0.56814     568145.16   4148790.16   568125.16.4148790.16   1.18502   555251   5.33377   568125.16   4148790.16   568125.16.4148790.16   0.40462   4172213   0.56814     568145.16   4148790.16   568125.16.4148790.16   1.18502   525521   5.33377   568125.16   4148790.16   568125.16.4148790.16   37.31875   29.0446   81.4799   81	567745.16	4148790.16	567745.16_4148790.16	0.16662	1.23107	0.17117	567745.16	4148790.16	567745.16_4148790.16	0.18139	1.46248	0.3236
567805.16   418790.16   567805.16   4148790.16   0.21377   2.74656   0.21988   567805.16   4148790.16   567805.16   4148790.16   0.25817   4.66767   0.44211   567825.16   4148790.16   567825.16   4148790.16   567825.16   4148790.16   567825.16   567825.16   4148790.16   567825.16   567825.16   4148790.16   568125.16   4148790.16   568125.16	567765.16	4148790.16	567765.16_4148790.16	0.18052	1.57212	0.18553	567765.16	4148790.16	567765.16_4148790.16	0.19693	1.89118	0.348
567825.16         4148790.16         567825.16_4148790.16         0.23412         3.69216         0.24093         567825.16         4148790.16         567845.16_4148790.16         0.25837         4.66767         0.44211           567845.16         4148790.16         567845.16_4148790.16         567845.16_4148790.16         567845.16_4148790.16         0.28809         6.46211         0.48621           567865.16         4148790.16         567865.16_4148790.16         567865.16_4148790.16         567865.16_4148790.16         0.31795         8.51075         0.53611           567805.16         4148790.16         567895.16_4148790.16         0.35779         10.3593         0.36616         567905.16_4148790.16         567895.16_4148790.16         0.35779         11.27689         0.5886           568125.16         4148790.16         568125.16_51         4148790.16         568125.16_4148790.16         0.35779         11.27689         0.5886           568125.16         4148790.16         568125.16_4148790.16         568125.16_4148790.16         568125.16_4148790.16         568125.16_4148790.16         4148790.16         568125.16_4148790.16         4148790.16         568125.16_4148790.16         4148790.16         568125.16_4148790.16         37.31875         29.0446         84.34799           568125.16         4148790.16         568	567785.16	4148790.16	567785.16_4148790.16	0.1959	2.05422	0.20142	567785.16	4148790.16	567785.16_4148790.16	0.21447	2.50924	0.37522
567845.16         4148790.16         567845.16         4148790.16         567845.16         4148790.16         567845.16         4148790.16         567845.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56785.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16         4148790.16         56815.16	567805.16	4148790.16	567805.16_4148790.16	0.21377	2.74636	0.21988	567805.16	4148790.16	567805.16_4148790.16	0.23484	3.4088	0.40643
567865.16         4148790.16         567865.16_4148790.16         0.28429         6.39674         0.29282         567865.16         4148790.16         567885.16_4148790.16         0.31795         8.51075         0.53111           567885.16         4148790.16         567885.16_4148790.16         0.35717         11.27689         0.38886           567905.16         4148790.16         567905.16_4148790.16         0.35577         11.27689         0.38886           568125.16         4148790.16         568125.16_4148790.16         0.35577         10.3593         0.36616         567905.16         4148790.16         0.448790.16         0.448790.16         11.93416         11.85068         20.91122         7.99799         568145.16         4148790.16         568145.16_4148790.16         11.85068         20.91122         7.99799         568145.16         4148790.16         568145.16_4148790.16         37.31875         29.0446         84.34799           56815.16         4148790.16         568145.16_4148790.16         11.84790.16         11.84790.16         56815.16_4148790.16         11.84790.16         56815.16_4148790.16         23.3407         24.24037         22.48469           56825.16         4148790.16         568125.16_4148790.16         11.04246         11.5291         15.6766         568125.16         41487	567825.16	4148790.16	567825.16_4148790.16	0.23412	3.69216	0.24093	567825.16	4148790.16	567825.16_4148790.16	0.25837	4.66767	0.44211
567885.16         4148790.16         567885.16_4148790.16         0.31706         8.21366         0.32652         567885.16         4148790.16         567885.16_4148790.16         0.35719         11.27689         0.58886           567905.16         4148790.16         567905.16_4148790.16         0.35577         10.3593         0.36616         567905.16         4148790.16         567905.16_4148790.16         0.40462         14.72213         0.6581           568145.16         4148790.16         568125.16_4148790.16         11.89088         20.91122         7.99799         568145.16         4148790.16         568145.16_4148790.16         37.31875         29.0446         84.34799           568165.16         4148790.16         568165.16_4148790.16         11.93416         17.7836         10.48207         568165.16         4148790.16         568165.16_4148790.16         23.33407         22.48469           568165.16         4148790.16         568165.16_4148790.16         11.04365         13.32889         11.26253         568205.16         4148790.16         568165.16_4148790.16         23.7913         20.3116         24.48790.16         568205.16_4148790.16         23.7913         20.3116         24.48790.16         568165.16_4148790.16         20.0459         17.27447         41.07826         568185.16_4148790.16         568205	567845.16	4148790.16	567845.16_4148790.16	0.26108	5.05259	0.26857	567845.16	4148790.16	567845.16_4148790.16	0.28809	6.46211	0.48631
567905.16         4148790.16         567905.16_4148790.16         0.35577         10.3593         0.36616         567905.16         4148790.16         567905.16_4148790.16         0.40462         14.72213         0.6581           568125.16         4148790.16         568125.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568145.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568165.16         4148790.16         568205.16         4148790.16         568205.16	567865.16	4148790.16	567865.16_4148790.16	0.28429	6.39674	0.29282	567865.16	4148790.16	567865.16_4148790.16	0.31795	8.51075	0.53111
568125.16         4148790.16         568125.16_4148790.16         11.41952         25.53521         5.33377         568125.16         4148790.16         568145.16_4148790.16         34.78929         128.91974           568145.16         4148790.16         568145.16_4148790.16         11.85068         20.91122         7.99799         568145.16         4148790.16         568145.16_4148790.16         37.31875         29.0446         83.43799           568165.16         4148790.16         568165.16_4148790.16         11.93416         17.77836         10.48207         568165.16         4148790.16         568165.16_4148790.16         23.3407         24.24037         62.4869           568205.16         4148790.16         568185.16_4148790.16         11.93416         11.54291         15.33173         11.8092         568185.16         4148790.16         568185.16_4148790.16         23.7913         20.38116         44.2755           568205.16         4148790.16         568205.16_4148790.16         10.50375         11.5921         10.8766         568205.16         4148790.16         568225.16_4148790.16         10.076391         70.6683         11.35046         568305.16         4148790.16         568245.16_4148790.16         10.076391         70.6633         11.56409         568325.16         4148790.16         568305.16_4148790.16	567885.16	4148790.16	567885.16_4148790.16	0.31706	8.21366	0.32652	567885.16	4148790.16	567885.16_4148790.16	0.35719	11.27689	0.58886
568145.16         4148790.16         568145.16_4148790.16         11.85068         20.91122         7.99799         568145.16         4148790.16         568145.16_4148790.16         258165.16_4148790.16         11.93416         17.7836         10.48207         568165.16         4148790.16         568165.16_4148790.16         29.33407         24.24037         62.48469           568185.16         4148790.16         568185.16_4148790.16         11.93416         11.533173         11.30092         568185.16         4148790.16         568165.16_4148790.16         23.3407         24.24037         62.48469           568205.16         4148790.16         568205.16_4148790.16         11.04365         13.32889         11.26253         568205.16         4148790.16         568225.16_4148790.16         17.54072         14.73277         35.35489           568205.16         4148790.16         568225.16_4148790.16         10.09071         10.09691	567905.16	4148790.16	567905.16_4148790.16	0.35577	10.3593	0.36616	567905.16	4148790.16	567905.16_4148790.16	0.40462	14.72213	0.6581
568165.16         4148790.16         568165.16, 4148790.16         11.93416         17.77836         10.48207         568165.16         4148790.16         568165.16, 4148790.16         29.33407         24.24037         62.48469           568185.16         4148790.16         568185.16, 4148790.16         11.54291         15.33173         11.30092         568185.16         4148790.16         568205.16, 4148790.16         23.7913         20.38116         49.42755           568205.16         4148790.16         568205.16, 4148790.16         11.04365         13.3289         11.26253         568205.16         4148790.16         568205.16, 4148790.16         20.0459         17.27447         41.07825           568205.16         4148790.16         568205.16, 4148790.16         10.50375         11.5911         10.8766         568225.16         4148790.16         568225.16, 4148790.16         16.01015         12.65413         31.62844           568305.16         4148790.16         568305.16, 4148790.16         10.076391         7.06835         11.35046         568305.16         4148790.16         568325.16, 4148790.16         16.01015         12.65413         31.62844           568305.16         4148790.16         568305.16, 4148790.16         11.4762         6.03731         11.76409         568325.16         4148790.16	568125.16	4148790.16	568125.16_4148790.16	11.41952	25.53521	5.33377	568125.16	4148790.16	568125.16_4148790.16	49.19166	34.78929	128.91974
568185.16         4148790.16         568185.16_4148790.16         11.54291         15.33173         11.30092         568185.16         4148790.16         56818.6_4148790.16         23.7913         20.38116         49.42755           568205.16         4148790.16         568205.16_4148790.16         11.04365         13.32889         11.26253         568205.16         4148790.16         568205.16_4148790.16         20.0459         17.27447         41.07826           568225.16         4148790.16         568225.16_4148790.16         10.50375         11.5921         10.8766         568225.16         4148790.16         568225.16_4148790.16         17.54072         14.73277         35.35489           568245.16         4148790.16         568245.16_4148790.16         10.09691         10.09691         10.09692         10.50376         568245.16         4148790.16         568245.16_4148790.16         16.10515         2.65413         31.62844           568305.16         4148790.16         568305.16_4148790.16         10.76391         7.06835         11.56409         568325.16         4148790.16         568345.16_4148790.16         11.0123         7.50769         30.92088           568305.16         4148790.16         568345.16_4148790.16         11.01484         5.54694         11.55025         568345.16         41487	568145.16	4148790.16	568145.16_4148790.16	11.85068	20.91122	7.99799	568145.16	4148790.16	568145.16_4148790.16	37.31875	29.0446	84.34799
568205.16         4148790.16         568205.16_4148790.16         11.04365         13.32889         11.26253         568205.16         4148790.16         568205.16_4148790.16         20.0459         17.27447         41.07826           568225.16         4148790.16         568225.16_4148790.16         10.50375         11.5921         10.8766         568225.16         4148790.16         568225.16_4148790.16         17.54072         14.73277         35.35489           568245.16         4148790.16         568245.16_4148790.16         10.09691         10.09902         10.5087         568245.16         4148790.16         568245.16_4148790.16         16.01015         12.65413         31.62844           568305.16         4148790.16         568305.16_4148790.16         10.76391         7.06835         11.35046         568305.16         4148790.16         16.10517         8.45963         29.69943           568355.16         4148790.16         568355.16_4148790.16         11.14762         6.30377         11.76409         568325.16         4148790.16         16.05479.16         17.01123         7.50769         30.92908           568345.16         4148790.16         568345.16_4148790.16         12.50818         5.22952         13.26185         568365.16         4148790.16         16.344790.16         19.3745	568165.16	4148790.16	568165.16_4148790.16	11.93416	17.77836	10.48207	568165.16	4148790.16	568165.16_4148790.16	29.33407	24.24037	62.48469
568225.16         4148790.16         568225.16_4148790.16         10.50375         11.5921         10.8766         568225.16         4148790.16         568225.16_4148790.16         17.54072         14.73277         35.35489           568245.16         4148790.16         568245.16_4148790.16         10.09691         10.09902         10.50687         568245.16         4148790.16         568245.16_4148790.16         16.01015         12.65413         31.62844           568305.16         4148790.16         568305.16_4148790.16         10.76391         7.06835         11.35046         568305.16         4148790.16         568305.16_4148790.16         16.10517         8.45963         29.69943           568325.16         4148790.16         568325.16_4148790.16         11.14762         6.30377         11.76409         568325.16         4148790.16         568325.16_4148790.16         17.06658         6.68711         32.24414           568355.16         4148790.16         568345.16_4148790.16         12.50818         5.22952         13.26185         568365.16         4148790.16         568345.16_4148790.16         17.66658         6.68711         32.24414           568385.16         4148790.16         568385.16_4148790.16         12.5018         5.22952         13.26185         568365.16         4148790.16         56	568185.16	4148790.16	568185.16_4148790.16	11.54291	15.33173	11.30092	568185.16	4148790.16	568185.16_4148790.16	23.7913	20.38116	49.42755
568245.16         4148790.16         568245.16_4148790.16         10.09691         10.09902         10.50687         568245.16         4148790.16         568245.16_4148790.16         16.01015         12.65413         31.62844           568305.16         4148790.16         568305.16_4148790.16         10.76391         7.06835         11.35046         568305.16         4148790.16         568305.16_4148790.16         16.10517         8.45963         29.69943           568325.16         4148790.16         568325.16_4148790.16         11.14762         6.30377         11.76409         568325.16         4148790.16         568325.16_4148790.16         17.01123         7.50769         30.92088           568345.16         4148790.16         568345.16_4148790.16         11.01484         5.54694         11.55025         568345.16         4148790.16         568345.16_4148790.16         17.66658         6.68711         32.24414           568365.16         4148790.16         568365.16_4148790.16         12.50818         5.22952         13.26185         568365.16         4148790.16         568365.16_4148790.16         19.3745         6.05543         36.17606           568405.16         4148790.16         568405.16_4148790.16         12.50818         3.22952         13.24726         568365.16         4148790.16         56	568205.16	4148790.16	568205.16_4148790.16	11.04365	13.32889	11.26253	568205.16	4148790.16	568205.16_4148790.16	20.0459	17.27447	41.07826
568305.16         4148790.16         568305.16_4148790.16         10.76391         7.06835         11.35046         568305.16         4148790.16         568305.16_4148790.16         16.10517         8.45963         29.69943           568325.16         4148790.16         568325.16_4148790.16         11.14762         6.30377         11.76409         568325.16         4148790.16         568325.16_4148790.16         17.01123         7.50769         30.92088           568345.16         4148790.16         568345.16_4148790.16         11.01484         5.54694         11.55025         568345.16         4148790.16         568345.16_4148790.16         17.66658         6.68711         32.24414           568365.16         4148790.16         568365.16_4148790.16         12.50818         5.22952         13.26185         568365.16         4148790.16         568365.16_4148790.16         19.3745         6.05543         36.17606           568385.16         4148790.16         568385.16_4148790.16         12.5301         4.70693         13.24726         568365.16         4148790.16         568385.16_4148790.16         20.08014         5.47291         39.06806           568405.16         4148790.16         568445.16_4148790.16         13.46413         4.36664         14.33472         568405.16         4148790.16         56844	568225.16	4148790.16	568225.16_4148790.16	10.50375	11.5921	10.8766	568225.16	4148790.16	568225.16_4148790.16	17.54072	14.73277	35.35489
568325.16         4148790.16         568325.16_4148790.16         11.14762         6.30377         11.76409         568325.16         4148790.16         568325.16_4148790.16         17.01123         7.50769         30.92088           568345.16         4148790.16         568345.16_4148790.16         11.01484         5.54694         11.55025         568345.16         4148790.16         568345.16_4148790.16         17.66658         6.68711         32.24414           568365.16         4148790.16         568365.16_4148790.16         12.50818         5.22952         13.26185         568365.16         4148790.16         568365.16_4148790.16         19.3745         6.05543         36.17606           568385.16         4148790.16         568385.16_4148790.16         12.5001         4.70693         13.24726         568365.16         4148790.16         568385.16_4148790.16         20.08014         5.47291         39.06806           568405.16         4148790.16         568405.16_4148790.16         13.46413         4.36664         14.33472         568405.16         4148790.16         568405.16_4148790.16         21.28533         4.98941         42.3392           568465.16         4148790.16         568445.16_4148790.16         14.89452         3.41336         15.35372         568465.16         4148790.16         568465	568245.16	4148790.16	568245.16_4148790.16	10.09691	10.09902	10.50687	568245.16	4148790.16	568245.16_4148790.16	16.01015	12.65413	31.62844
568345.16         4148790.16         568345.16_4148790.16         11.01484         5.54694         11.55025         568345.16         4148790.16         568345.16_4148790.16         17.66658         6.68711         32.24414           568365.16         4148790.16         568365.16_4148790.16         12.50818         5.22952         13.26185         568365.16         4148790.16         568365.16_4148790.16         19.3745         6.05543         36.17606           568385.16         4148790.16         568385.16_4148790.16         12.5301         4.70693         13.24726         568385.16         4148790.16         568385.16_4148790.16         20.08014         5.47291         39.06806           568405.16         4148790.16         568405.16_4148790.16         13.46413         4.36664         14.33472         568405.16         4148790.16         568405.16_4148790.16         21.28533         4.98941         42.3392           568445.16         4148790.16         568445.16_4148790.16         14.53387         3.70301         15.39711         568445.16         4148790.16         568445.16_4148790.16         27.18718         3.85843         52.48399           56845.16         4148790.16         568465.16_4148790.16         15.86346         3.18666         15.47576         568485.16         4148790.16         568505.	568305.16	4148790.16	568305.16_4148790.16	10.76391	7.06835	11.35046	568305.16	4148790.16	568305.16_4148790.16	16.10517	8.45963	29.69943
568365.164148790.16568365.16_4148790.1612.508185.2295213.26185568365.164148790.16568365.16_4148790.1619.37456.0554336.17606568385.164148790.16568385.16_4148790.1612.53014.7069313.24726568385.164148790.16568385.16_4148790.1620.080145.4729139.06806568405.164148790.16568405.16_4148790.1613.464134.3666414.33472568405.164148790.16568405.16_4148790.1621.285334.9894142.3392568445.164148790.16568445.16_4148790.16568445.16_4148790.1614.894523.4133615.35372568465.164148790.16568465.16_4148790.1627.187183.8584352.48399568485.164148790.16568485.16_4148790.16568485.16_4148790.16568485.16_4148790.1631.979743.5717962.27769568505.164148790.16568505.16_4148790.1618.203152.7983113.76909568505.164148790.16568505.16_4148790.1650.780813.08945115.23324568505.164148790.165688585.16_4148790.1616.964292.3185813.04553568505.164148790.16568505.16_4148790.1649.688222.5323144.99748568605.164148790.16568605.16_4148790.16568605.16_4148790.1615.467842.1926713.40581568605.164148790.16568605.16_4148790.1635.816332.3817499.19443	568325.16	4148790.16	568325.16_4148790.16	11.14762	6.30377	11.76409	568325.16	4148790.16	568325.16_4148790.16	17.01123	7.50769	30.92088
568385.16         4148790.16         568385.16_4148790.16         12.5301         4.70693         13.24726         568385.16         4148790.16         568385.16_4148790.16         20.08014         5.47291         39.06806           568405.16         4148790.16         568405.16_4148790.16         568405.16_4148790.16         13.46413         4.36664         14.33472         568405.16         4148790.16         568405.16_4148790.16         21.28533         4.98941         42.3392           568445.16         4148790.16         568445.16_4148790.16         568445.16_4148790.16         14.89452         3.41336         15.35372         568465.16         4148790.16         568465.16_4148790.16         27.18718         3.85843         52.48399           56845.16         4148790.16         568485.16_4148790.16         15.86346         3.18666         15.47576         568485.16         4148790.16         568485.16_4148790.16         31.97974         3.57179         62.27769           568505.16         4148790.16         568505.16_4148790.16         18.20315         2.79831         13.76909         568505.16         4148790.16         568505.16_4148790.16         50.78081         3.08945         115.23324           568605.16         4148790.16         568605.16_4148790.16         16.96429         2.31858         13.04553 </td <td>568345.16</td> <td>4148790.16</td> <td>568345.16_4148790.16</td> <td>11.01484</td> <td>5.54694</td> <td>11.55025</td> <td>568345.16</td> <td>4148790.16</td> <td>568345.16_4148790.16</td> <td>17.66658</td> <td>6.68711</td> <td>32.24414</td>	568345.16	4148790.16	568345.16_4148790.16	11.01484	5.54694	11.55025	568345.16	4148790.16	568345.16_4148790.16	17.66658	6.68711	32.24414
568405.16         4148790.16         568405.16_4148790.16         13.46413         4.36664         14.33472         568405.16         4148790.16         568405.16_4148790.16         21.28533         4.98941         42.3392           568445.16         4148790.16         568405.16_4148790.16         14.53387         3.70301         15.39711         568405.16         4148790.16         568405.16_4148790.16         24.40211         4.18856         47.73394           568465.16         4148790.16         568465.16_4148790.16         14.89452         3.41336         15.35372         568465.16         4148790.16         568465.16_4148790.16         27.18718         3.85843         52.48399           568485.16         4148790.16         568485.16_4148790.16         15.86346         3.18666         15.47576         568485.16         4148790.16         568485.16_4148790.16         31.97974         3.57179         62.27769           568505.16         4148790.16         568505.16_4148790.16         17.16184         2.98829         15.04815         568505.16         4148790.16         568505.16_4148790.16         39.47893         3.31784         80.82039           568525.16         4148790.16         568525.16_4148790.16         18.20315         2.79831         13.04553         568525.16         4148790.16         5685	568365.16	4148790.16	568365.16_4148790.16	12.50818	5.22952	13.26185	568365.16	4148790.16	568365.16_4148790.16	19.3745	6.05543	36.17606
568445.16       4148790.16       568445.16_4148790.16       14.53387       3.70301       15.39711       568445.16       4148790.16       568445.16_4148790.16       24.40211       4.18856       47.73394         568465.16       4148790.16       568465.16_4148790.16       14.89452       3.41336       15.35372       568465.16       4148790.16       568465.16_4148790.16       27.18718       3.85843       52.48399         568485.16       4148790.16       568485.16_4148790.16       15.86346       3.18666       15.47576       568485.16       4148790.16       568485.16_4148790.16       31.97974       3.57179       62.27769         568505.16       4148790.16       568505.16_4148790.16       17.16184       2.98829       15.04815       568505.16       4148790.16       568505.16_4148790.16       39.47893       3.31784       80.82039         568525.16       4148790.16       568525.16_4148790.16       18.20315       2.79831       13.76909       568525.16       4148790.16       568525.16_4148790.16       50.78081       3.08945       115.23324         568505.16       4148790.16       568585.16_4148790.16       16.96429       2.31858       13.04553       568505.16       4148790.16       568505.16_4148790.16       35.81633       2.38174       99.19443         5686	568385.16	4148790.16	568385.16_4148790.16	12.5301	4.70693	13.24726	568385.16	4148790.16	568385.16_4148790.16	20.08014	5.47291	39.06806
568465.16       4148790.16       568465.16_4148790.16       14.89452       3.41336       15.35372       568465.16       4148790.16       568465.16_4148790.16       27.18718       3.85843       52.48399         568485.16       4148790.16       568485.16_4148790.16       15.86346       3.18666       15.47576       568485.16       4148790.16       568485.16_4148790.16       31.97974       3.57179       62.27769         568505.16       4148790.16       568505.16_4148790.16       17.16184       2.98829       15.04815       568505.16       4148790.16       568505.16_4148790.16       39.47893       3.31784       80.82039         568525.16       4148790.16       568525.16_4148790.16       18.20315       2.79831       13.76909       568525.16       4148790.16       568525.16_4148790.16       50.78081       3.08945       115.23324         568585.16       4148790.16       568585.16_4148790.16       16.96429       2.31858       13.04553       568585.16       4148790.16       568585.16_4148790.16       49.68822       2.5323       144.99748         568605.16       4148790.16       568605.16_4148790.16       15.46784       2.19267       13.40581       568605.16       4148790.16       568605.16_4148790.16       35.81633       2.38174       99.19443	568405.16	4148790.16	568405.16_4148790.16	13.46413	4.36664	14.33472	568405.16	4148790.16	568405.16_4148790.16	21.28533	4.98941	42.3392
568485.16       4148790.16       568485.16_4148790.16       15.86346       3.18666       15.47576       568485.16       4148790.16       568485.16_4148790.16       31.97974       3.57179       62.27769         568505.16       4148790.16       568505.16_4148790.16       568505.16_4148790.16       39.47893       3.31784       80.82039         568525.16       4148790.16       568525.16_4148790.16       18.20315       2.79831       13.76909       568525.16       4148790.16       568525.16_4148790.16       50.78081       3.08945       115.23324         568585.16       4148790.16       568585.16_4148790.16       16.96429       2.31858       13.04553       568585.16       4148790.16       568585.16_4148790.16       49.68822       2.5323       144.99748         568605.16       4148790.16       568605.16_4148790.16       15.46784       2.19267       13.40581       568605.16       4148790.16       568605.16_4148790.16       35.81633       2.38174       99.19443	568445.16	4148790.16	568445.16_4148790.16	14.53387	3.70301	15.39711	568445.16	4148790.16	568445.16_4148790.16	24.40211	4.18856	47.73394
568505.16       4148790.16       568505.16_4148790.16       17.16184       2.98829       15.04815       568505.16       4148790.16       568505.16_4148790.16       39.47893       3.31784       80.82039         568525.16       4148790.16       568525.16_4148790.16       18.20315       2.79831       13.76909       568525.16       4148790.16       568525.16_4148790.16       50.78081       3.08945       115.23324         568585.16       4148790.16       568585.16_4148790.16       16.96429       2.31858       13.04553       568585.16       4148790.16       568585.16_4148790.16       49.68822       2.5323       144.99748         568605.16       4148790.16       568605.16_4148790.16       15.46784       2.19267       13.40581       568605.16       4148790.16       568605.16_4148790.16       35.81633       2.38174       99.19443	568465.16	4148790.16	568465.16_4148790.16	14.89452	3.41336	15.35372	568465.16	4148790.16	568465.16_4148790.16	27.18718	3.85843	52.48399
568525.16       4148790.16       568525.16_4148790.16       18.20315       2.79831       13.76909       568525.16       4148790.16       568525.16_4148790.16       50.78081       3.08945       115.23324         568585.16       4148790.16       568585.16_4148790.16       568585.16_4148790.16       568585.16_4148790.16       49.68822       2.5323       144.99748         568605.16       4148790.16       568605.16_4148790.16       35.81633       2.38174       99.19443	568485.16	4148790.16	568485.16_4148790.16	15.86346	3.18666	15.47576	568485.16	4148790.16	568485.16_4148790.16	31.97974	3.57179	62.27769
568585.16       4148790.16       568585.16_4148790.16       16.96429       2.31858       13.04553       568585.16       4148790.16       568585.16_4148790.16       49.68822       2.5323       144.99748         568605.16       4148790.16       568605.16_4148790.16       35.81633       2.38174       99.19443	568505.16	4148790.16	568505.16_4148790.16	17.16184	2.98829	15.04815	568505.16	4148790.16	568505.16_4148790.16	39.47893	3.31784	80.82039
568605.16 4148790.16 568605.16_4148790.16 15.46784 2.19267 13.40581 568605.16 4148790.16 568605.16_4148790.16 35.81633 2.38174 99.19443	568525.16	4148790.16	568525.16_4148790.16	18.20315	2.79831	13.76909	568525.16	4148790.16	568525.16_4148790.16	50.78081	3.08945	115.23324
<del>-</del>	568585.16	4148790.16	568585.16_4148790.16	16.96429	2.31858	13.04553	568585.16	4148790.16	568585.16_4148790.16	49.68822	2.5323	144.99748
568625.16 4148790.16 568625.16_4148790.16 13.89932 2.07328 13.19888 568625.16 4148790.16 568625.16_4148790.16 27.76649 2.24415 73.61738	568605.16	4148790.16	568605.16_4148790.16	15.46784	2.19267	13.40581	568605.16	4148790.16	568605.16_4148790.16	35.81633	2.38174	99.19443
	568625.16	4148790.16	568625.16_4148790.16	13.89932	2.07328	13.19888	568625.16	4148790.16	568625.16_4148790.16	27.76649	2.24415	73.61738

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568645.16	4148790.16	568645.16_4148790.16	12.28076	1.95921	12.30001	568645.16	4148790.16	568645.16_4148790.16	22.28808	2.11792	57.58752
568665.16	4148790.16	568665.16_4148790.16	11.07776	1.86116	11.45226	568665.16	4148790.16	568665.16_4148790.16	18.39868	2.00337	46.80588
568685.16	4148790.16	568685.16_4148790.16	9.82165	1.7656	10.30306	568685.16	4148790.16	568685.16_4148790.16	15.37202	1.89747	38.59939
568705.16	4148790.16	568705.16_4148790.16	8.79032	1.67971	9.30652	568705.16	4148790.16	568705.16_4148790.16	13.01635	1.80038	32.31277
568725.16	4148790.16	568725.16_4148790.16	7.81905	1.59725	8.30879	568725.16	4148790.16	568725.16_4148790.16	11.11028	1.71038	27.26109
567325.16	4148810.16	567325.16_4148810.16	0.05257	0.12582	0.05045	567325.16	4148810.16	567325.16_4148810.16	0.05675	0.13691	0.10665
567345.16	4148810.16	567345.16_4148810.16	0.05479	0.13406	0.05269	567345.16	4148810.16	567345.16_4148810.16	0.05904	0.14595	0.111
567365.16	4148810.16	567365.16_4148810.16	0.05696	0.14256	0.05491	567365.16	4148810.16	567365.16_4148810.16	0.06143	0.15564	0.11552
567385.16	4148810.16	567385.16_4148810.16	0.05939	0.15228	0.05739	567385.16	4148810.16	567385.16_4148810.16	0.06404	0.16656	0.12043
567405.16	4148810.16	567405.16_4148810.16	0.0621	0.16342	0.06018	567405.16	4148810.16	567405.16_4148810.16	0.06686	0.17892	0.12574
567425.16	4148810.16	567425.16_4148810.16	0.06489	0.17542	0.06306	567425.16	4148810.16	567425.16_4148810.16	0.06986	0.19252	0.13135
567445.16	4148810.16	567445.16_4148810.16	0.06769	0.18816	0.06597	567445.16	4148810.16	567445.16_4148810.16	0.07301	0.20743	0.13724
567465.16	4148810.16	567465.16_4148810.16	0.07082	0.20286	0.06922	567465.16	4148810.16	567465.16_4148810.16	0.07644	0.22446	0.14363
567485.16	4148810.16	567485.16_4148810.16	0.07422	0.2196	0.07277	567485.16	4148810.16	567485.16_4148810.16	0.08017	0.24386	0.15053
567505.16	4148810.16	567505.16_4148810.16	0.07799	0.23902	0.07671	567505.16	4148810.16	567505.16_4148810.16	0.08425	0.26624	0.15803
567525.16	4148810.16	567525.16_4148810.16	0.08178	0.26003	0.0807	567525.16	4148810.16	567525.16_4148810.16	0.08854	0.29128	0.16593
567545.16	4148810.16	567545.16_4148810.16	0.0864	0.28651	0.08552	567545.16	4148810.16	567545.16_4148810.16	0.09345	0.3216	0.1748
567565.16	4148810.16	567565.16_4148810.16	0.09121	0.31646	0.09058	567565.16	4148810.16	567565.16_4148810.16	0.0987	0.35654	0.18426
567585.16	4148810.16	567585.16_4148810.16	0.09597	0.34917	0.09561	567585.16	4148810.16	567585.16_4148810.16	0.1042	0.3963	0.19423
567605.16	4148810.16	567605.16_4148810.16	0.10189	0.39192	0.1018	567605.16	4148810.16	567605.16_4148810.16	0.1106	0.44614	0.20556
567625.16	4148810.16	567625.16_4148810.16	0.1086	0.44474	0.10879	567625.16	4148810.16	567625.16_4148810.16	0.11773	0.50737	0.21806
567645.16	4148810.16	567645.16_4148810.16	0.11589	0.50905	0.1164	567645.16	4148810.16	567645.16_4148810.16	0.12558	0.58259	0.23171
567665.16	4148810.16	567665.16_4148810.16	0.12337	0.58515	0.12423	567665.16	4148810.16	567665.16_4148810.16	0.13398	0.6742	0.24628
567685.16	4148810.16	567685.16_4148810.16	0.13166	0.68185	0.1329	567685.16	4148810.16	567685.16_4148810.16	0.14335	0.79148	0.26239
567705.16	4148810.16	567705.16_4148810.16	0.14181	0.81569	0.1434	567705.16	4148810.16	567705.16_4148810.16	0.15429	0.95168	0.28081
567725.16	4148810.16	567725.16_4148810.16	0.15275	0.9913	0.15474	567725.16	4148810.16	567725.16_4148810.16	0.16638	1.16683	0.30102
567745.16	4148810.16	567745.16_4148810.16	0.16377	1.21919	0.16621	567745.16	4148810.16	567745.16_4148810.16	0.17935	1.45746	0.32275
567765.16	4148810.16	567765.16_4148810.16	0.1772	1.55928	0.18009	567765.16	4148810.16	567765.16_4148810.16	0.19463	1.89486	0.34779
567785.16	4148810.16	567785.16_4148810.16	0.19287	2.07132	0.19623	567785.16	4148810.16	567785.16_4148810.16	0.21234	2.56567	0.37637
567805.16	4148810.16	567805.16_4148810.16	0.21019	2.82433	0.21409	567805.16	4148810.16	567805.16_4148810.16	0.23242	3.58242	0.40851
567825.16	4148810.16	567825.16_4148810.16	0.23039	3.9191	0.23489	567825.16	4148810.16	567825.16_4148810.16	0.25589	5.10164	0.44558
567845.16	4148810.16	567845.16_4148810.16	0.26023	5.69608	0.26533	567845.16	4148810.16	567845.16_4148810.16	0.28702	7.35697	0.49301
567865.16	4148810.16	567865.16_4148810.16	0.28085	7.25962	0.28685	567865.16	4148810.16	567865.16_4148810.16	0.3158	10.06189	0.53857
567885.16	4148810.16	567885.16_4148810.16	0.31261	9.54966	0.31957	567885.16	4148810.16	567885.16_4148810.16	0.35452	13.66949	0.59782
568145.16	4148810.16	568145.16_4148810.16	14.79471	24.58932	6.0266	568145.16	4148810.16	568145.16_4148810.16	59.3994	32.39436	172.08807
568165.16	4148810.16	568165.16_4148810.16	12.49356	18.9286	8.04533	568165.16	4148810.16	568165.16_4148810.16	41.76127	26.25971	95.76128
568185.16	4148810.16	568185.16_4148810.16	12.48016	16.00872	10.75848	568185.16	4148810.16	568185.16_4148810.16	31.49035	21.63713	68.5108
568205.16	4148810.16	568205.16_4148810.16	12.09364	13.68468	11.78521	568205.16	4148810.16	568205.16_4148810.16	25.11292	17.97955	52.71344
568225.16	4148810.16	568225.16_4148810.16	11.7392	11.84657	11.97291	568225.16	4148810.16	568225.16_4148810.16	21.38941	15.10682	43.59882

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568265.16	4148810.16	568265.16_4148810.16	11.35098	8.96255	11.86522	568265.16	4148810.16	568265.16_4148810.16	18.35868	11.02264	35.57337
568285.16	4148810.16	568285.16_4148810.16	11.57112	7.87101	12.16246	568285.16	4148810.16	568285.16_4148810.16	18.55048	9.57587	34.91598
568305.16	4148810.16	568305.16_4148810.16	12.00127	6.95415	12.62645	568305.16	4148810.16	568305.16_4148810.16	19.70246	8.4008	36.17686
568325.16	4148810.16	568325.16_4148810.16	12.79953	6.24145	13.41504	568325.16	4148810.16	568325.16_4148810.16	21.8112	7.44532	39.73977
568345.16	4148810.16	568345.16_4148810.16	13.60329	5.642	14.14255	568345.16	4148810.16	568345.16_4148810.16	24.11761	6.65075	44.83317
568365.16	4148810.16	568365.16_4148810.16	15.23298	5.21922	15.95424	568365.16	4148810.16	568365.16_4148810.16	26.68759	5.99047	51.82535
568385.16	4148810.16	568385.16_4148810.16	15.83223	4.753	16.56538	568385.16	4148810.16	568385.16_4148810.16	28.05875	5.41933	56.91174
568405.16	4148810.16	568405.16_4148810.16	15.75193	4.31571	16.36687	568405.16	4148810.16	568405.16_4148810.16	28.67641	4.92685	58.82352
568465.16	4148810.16	568465.16_4148810.16	17.0065	3.38926	15.14623	568465.16	4148810.16	568465.16_4148810.16	38.94802	3.80912	78.92358
568485.16	4148810.16	568485.16_4148810.16	17.27168	3.14411	13.35761	568485.16	4148810.16	568485.16_4148810.16	48.4942	3.52246	105.79751
568545.16	4148810.16	568545.16_4148810.16	17.55939	2.59147	13.21853	568545.16	4148810.16	568545.16_4148810.16	53.01772	2.84438	157.66505
568565.16	4148810.16	568565.16_4148810.16	15.45109	2.43094	13.22276	568565.16	4148810.16	568565.16_4148810.16	37.26623	2.66163	103.3285
568585.16	4148810.16	568585.16_4148810.16	13.85109	2.28711	13.00286	568585.16	4148810.16	568585.16_4148810.16	28.70467	2.49683	76.20011
568605.16	4148810.16	568605.16_4148810.16	12.58913	2.16087	12.58002	568605.16	4148810.16	568605.16_4148810.16	23.15939	2.34814	60.13254
568625.16	4148810.16	568625.16_4148810.16	11.4679	2.04707	11.87559	568625.16	4148810.16	568625.16_4148810.16	19.21714	2.21312	49.23423
568645.16	4148810.16	568645.16_4148810.16	10.2361	1.93586	10.75098	568645.16	4148810.16	568645.16_4148810.16	16.17798	2.08893	41.0238
568665.16	4148810.16	568665.16_4148810.16	9.19068	1.83544	9.72372	568665.16	4148810.16	568665.16_4148810.16	13.81339	1.97552	34.73007
568685.16	4148810.16	568685.16_4148810.16	8.25355	1.74223	8.76604	568685.16	4148810.16	568685.16_4148810.16	11.90696	1.87135	29.7011
568705.16	4148810.16	568705.16_4148810.16	7.44728	1.65701	7.92384	568705.16	4148810.16	568705.16_4148810.16	10.34951	1.77563	25.61515
568725.16	4148810.16	568725.16_4148810.16	6.74803	1.57885	7.18202	568725.16	4148810.16	568725.16_4148810.16	9.06126	1.68746	22.22957
567325.16	4148830.16	567325.16_4148830.16	0.05125	0.12414	0.04826	567325.16	4148830.16	567325.16_4148830.16	0.05566	0.136	0.10327
567345.16	4148830.16	567345.16_4148830.16	0.05345	0.13248	0.05042	567345.16	4148830.16	567345.16_4148830.16	0.05798	0.14508	0.10755
567365.16	4148830.16	567365.16_4148830.16	0.05556	0.14097	0.05251	567365.16	4148830.16	567365.16_4148830.16	0.06033	0.15477	0.11195
567385.16	4148830.16	567385.16_4148830.16	0.05796	0.15078	0.05488	567385.16	4148830.16	567385.16_4148830.16	0.06291	0.16574	0.11677
567405.16	4148830.16	567405.16_4148830.16	0.06053	0.16167	0.05744	567405.16	4148830.16	567405.16_4148830.16	0.06566	0.17796	0.12192
567425.16	4148830.16	567425.16_4148830.16	0.06303	0.17296	0.05996	567425.16	4148830.16	567425.16_4148830.16	0.06852	0.19118	0.12726
567445.16	4148830.16	567445.16_4148830.16	0.06567	0.18537	0.06262	567445.16	4148830.16	567445.16_4148830.16	0.07157	0.20591	0.13296
567465.16	4148830.16	567465.16_4148830.16	0.0689	0.20071	0.06588	567465.16	4148830.16	567465.16_4148830.16	0.07504	0.22329	0.13935
567485.16	4148830.16	567485.16_4148830.16	0.07225	0.21756	0.06928	567485.16	4148830.16	567485.16_4148830.16	0.07871	0.24275	0.14616
567505.16	4148830.16	567505.16_4148830.16	0.07571	0.23603	0.07281	567505.16	4148830.16	567505.16_4148830.16	0.08264	0.2646	0.15338
567525.16	4148830.16	567525.16_4148830.16	0.07951	0.25738	0.0767	567525.16	4148830.16	567525.16_4148830.16	0.08691	0.28984	0.16124
567545.16	4148830.16	567545.16_4148830.16	0.08377	0.28255	0.08106	567545.16	4148830.16	567545.16_4148830.16	0.09159	0.31939	0.16985
567565.16	4148830.16	567565.16_4148830.16	0.08861	0.3128	0.08603	567565.16	4148830.16	567565.16_4148830.16	0.09684	0.35449	0.17937
567585.16	4148830.16	567585.16_4148830.16	0.09407	0.34926	0.09163	567585.16	4148830.16	567585.16_4148830.16	0.10266	0.39652	0.18985
567605.16	4148830.16	567605.16_4148830.16	0.10026	0.39382	0.09798	567605.16	4148830.16	567605.16_4148830.16	0.10917	0.44751	0.20145
567625.16	4148830.16	567625.16_4148830.16	0.10652	0.44444	0.10444	567625.16	4148830.16	567625.16_4148830.16	0.11606	0.50737	0.21376
567645.16	4148830.16	567645.16_4148830.16	0.11318	0.50477	0.11137	567645.16	4148830.16	567645.16_4148830.16	0.12357	0.57996	0.22715
567665.16	4148830.16	567665.16_4148830.16	0.12055	0.57965	0.11904	567665.16	4148830.16	567665.16_4148830.16	0.13189	0.67068	0.24193
567685.16	4148830.16	567685.16_4148830.16	0.1288	0.67495	0.12763	567685.16	4148830.16	567685.16_4148830.16	0.1412	0.78687	0.2583

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567705.16	4148830.16	567705.16_4148830.16	0.13775	0.79644	0.13697	567705.16	4148830.16	567705.16_4148830.16	0.15148	0.93771	0.27632
567725.16	4148830.16	567725.16_4148830.16	0.149	0.97098	0.1486	567725.16	4148830.16	567725.16_4148830.16	0.16371	1.15168	0.29732
567745.16	4148830.16	567745.16_4148830.16	0.1611	1.20766	0.16114	567745.16	4148830.16	567745.16_4148830.16	0.17724	1.4511	0.32044
567765.16	4148830.16	567765.16_4148830.16	0.17386	1.53848	0.17442	567765.16	4148830.16	567765.16_4148830.16	0.19214	1.88744	0.34588
567785.16	4148830.16	567785.16_4148830.16	0.18871	2.04854	0.18984	567785.16	4148830.16	567785.16_4148830.16	0.20939	2.58213	0.37498
567805.16	4148830.16	567805.16_4148830.16	0.20617	2.86574	0.20789	567805.16	4148830.16	567805.16_4148830.16	0.22953	3.73298	0.40851
567825.16	4148830.16	567825.16_4148830.16	0.22589	4.12068	0.22827	567825.16	4148830.16	567825.16_4148830.16	0.25273	5.57608	0.44683
567845.16	4148830.16	567845.16_4148830.16	0.25044	6.00839	0.25351	567845.16	4148830.16	567845.16_4148830.16	0.28092	8.39179	0.49251
567865.16	4148830.16	567865.16_4148830.16	0.27633	8.36756	0.28023	567865.16	4148830.16	567865.16_4148830.16	0.31269	12.07374	0.54405
568165.16	4148830.16	568165.16_4148830.16	25.31905	24.16044	10.09854	568165.16	4148830.16	568165.16_4148830.16	54.66552	25.40153	161.23563
568185.16	4148830.16	568185.16_4148830.16	12.09727	16.29615	8.11711	568185.16	4148830.16	568185.16_4148830.16	40.1135	22.17365	92.26024
568205.16	4148830.16	568205.16_4148830.16	12.4589	13.71483	11.0604	568205.16	4148830.16	568205.16_4148830.16	30.69809	18.09134	65.03013
568245.16	4148830.16	568245.16_4148830.16	12.29957	10.09336	12.57995	568245.16	4148830.16	568245.16_4148830.16	22.80568	12.62936	45.55745
568265.16	4148830.16	568265.16_4148830.16	12.33777	8.74363	12.83045	568265.16	4148830.16	568265.16_4148830.16	21.81028	10.79783	42.25582
568285.16	4148830.16	568285.16_4148830.16	12.61954	7.63912	13.15571	568285.16	4148830.16	568285.16_4148830.16	22.49802	9.3534	42.26765
568305.16	4148830.16	568305.16_4148830.16	13.42116	6.79799	13.76152	568305.16	4148830.16	568305.16_4148830.16	25.23215	8.20635	46.57589
568325.16	4148830.16	568325.16_4148830.16	14.55304	6.10977	14.17575	568325.16	4148830.16	568325.16_4148830.16	30.02652	7.27128	56.28855
568345.16	4148830.16	568345.16_4148830.16	16.27831	5.57646	15.02016	568345.16	4148830.16	568345.16_4148830.16	35.82105	6.50304	71.47589
568365.16	4148830.16	568365.16_4148830.16	17.46665	5.0712	15.64646	568365.16	4148830.16	568365.16_4148830.16	39.80616	5.84892	85.70709
568385.16	4148830.16	568385.16_4148830.16	18.16696	4.62753	16.27131	568385.16	4148830.16	568385.16_4148830.16	41.495	5.29277	90.49949
568405.16	4148830.16	568405.16_4148830.16	18.03068	4.22399	16.15038	568405.16	4148830.16	568405.16_4148830.16	41.53623	4.81402	89.42497
568425.16	4148830.16	568425.16_4148830.16	18.03277	3.8828	15.62483	568425.16	4148830.16	568425.16_4148830.16	42.96889	4.40109	91.51415
568445.16	4148830.16	568445.16_4148830.16	17.69226	3.57027	13.79497	568445.16	4148830.16	568445.16_4148830.16	48.84061	4.03934	105.88099
568465.16	4148830.16	568465.16_4148830.16	19.04017	3.33377	13.23984	568465.16	4148830.16	568465.16_4148830.16	64.61853	3.72817	158.47046
568505.16	4148830.16	568505.16_4148830.16	17.75441	2.89539	13.10506	568505.16	4148830.16	568505.16_4148830.16	56.72856	3.20374	168.71615
568525.16	4148830.16	568525.16_4148830.16	15.6789	2.70722	13.23105	568525.16	4148830.16	568525.16_4148830.16	38.84311	2.98345	108.96561
568545.16	4148830.16	568545.16_4148830.16	14.39922	2.54639	13.4639	568545.16	4148830.16	568545.16_4148830.16	29.80422	2.78706	79.97768
568565.16	4148830.16	568565.16_4148830.16	12.7038	2.3847	12.63114	568565.16	4148830.16	568565.16_4148830.16	23.80706	2.60845	62.01813
568585.16	4148830.16	568585.16_4148830.16	11.58496	2.25011	11.97027	568585.16	4148830.16	568585.16_4148830.16	19.74201	2.44862	50.76247
568605.16	4148830.16	568605.16_4148830.16	10.40049	2.12094	10.92671	568605.16	4148830.16	568605.16_4148830.16	16.66743	2.30275	42.49047
568625.16	4148830.16	568625.16_4148830.16	9.46477	2.00825	10.03038	568625.16	4148830.16	568625.16_4148830.16	14.32603	2.1708	36.28691
568645.16	4148830.16	568645.16_4148830.16	8.56691	1.90233	9.1026	568645.16	4148830.16	568645.16_4148830.16	12.43209	2.04998	31.30251
568665.16	4148830.16	568665.16_4148830.16	7.75181	1.80395	8.2441	568665.16	4148830.16	568665.16_4148830.16	10.87387	1.93923	27.22409
568685.16	4148830.16	568685.16_4148830.16	7.00803	1.71178	7.4496	568685.16	4148830.16	568685.16_4148830.16	9.56796	1.83735	23.82098
568705.16	4148830.16	568705.16_4148830.16	6.35996	1.62714	6.75275	568705.16	4148830.16	568705.16_4148830.16	8.46807	1.74365	20.95696
568725.16	4148830.16	568725.16_4148830.16	5.80922	1.55051	6.15888	568725.16	4148830.16	568725.16_4148830.16	7.54011	1.65746	18.5265
567325.16	4148850.16	567325.16_4148850.16	0.05018	0.12216	0.04665	567325.16	4148850.16	567325.16_4148850.16	0.05474	0.13499	0.10096
567345.16	4148850.16	567345.16_4148850.16	0.05229	0.13034	0.04868	567345.16	4148850.16	567345.16_4148850.16	0.05706	0.14399	0.10516
567365.16	4148850.16	567365.16_4148850.16	0.0545	0.13921	0.05082	567365.16	4148850.16	567365.16_4148850.16	0.05943	0.15387	0.10959

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567385.16	4148850.16	567385.16_4148850.16	0.0568	0.14887	0.05306	567385.16	4148850.16	567385.16_4148850.16	0.06195	0.16476	0.11428
567405.16	4148850.16	567405.16_4148850.16	0.05911	0.15906	0.05533	567405.16	4148850.16	567405.16_4148850.16	0.06458	0.17662	0.11918
567425.16	4148850.16	567425.16_4148850.16	0.06131	0.1695	0.05753	567425.16	4148850.16	567425.16_4148850.16	0.0672	0.18941	0.12421
567445.16	4148850.16	567445.16_4148850.16	0.06414	0.18268	0.06031	567445.16	4148850.16	567445.16_4148850.16	0.07039	0.20454	0.12998
567465.16	4148850.16	567465.16_4148850.16	0.0675	0.19866	0.0636	567465.16	4148850.16	567465.16_4148850.16	0.0739	0.22224	0.13644
567485.16	4148850.16	567485.16_4148850.16	0.07075	0.21539	0.06684	567485.16	4148850.16	567485.16_4148850.16	0.07752	0.24165	0.14313
567505.16	4148850.16	567505.16_4148850.16	0.07406	0.23357	0.07015	567505.16	4148850.16	567505.16_4148850.16	0.08135	0.26335	0.15019
567525.16	4148850.16	567525.16_4148850.16	0.07774	0.25473	0.07385	567525.16	4148850.16	567525.16_4148850.16	0.08554	0.28849	0.15792
567545.16	4148850.16	567545.16_4148850.16	0.08186	0.27962	0.078	567545.16	4148850.16	567545.16_4148850.16	0.09015	0.31789	0.16641
567565.16	4148850.16	567565.16_4148850.16	0.08646	0.30906	0.08263	567565.16	4148850.16	567565.16_4148850.16	0.09525	0.35251	0.17572
567585.16	4148850.16	567585.16_4148850.16	0.09204	0.34634	0.08823	567585.16	4148850.16	567585.16_4148850.16	0.10111	0.39499	0.18636
567605.16	4148850.16	567605.16_4148850.16	0.09828	0.39143	0.09451	567605.16	4148850.16	567605.16_4148850.16	0.10763	0.44625	0.19808
567625.16	4148850.16	567625.16_4148850.16	0.1042	0.44038	0.10055	567625.16	4148850.16	567625.16_4148850.16	0.11433	0.50505	0.21022
567645.16	4148850.16	567645.16_4148850.16	0.11064	0.49943	0.10716	567645.16	4148850.16	567645.16_4148850.16	0.12169	0.57678	0.22352
567665.16	4148850.16	567665.16_4148850.16	0.11799	0.57373	0.11469	567665.16	4148850.16	567665.16_4148850.16	0.12997	0.66701	0.23841
567685.16	4148850.16	567685.16_4148850.16	0.12591	0.66567	0.12287	567685.16	4148850.16	567685.16_4148850.16	0.13908	0.78072	0.25474
567705.16	4148850.16	567705.16_4148850.16	0.13493	0.78573	0.13218	567705.16	4148850.16	567705.16_4148850.16	0.14938	0.93027	0.27307
567725.16	4148850.16	567725.16_4148850.16	0.14508	0.94578	0.14268	567725.16	4148850.16	567725.16_4148850.16	0.161	1.13276	0.29363
567745.16	4148850.16	567745.16_4148850.16	0.15793	1.18324	0.15584	567745.16	4148850.16	567745.16_4148850.16	0.17491	1.4324	0.31786
567765.16	4148850.16	567765.16_4148850.16	0.17059	1.50341	0.169	567765.16	4148850.16	567765.16_4148850.16	0.18973	1.86268	0.34382
567785.16	4148850.16	567785.16_4148850.16	0.18493	1.996	0.18391	567785.16	4148850.16	567785.16_4148850.16	0.20667	2.55964	0.37328
567805.16	4148850.16	567805.16_4148850.16	0.20214	2.83706	0.20172	567805.16	4148850.16	567805.16_4148850.16	0.22666	3.81008	0.40765
567825.16	4148850.16	567825.16_4148850.16	0.22204	4.29451	0.22229	567825.16	4148850.16	567825.16_4148850.16	0.24998	6.06106	0.44735
568225.16	4148850.16	568225.16_4148850.16	12.28421	11.17359	11.15022	568225.16	4148850.16	568225.16_4148850.16	30.32162	14.27369	62.163
568245.16	4148850.16	568245.16_4148850.16	12.94369	9.68435	12.80203	568245.16	4148850.16	568245.16_4148850.16	27.36	12.03516	54.87915
568265.16	4148850.16	568265.16_4148850.16	13.27498	8.37748	13.50919	568265.16	4148850.16	568265.16_4148850.16	26.56034	10.29958	51.51479
568285.16	4148850.16	568285.16_4148850.16	13.77403	7.33681	13.70368	568285.16	4148850.16	568285.16_4148850.16	28.66042	8.93985	54.2853
568305.16	4148850.16	568305.16_4148850.16	14.53431	6.52082	13.11692	568305.16	4148850.16	568305.16_4148850.16	34.42893	7.85548	66.09347
568325.16	4148850.16	568325.16_4148850.16	15.83809	5.87647	12.07737	568325.16	4148850.16	568325.16_4148850.16	45.85715	6.97524	96.949
568345.16	4148850.16	568345.16_4148850.16	18.1362	5.35509	12.08324	568345.16	4148850.16	568345.16_4148850.16	62.26524	6.24738	158.01812
568365.16	4148850.16	568365.16_4148850.16	19.39052	4.87268	12.42124	568365.16	4148850.16	568365.16_4148850.16	69.22906	5.62871	181.48206
568385.16	4148850.16	568385.16_4148850.16	19.71051	4.4516	12.78392	568385.16	4148850.16	568385.16_4148850.16	69.47796	5.10155	179.15828
568405.16	4148850.16	568405.16_4148850.16	19.6123	4.08495	12.89834	568405.16	4148850.16	568405.16_4148850.16	67.08427	4.64862	170.45933
568425.16	4148850.16	568425.16_4148850.16	19.54045	3.76943	12.81172	568425.16	4148850.16	568425.16_4148850.16	67.82338	4.257	172.42629
568485.16	4148850.16	568485.16_4148850.16	15.56593	3.01145	12.91106	568485.16	4148850.16	568485.16_4148850.16	40.06915	3.34734	113.59712
568505.16	4148850.16	568505.16_4148850.16	13.76263	2.80383	12.62316	568505.16	4148850.16	568505.16_4148850.16	30.1807	3.10972	80.95377
568525.16	4148850.16	568525.16_4148850.16	12.4896	2.62619	12.28925	568525.16	4148850.16	568525.16_4148850.16	24.11711	2.89882	63.01943
568545.16	4148850.16	568545.16_4148850.16	11.53788	2.47388	11.86804	568545.16	4148850.16	568545.16_4148850.16	20.00758	2.71075	51.6131
568565.16	4148850.16	568565.16_4148850.16	10.54736	2.33086	11.08823	568565.16	4148850.16	568565.16_4148850.16	16.95223	2.54028	43.37646

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568585.16	4148850.16	568585.16_4148850.16	9.44695	2.19042	9.99786	568585.16	4148850.16	568585.16_4148850.16	14.54371	2.38511	37.01815
568605.16	4148850.16	568605.16_4148850.16	8.5921	2.06862	9.12324	568605.16	4148850.16	568605.16_4148850.16	12.6709	2.24492	32.11688
568625.16	4148850.16	568625.16_4148850.16	7.88563	1.96084	8.38376	568625.16	4148850.16	568625.16_4148850.16	11.15937	2.11763	28.16543
568645.16	4148850.16	568645.16_4148850.16	7.2018	1.85883	7.65361	568645.16	4148850.16	568645.16_4148850.16	9.88347	2.00091	24.84255
568665.16	4148850.16	568665.16_4148850.16	6.56284	1.76286	6.96723	568665.16	4148850.16	568665.16_4148850.16	8.79624	1.8939	22.01876
568685.16	4148850.16	568685.16_4148850.16	5.98798	1.67378	6.34582	568685.16	4148850.16	568685.16_4148850.16	7.86454	1.79544	19.60137
568705.16	4148850.16	568705.16_4148850.16	5.46747	1.59073	5.78229	568705.16	4148850.16	568705.16_4148850.16	7.05789	1.70458	17.50526
568725.16	4148850.16	568725.16_4148850.16	5.03237	1.51647	5.31154	568725.16	4148850.16	568725.16_4148850.16	6.36723	1.62109	15.69626
567325.16	4148870.16	567325.16_4148870.16	0.04946	0.12019	0.04573	567325.16	4148870.16	567325.16_4148870.16	0.05396	0.13406	0.10014
567345.16	4148870.16	567345.16_4148870.16	0.05147	0.12811	0.04767	567345.16	4148870.16	567345.16_4148870.16	0.05626	0.14293	0.10428
567365.16	4148870.16	567365.16_4148870.16	0.05362	0.13685	0.04974	567365.16	4148870.16	567365.16_4148870.16	0.05872	0.15275	0.10868
567385.16	4148870.16	567385.16_4148870.16	0.05575	0.146	0.05182	567385.16	4148870.16	567385.16_4148870.16	0.06115	0.1634	0.11323
567405.16	4148870.16	567405.16_4148870.16	0.05795	0.15585	0.05398	567405.16	4148870.16	567405.16_4148870.16	0.06358	0.1751	0.11801
567425.16	4148870.16	567425.16_4148870.16	0.0603	0.16679	0.0563	567425.16	4148870.16	567425.16_4148870.16	0.06632	0.18816	0.12313
567445.16	4148870.16	567445.16_4148870.16	0.06309	0.17996	0.05904	567445.16	4148870.16	567445.16_4148870.16	0.06942	0.2033	0.12891
567465.16	4148870.16	567465.16_4148870.16	0.06635	0.19571	0.06223	567465.16	4148870.16	567465.16_4148870.16	0.07301	0.22088	0.13536
567485.16	4148870.16	567485.16_4148870.16	0.0696	0.21247	0.06543	567485.16	4148870.16	567485.16_4148870.16	0.07661	0.2403	0.14204
567505.16	4148870.16	567505.16_4148870.16	0.07283	0.23047	0.06866	567505.16	4148870.16	567505.16_4148870.16	0.08038	0.26193	0.14905
567525.16	4148870.16	567525.16_4148870.16	0.07664	0.2523	0.07244	567525.16	4148870.16	567525.16_4148870.16	0.08463	0.28746	0.1569
567545.16	4148870.16	567545.16_4148870.16	0.08067	0.27693	0.07646	567545.16	4148870.16	567545.16_4148870.16	0.0892	0.31674	0.16533
567565.16	4148870.16	567565.16_4148870.16	0.08517	0.30611	0.08095	567565.16	4148870.16	567565.16_4148870.16	0.09423	0.35125	0.17461
567585.16	4148870.16	567585.16_4148870.16	0.09104	0.34507	0.08675	567585.16	4148870.16	567585.16_4148870.16	0.10025	0.39467	0.18557
567605.16	4148870.16	567605.16_4148870.16	0.09679	0.3878	0.0925	567605.16	4148870.16	567605.16_4148870.16	0.1065	0.44452	0.19698
567625.16	4148870.16	567625.16_4148870.16	0.10259	0.43617	0.09836	567625.16	4148870.16	567625.16_4148870.16	0.11312	0.50299	0.20909
567645.16	4148870.16	567645.16_4148870.16	0.10892	0.49437	0.10478	567645.16	4148870.16	567645.16_4148870.16	0.1204	0.57418	0.22237
567665.16	4148870.16	567665.16_4148870.16	0.11613	0.56742	0.1121	567665.16	4148870.16	567665.16_4148870.16	0.12861	0.66353	0.23725
567685.16	4148870.16	567685.16_4148870.16	0.12416	0.65931	0.12026	567685.16	4148870.16	567685.16_4148870.16	0.13777	0.77707	0.2538
567705.16	4148870.16	567705.16_4148870.16	0.13285	0.77497	0.12914	567705.16	4148870.16	567705.16_4148870.16	0.14788	0.92332	0.27201
567725.16	4148870.16	567725.16_4148870.16	0.14293	0.93075	0.13942	567725.16	4148870.16	567725.16_4148870.16	0.15945	1.1221	0.29272
567745.16	4148870.16	567745.16_4148870.16	0.15398	1.14031	0.15074	567745.16	4148870.16	567745.16_4148870.16	0.17239	1.39853	0.31579
567765.16	4148870.16	567765.16_4148870.16	0.16769	1.45666	0.16466	567765.16	4148870.16	567765.16_4148870.16	0.1878	1.82345	0.34293
567785.16	4148870.16	567785.16_4148870.16	0.18279	1.93502	0.18004	567785.16	4148870.16	567785.16_4148870.16	0.2052	2.51021	0.37342
567805.16	4148870.16	567805.16_4148870.16	0.19945	2.74319	0.19705	567805.16	4148870.16	567805.16_4148870.16	0.22494	3.76601	0.40789
568205.16	4148870.16	568205.16_4148870.16	12.31881	13.51652	7.49018	568205.16	4148870.16	568205.16_4148870.16	59.75934	14.72365	121.29056
568225.16	4148870.16	568225.16_4148870.16	11.37793	10.17439	8.77902	568225.16	4148870.16	568225.16_4148870.16	36.4766	12.93833	74.78368
568245.16	4148870.16	568245.16_4148870.16	12.56055	8.83456	11.2864	568245.16	4148870.16	568245.16_4148870.16	32.61213	11.01647	65.43144
568265.16	4148870.16	568265.16_4148870.16	13.82309	7.79609	12.76048	568265.16	4148870.16	568265.16_4148870.16	33.62638	9.52735	65.95822
568285.16	4148870.16	568285.16_4148870.16	14.6208	6.88894	12.04055	568285.16	4148870.16	568285.16_4148870.16	39.34814	8.33044	78.17153
568305.16	4148870.16	568305.16_4148870.16	15.69171	6.1816	10.93423	568305.16	4148870.16	568305.16_4148870.16	53.78064	7.3666	118.85441

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568345.16	4148870.16	568345.16_4148870.16	16.13913	5.05702	10.99703	568345.16	4148870.16	568345.16_4148870.16	57.56805	5.90029	170.0038
568365.16	4148870.16	568365.16_4148870.16	15.13958	4.61944	11.51538	568365.16	4148870.16	568365.16_4148870.16	46.26902	5.33529	133.9956
568385.16	4148870.16	568385.16_4148870.16	14.72905	4.24117	11.66556	568385.16	4148870.16	568385.16_4148870.16	43.42937	4.85184	126.47539
568405.16	4148870.16	568405.16_4148870.16	14.78374	3.9074	11.53481	568405.16	4148870.16	568405.16_4148870.16	45.25765	4.43389	134.53114
568425.16	4148870.16	568425.16_4148870.16	14.9065	3.60762	11.43919	568425.16	4148870.16	568425.16_4148870.16	46.83111	4.06927	143.29114
568445.16	4148870.16	568445.16_4148870.16	13.74296	3.33289	11.32129	568445.16	4148870.16	568445.16_4148870.16	36.46691	3.74831	105.36479
568465.16	4148870.16	568465.16_4148870.16	12.82877	3.09999	11.52693	568465.16	4148870.16	568465.16_4148870.16	28.80852	3.46698	78.71646
568485.16	4148870.16	568485.16_4148870.16	12.1461	2.90506	11.84176	568485.16	4148870.16	568485.16_4148870.16	23.5388	3.21913	62.40075
568505.16	4148870.16	568505.16_4148870.16	11.07952	2.7138	11.30223	568505.16	4148870.16	568505.16_4148870.16	19.60187	2.99638	50.98581
568525.16	4148870.16	568525.16_4148870.16	10.12943	2.54321	10.58103	568525.16	4148870.16	568525.16_4148870.16	16.67871	2.7969	42.9693
568545.16	4148870.16	568545.16_4148870.16	9.31477	2.39218	9.85183	568545.16	4148870.16	568545.16_4148870.16	14.441	2.6178	37.01009
568565.16	4148870.16	568565.16_4148870.16	8.56077	2.25467	9.10381	568565.16	4148870.16	568565.16_4148870.16	12.65697	2.45591	32.32097
568585.16	4148870.16	568585.16_4148870.16	7.80586	2.12483	8.30349	568585.16	4148870.16	568585.16_4148870.16	11.17682	2.30905	28.45942
568605.16	4148870.16	568605.16_4148870.16	7.11399	2.00514	7.55424	568605.16	4148870.16	568605.16_4148870.16	9.9371	2.17522	25.23257
568625.16	4148870.16	568625.16_4148870.16	6.59904	1.90366	7.0052	568625.16	4148870.16	568625.16_4148870.16	8.91582	2.0538	22.56425
568645.16	4148870.16	568645.16_4148870.16	6.05168	1.8038	6.41527	568645.16	4148870.16	568645.16_4148870.16	8.01538	1.94229	20.22323
568665.16	4148870.16	568665.16_4148870.16	5.55993	1.71164	5.88439	568665.16	4148870.16	568665.16_4148870.16	7.2347	1.83996	18.19296
568685.16	4148870.16	568685.16_4148870.16	5.13529	1.62823	5.42517	568685.16	4148870.16	568685.16_4148870.16	6.55719	1.74587	16.42697
568705.16	4148870.16	568705.16_4148870.16	4.70584	1.54645	4.96058	568705.16	4148870.16	568705.16_4148870.16	5.94879	1.65845	14.84113
568725.16	4148870.16	568725.16_4148870.16	4.36321	1.4753	4.58999	568725.16	4148870.16	568725.16_4148870.16	5.42477	1.57834	13.46211
567325.16	4148890.16	567325.16_4148890.16	0.04912	0.11851	0.04555	567325.16	4148890.16	567325.16_4148890.16	0.05345	0.13336	0.10094
567345.16	4148890.16	567345.16_4148890.16	0.05099	0.12599	0.04739	567345.16	4148890.16	567345.16_4148890.16	0.05563	0.14204	0.105
567365.16	4148890.16	567365.16_4148890.16	0.05306	0.13443	0.04941	567365.16	4148890.16	567365.16_4148890.16	0.05811	0.15174	0.1094
567385.16	4148890.16	567385.16_4148890.16	0.0552	0.14354	0.05152	567385.16	4148890.16	567385.16_4148890.16	0.06054	0.16239	0.11403
567405.16	4148890.16	567405.16_4148890.16	0.05738	0.15329	0.05369	567405.16	4148890.16	567405.16_4148890.16	0.06277	0.17407	0.11884
567425.16	4148890.16	567425.16_4148890.16	0.05963	0.16383	0.05595	567425.16	4148890.16	567425.16_4148890.16	0.06522	0.18697	0.12387
567445.16	4148890.16	567445.16_4148890.16	0.06212	0.17584	0.05844	567445.16	4148890.16	567445.16_4148890.16	0.06809	0.20156	0.12936
567465.16	4148890.16	567465.16_4148890.16	0.0657	0.19272	0.06193	567465.16	4148890.16	567465.16_4148890.16	0.0725	0.21972	0.13644
567485.16	4148890.16	567485.16_4148890.16	0.06901	0.20969	0.06521	567485.16	4148890.16	567485.16_4148890.16	0.07613	0.23929	0.14329
567505.16	4148890.16	567505.16_4148890.16	0.07253	0.22876	0.06871	567505.16	4148890.16	567505.16_4148890.16	0.08006	0.26154	0.15064
567525.16	4148890.16	567525.16_4148890.16	0.07648	0.25123	0.07264	567525.16	4148890.16	567525.16_4148890.16	0.08438	0.28747	0.15872
567545.16	4148890.16	567545.16_4148890.16	0.08085	0.27744	0.07697	567545.16	4148890.16	567545.16_4148890.16	0.08912	0.31768	0.16755
567565.16	4148890.16	567565.16_4148890.16	0.08514	0.30575	0.08129	567565.16	4148890.16	567565.16_4148890.16	0.09406	0.35182	0.17677
567585.16	4148890.16	567585.16_4148890.16	0.09043	0.34192	0.08656	567585.16	4148890.16	567585.16_4148890.16	0.09978	0.39373	0.18735
567605.16	4148890.16	567605.16_4148890.16	0.09601	0.38368	0.09215	567605.16	4148890.16	567605.16_4148890.16	0.10595	0.44308	0.19874
567625.16	4148890.16	567625.16_4148890.16	0.10202	0.43301	0.09818	567625.16	4148890.16	567625.16_4148890.16	0.1127	0.50221	0.21115
567645.16	4148890.16	567645.16_4148890.16	0.10836	0.491	0.10459	567645.16	4148890.16	567645.16_4148890.16	0.12001	0.57341	0.22458
567665.16	4148890.16	567665.16_4148890.16	0.11528	0.56155	0.11159	567665.16	4148890.16	567665.16_4148890.16	0.12807	0.66134	0.23933
567685.16	4148890.16	567685.16_4148890.16	0.12314	0.65097	0.11951	567685.16	4148890.16	567685.16_4148890.16	0.13716	0.77334	0.25585

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567705.16	4148890.16	567705.16_4148890.16	0.13202	0.76614	0.12843	567705.16	4148890.16	567705.16_4148890.16	0.14741	0.91917	0.27437
567725.16	4148890.16	567725.16_4148890.16	0.1419	0.91662	0.13836	567725.16	4148890.16	567725.16_4148890.16	0.15892	1.11375	0.29505
567745.16	4148890.16	567745.16_4148890.16	0.15278	1.11732	0.14929	567745.16	4148890.16	567745.16_4148890.16	0.17181	1.38224	0.31814
567765.16	4148890.16	567765.16_4148890.16	0.16547	1.40493	0.16198	567765.16	4148890.16	567765.16_4148890.16	0.18674	1.77984	0.34466
567785.16	4148890.16	567785.16_4148890.16	0.18123	1.85824	0.17762	567785.16	4148890.16	567785.16_4148890.16	0.20459	2.4307	0.37611
568165.16	4148890.16	568165.16_4148890.16	3.54979	13.73073	3.20078	568165.16	4148890.16	568165.16_4148890.16	8.34046	18.29921	21.22861
568225.16	4148890.16	568225.16_4148890.16	12.62234	9.97868	7.91909	568225.16	4148890.16	568225.16_4148890.16	60.06391	10.83779	121.76859
568245.16	4148890.16	568245.16_4148890.16	11.85673	7.87434	8.02945	568245.16	4148890.16	568245.16_4148890.16	41.35485	9.74866	85.05506
568265.16	4148890.16	568265.16_4148890.16	13.77964	7.05007	9.0485	568265.16	4148890.16	568265.16_4148890.16	45.79365	8.55341	96.58529
568285.16	4148890.16	568285.16_4148890.16	15.43524	6.31891	9.13879	568285.16	4148890.16	568285.16_4148890.16	64.43572	7.56879	152.33161
568325.16	4148890.16	568325.16_4148890.16	13.97132	5.15011	10.1958	568325.16	4148890.16	568325.16_4148890.16	44.37991	6.06057	124.47251
568345.16	4148890.16	568345.16_4148890.16	12.35317	4.66707	10.36923	568345.16	4148890.16	568345.16_4148890.16	31.87014	5.47221	84.019
568365.16	4148890.16	568365.16_4148890.16	10.16521	4.15164	9.13691	568365.16	4148890.16	568365.16_4148890.16	25.07593	4.94659	63.44134
568385.16	4148890.16	568385.16_4148890.16	10.17056	3.88519	9.46399	568385.16	4148890.16	568385.16_4148890.16	22.88786	4.53221	59.84243
568405.16	4148890.16	568405.16_4148890.16	10.87042	3.68344	10.2845	568405.16	4148890.16	568405.16_4148890.16	22.18339	4.17387	61.52917
568425.16	4148890.16	568425.16_4148890.16	10.40768	3.41289	9.9534	568425.16	4148890.16	568425.16_4148890.16	20.71128	3.84424	57.70381
568445.16	4148890.16	568445.16_4148890.16	9.8441	3.1618	9.64085	568445.16	4148890.16	568445.16_4148890.16	18.80626	3.55215	50.81638
568465.16	4148890.16	568465.16_4148890.16	9.4023	2.94368	9.48436	568465.16	4148890.16	568465.16_4148890.16	16.94437	3.29383	44.70444
568485.16	4148890.16	568485.16_4148890.16	9.15445	2.76726	9.50293	568485.16	4148890.16	568485.16_4148890.16	15.20513	3.06624	39.65672
568505.16	4148890.16	568505.16_4148890.16	8.64142	2.59637	9.09973	568505.16	4148890.16	568505.16_4148890.16	13.53939	2.86068	35.07206
568525.16	4148890.16	568525.16_4148890.16	7.92575	2.42833	8.37967	568525.16	4148890.16	568525.16_4148890.16	12.0274	2.67485	31.04714
568545.16	4148890.16	568545.16_4148890.16	7.49211	2.29593	7.96346	568545.16	4148890.16	568545.16_4148890.16	10.81192	2.50887	27.82849
568565.16	4148890.16	568565.16_4148890.16	6.98143	2.16838	7.42511	568565.16	4148890.16	568565.16_4148890.16	9.73859	2.35771	24.99419
568585.16	4148890.16	568585.16_4148890.16	6.43395	2.04595	6.82827	568585.16	4148890.16	568585.16_4148890.16	8.78007	2.22018	22.49776
568605.16	4148890.16	568605.16_4148890.16	5.968	1.93716	6.32284	568605.16	4148890.16	568605.16_4148890.16	7.95831	2.09483	20.34298
568625.16	4148890.16	568625.16_4148890.16	5.51497	1.83463	5.83396	568625.16	4148890.16	568625.16_4148890.16	7.23009	1.98013	18.43823
568645.16	4148890.16	568645.16_4148890.16	5.1019	1.74006	5.39005	568645.16	4148890.16	568645.16_4148890.16	6.58786	1.87493	16.75572
568665.16	4148890.16	568665.16_4148890.16	4.76324	1.65685	5.02513	568665.16	4148890.16	568665.16_4148890.16	6.02808	1.7783	15.28177
568685.16	4148890.16	568685.16_4148890.16	4.42914	1.57733	4.66388	568685.16	4148890.16	568685.16_4148890.16	5.5223	1.68917	13.95263
568705.16	4148890.16	568705.16_4148890.16	4.1195	1.50323	4.33009	568705.16	4148890.16	568705.16_4148890.16	5.06864	1.6068	12.75417
568725.16	4148890.16	568725.16_4148890.16	3.82847	1.43342	4.01605	568725.16	4148890.16	568725.16_4148890.16	4.66087	1.53052	11.67438
567325.16	4148910.16	567325.16_4148910.16	0.04916	0.11737	0.04612	567325.16	4148910.16	567325.16_4148910.16	0.05342	0.13305	0.10324
567345.16	4148910.16	567345.16_4148910.16	0.05111	0.12502	0.04807	567345.16	4148910.16	567345.16_4148910.16	0.05581	0.14184	0.1075
567365.16	4148910.16	567365.16_4148910.16	0.05321	0.13351	0.05017	567365.16	4148910.16	567365.16_4148910.16	0.05814	0.1516	0.11206
567385.16	4148910.16	567385.16_4148910.16	0.05535	0.14254	0.05232	567385.16	4148910.16	567385.16_4148910.16	0.06056	0.16226	0.11681
567405.16	4148910.16	567405.16_4148910.16	0.05768	0.1527	0.05467	567405.16	4148910.16	567405.16_4148910.16	0.06318	0.17419	0.12194
567425.16	4148910.16	567425.16_4148910.16	0.05985	0.16281	0.05689	567425.16	4148910.16	567425.16_4148910.16	0.06542	0.18696	0.12703
567445.16	4148910.16	567445.16_4148910.16	0.06249	0.1753	0.05958	567445.16	4148910.16	567445.16_4148910.16	0.06842	0.20186	0.1329
567465.16	4148910.16	567465.16_4148910.16	0.06587	0.19136	0.06293	567465.16	4148910.16	567465.16_4148910.16	0.07258	0.21967	0.1398

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567485.16	4148910.16	567485.16_4148910.16	0.06926	0.20858	0.06634	567485.16	4148910.16	567485.16_4148910.16	0.07627	0.23946	0.14689
567505.16	4148910.16	567505.16_4148910.16	0.07303	0.22859	0.07011	567505.16	4148910.16	567505.16_4148910.16	0.08036	0.26229	0.15462
567525.16	4148910.16	567525.16_4148910.16	0.07692	0.2507	0.07403	567525.16	4148910.16	567525.16_4148910.16	0.08466	0.28815	0.1628
567545.16	4148910.16	567545.16_4148910.16	0.08117	0.27629	0.0783	567545.16	4148910.16	567545.16_4148910.16	0.08936	0.31818	0.17171
567565.16	4148910.16	567565.16_4148910.16	0.08564	0.30532	0.08283	567565.16	4148910.16	567565.16_4148910.16	0.09441	0.35289	0.18127
567585.16	4148910.16	567585.16_4148910.16	0.09074	0.34036	0.08795	567585.16	4148910.16	567585.16_4148910.16	0.10005	0.39436	0.19187
567605.16	4148910.16	567605.16_4148910.16	0.09614	0.38083	0.09339	567605.16	4148910.16	567605.16_4148910.16	0.10616	0.44322	0.20329
567625.16	4148910.16	567625.16_4148910.16	0.10212	0.4295	0.09939	567625.16	4148910.16	567625.16_4148910.16	0.11292	0.50226	0.21585
567645.16	4148910.16	567645.16_4148910.16	0.10868	0.48816	0.10596	567645.16	4148910.16	567645.16_4148910.16	0.12039	0.57422	0.22966
567665.16	4148910.16	567665.16_4148910.16	0.11574	0.55881	0.11303	567665.16	4148910.16	567665.16_4148910.16	0.12858	0.66269	0.24474
567685.16	4148910.16	567685.16_4148910.16	0.12354	0.64659	0.12082	567685.16	4148910.16	567685.16_4148910.16	0.1377	0.77426	0.26145
567705.16	4148910.16	567705.16_4148910.16	0.13235	0.75921	0.12958	567705.16	4148910.16	567705.16_4148910.16	0.14799	0.91902	0.28017
567725.16	4148910.16	567725.16_4148910.16	0.14228	0.90668	0.13941	567725.16	4148910.16	567725.16_4148910.16	0.15961	1.11196	0.30124
567745.16	4148910.16	567745.16_4148910.16	0.15356	1.10614	0.15056	567745.16	4148910.16	567745.16_4148910.16	0.17285	1.37912	0.32514
567765.16	4148910.16	567765.16_4148910.16	0.16697	1.39399	0.1638	567765.16	4148910.16	567765.16_4148910.16	0.18832	1.77311	0.35292
568145.16	4148910.16	568145.16_4148910.16	2.70897	12.80584	2.6968	568145.16	4148910.16	568145.16_4148910.16	4.98039	17.23906	12.79057
568165.16	4148910.16	568165.16_4148910.16	3.15161	11.00452	3.0596	568165.16	4148910.16	568165.16_4148910.16	6.40266	14.5561	16.42068
568185.16	4148910.16	568185.16_4148910.16	3.53966	9.54296	3.1992	568185.16	4148910.16	568185.16_4148910.16	8.50701	12.43211	21.4756
568245.16	4148910.16	568245.16_4148910.16	11.19312	6.93	3.83287	568245.16	4148910.16	568245.16_4148910.16	59.42985	8.401	141.06516
568285.16	4148910.16	568285.16_4148910.16	13.05659	5.5994	7.04434	568285.16	4148910.16	568285.16_4148910.16	60.7523	6.71611	176.68583
568305.16	4148910.16	568305.16_4148910.16	11.57449	5.09229	8.45863	568305.16	4148910.16	568305.16_4148910.16	36.24586	6.055	100.03159
568325.16	4148910.16	568325.16_4148910.16	10.9361	4.68036	9.61434	568325.16	4148910.16	568325.16_4148910.16	26.4267	5.49294	69.2788
568345.16	4148910.16	568345.16_4148910.16	9.74037	4.25799	9.31614	568345.16	4148910.16	568345.16_4148910.16	20.85495	4.99594	53.23914
568365.16	4148910.16	568365.16_4148910.16	8.30723	3.82004	8.10775	568365.16	4148910.16	568365.16_4148910.16	17.30034	4.54788	43.91193
568385.16	4148910.16	568385.16_4148910.16	8.28933	3.59214	8.27997	568385.16	4148910.16	568385.16_4148910.16	15.89121	4.19077	41.43143
568405.16	4148910.16	568405.16_4148910.16	8.75816	3.43496	8.97352	568405.16	4148910.16	568405.16_4148910.16	15.09744	3.87997	40.35084
568425.16	4148910.16	568425.16_4148910.16	8.31655	3.20058	8.57503	568425.16	4148910.16	568425.16_4148910.16	13.88621	3.5897	37.29939
568445.16	4148910.16	568445.16_4148910.16	7.72683	2.97146	8.01113	568445.16	4148910.16	568445.16_4148910.16	12.63207	3.33108	33.72342
568465.16	4148910.16	568465.16_4148910.16	7.38154	2.78207	7.72555	568465.16	4148910.16	568465.16_4148910.16	11.59921	3.10052	30.61208
568485.16	4148910.16	568485.16_4148910.16	7.04163	2.60872	7.41521	568485.16	4148910.16	568485.16_4148910.16	10.67647	2.89363	27.92802
568505.16	4148910.16	568505.16_4148910.16	6.78219	2.46037	7.17996	568505.16	4148910.16	568505.16_4148910.16	9.85803	2.70755	25.62352
568525.16	4148910.16	568525.16_4148910.16	6.41233	2.3167	6.79599	568525.16	4148910.16	568525.16_4148910.16	9.05332	2.53912	23.46626
568545.16	4148910.16	568545.16_4148910.16	6.02639	2.18455	6.38276	568545.16	4148910.16	568545.16_4148910.16	8.30084	2.38635	21.48995
568565.16	4148910.16	568565.16_4148910.16	5.6584	2.06487	5.98361	568565.16	4148910.16	568565.16_4148910.16	7.62136	2.24737	19.6964
568585.16	4148910.16	568585.16_4148910.16	5.33511	1.95856	5.63349	568585.16	4148910.16	568585.16_4148910.16	7.01541	2.1206	18.08496
568605.16	4148910.16	568605.16_4148910.16	4.9906	1.85662	5.26208	568605.16	4148910.16	568605.16_4148910.16	6.4523	2.00451	16.60697
568625.16	4148910.16	568625.16_4148910.16	4.62839	1.75777	4.87378	568625.16	4148910.16	568625.16_4148910.16	5.92992	1.8979	15.24861
568645.16	4148910.16	568645.16_4148910.16	4.3351	1.67154	4.56008	568645.16	4148910.16	568645.16_4148910.16	5.47125	1.79992	14.03755
568665.16	4148910.16	568665.16_4148910.16	4.07385	1.59328	4.27885	568665.16	4148910.16	568665.16_4148910.16	5.05804	1.70962	12.94299

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568685.16	4148910.16	568685.16_4148910.16	3.84166	1.5223	4.02855	568685.16	4148910.16	568685.16_4148910.16	4.6863	1.62618	11.94862
568705.16	4148910.16	568705.16_4148910.16	3.5755	1.44951	3.74382	568705.16	4148910.16	568705.16_4148910.16	4.33294	1.5488	11.01485
568725.16	4148910.16	568725.16_4148910.16	3.34603	1.38399	3.49748	568725.16	4148910.16	568725.16_4148910.16	4.01787	1.47702	10.1722
567325.16	4148930.16	567325.16_4148930.16	0.04958	0.11705	0.0474	567325.16	4148930.16	567325.16_4148930.16	0.0538	0.13327	0.1067
567345.16	4148930.16	567345.16_4148930.16	0.05165	0.12495	0.04949	567345.16	4148930.16	567345.16_4148930.16	0.05618	0.14224	0.11121
567365.16	4148930.16	567365.16_4148930.16	0.05372	0.13325	0.05163	567365.16	4148930.16	567365.16_4148930.16	0.0585	0.15197	0.11589
567385.16	4148930.16	567385.16_4148930.16	0.0559	0.14232	0.05388	567385.16	4148930.16	567385.16_4148930.16	0.06095	0.16272	0.12084
567405.16	4148930.16	567405.16_4148930.16	0.0582	0.15228	0.05626	567405.16	4148930.16	567405.16_4148930.16	0.06357	0.17465	0.1261
567425.16	4148930.16	567425.16_4148930.16	0.06069	0.16343	0.05884	567425.16	4148930.16	567425.16_4148930.16	0.06639	0.18801	0.13175
567445.16	4148930.16	567445.16_4148930.16	0.0633	0.17568	0.06155	567445.16	4148930.16	567445.16_4148930.16	0.0694	0.20291	0.13776
567465.16	4148930.16	567465.16_4148930.16	0.06641	0.19061	0.06474	567465.16	4148930.16	567465.16_4148930.16	0.07304	0.2203	0.14452
567485.16	4148930.16	567485.16_4148930.16	0.07007	0.20875	0.06843	567485.16	4148930.16	567485.16_4148930.16	0.07693	0.24067	0.15202
567505.16	4148930.16	567505.16_4148930.16	0.07388	0.22883	0.07229	567505.16	4148930.16	567505.16_4148930.16	0.08103	0.26369	0.15997
567525.16	4148930.16	567525.16_4148930.16	0.07779	0.25089	0.07628	567525.16	4148930.16	567525.16_4148930.16	0.08537	0.28973	0.16839
567545.16	4148930.16	567545.16_4148930.16	0.08211	0.27665	0.08065	567545.16	4148930.16	567545.16_4148930.16	0.09014	0.32009	0.17755
567565.16	4148930.16	567565.16_4148930.16	0.08661	0.30555	0.08523	567565.16	4148930.16	567565.16_4148930.16	0.09525	0.35505	0.18735
567585.16	4148930.16	567585.16_4148930.16	0.09138	0.33859	0.09007	567585.16	4148930.16	567585.16_4148930.16	0.10077	0.39584	0.19791
567605.16	4148930.16	567605.16_4148930.16	0.09695	0.37957	0.09566	567605.16	4148930.16	567605.16_4148930.16	0.10702	0.44544	0.20972
567625.16	4148930.16	567625.16_4148930.16	0.10322	0.42942	0.10189	567625.16	4148930.16	567625.16_4148930.16	0.114	0.5057	0.22277
567645.16	4148930.16	567645.16_4148930.16	0.10977	0.48741	0.10841	567645.16	4148930.16	567645.16_4148930.16	0.12153	0.57807	0.23687
567665.16	4148930.16	567665.16_4148930.16	0.11712	0.55919	0.1157	567665.16	4148930.16	567665.16_4148930.16	0.12996	0.66822	0.25255
567685.16	4148930.16	567685.16_4148930.16	0.12503	0.64672	0.12355	567685.16	4148930.16	567685.16_4148930.16	0.13925	0.78101	0.2698
567705.16	4148930.16	567705.16_4148930.16	0.13394	0.75869	0.13239	567705.16	4148930.16	567705.16_4148930.16	0.14971	0.92711	0.28918
567725.16	4148930.16	567725.16_4148930.16	0.14398	0.90507	0.14238	567725.16	4148930.16	567725.16_4148930.16	0.16155	1.12144	0.31109
567745.16	4148930.16	567745.16_4148930.16	0.1562	1.11239	0.15453	567745.16	4148930.16	567745.16_4148930.16	0.17549	1.39554	0.33671
567805.16	4148930.16	567805.16_4148930.16	0.20206	2.48894	0.20091	567805.16	4148930.16	567805.16_4148930.16	0.23012	3.35024	0.43815
567825.16	4148930.16	567825.16_4148930.16	0.22384	3.7612	0.22285	567825.16	4148930.16	567825.16_4148930.16	0.25562	4.93196	0.48557
568125.16	4148930.16	568125.16_4148930.16	2.06424	11.61199	2.0831	568125.16	4148930.16	568125.16_4148930.16	3.35727	15.79556	8.6246
568145.16	4148930.16	568145.16_4148930.16	2.39255	10.00999	2.3996	568145.16	4148930.16	568145.16_4148930.16	4.11292	13.41231	10.61359
568165.16	4148930.16	568165.16_4148930.16	2.75963	8.78339	2.7313	568165.16	4148930.16	568165.16_4148930.16	5.1264	11.53001	13.25818
568185.16	4148930.16	568185.16_4148930.16	3.16606	7.81824	3.02534	568185.16	4148930.16	568185.16_4148930.16	6.62918	10.04832	17.12323
568205.16	4148930.16	568205.16_4148930.16	3.59045	7.01598	3.09851	568205.16	4148930.16	568205.16_4148930.16	9.15476	8.87028	23.48777
568265.16	4148930.16	568265.16_4148930.16	7.71652	5.32	3.55977	568265.16	4148930.16	568265.16_4148930.16	37.16432	6.44611	115.03932
568285.16	4148930.16	568285.16_4148930.16	7.87618	4.87398	5.33637	568285.16	4148930.16	568285.16_4148930.16	25.61588	5.85567	72.04607
568305.16	4148930.16	568305.16_4148930.16	7.97453	4.50103	6.93152	568305.16	4148930.16	568305.16_4148930.16	19.81184	5.34534	52.55512
568325.16	4148930.16	568325.16_4148930.16	8.00264	4.18892	7.80944	568325.16	4148930.16	568325.16_4148930.16	16.38355	4.90013	42.40241
568345.16	4148930.16	568345.16_4148930.16	7.34781	3.83189	7.39852	568345.16	4148930.16	568345.16_4148930.16	13.95736	4.49509	35.86461
568365.16	4148930.16	568365.16_4148930.16	6.49389	3.4626	6.5612	568365.16	4148930.16	568365.16_4148930.16	12.17922	4.12327	31.44515
568385.16	4148930.16	568385.16_4148930.16	6.78105	3.31352	7.00735	568385.16	4148930.16	568385.16_4148930.16	11.54689	3.83294	30.37544

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568405.16	4148930.16	568405.16_4148930.16	6.89201	3.15137	7.22376	568405.16	4148930.16	568405.16_4148930.16	10.89078	3.56365	28.99181
568425.16	4148930.16	568425.16_4148930.16	6.56154	2.94909	6.89497	568425.16	4148930.16	568425.16_4148930.16	10.09389	3.31457	27.0306
568445.16	4148930.16	568445.16_4148930.16	6.21382	2.76239	6.54339	568445.16	4148930.16	568445.16_4148930.16	9.32672	3.0907	24.97759
568465.16	4148930.16	568465.16_4148930.16	5.93998	2.59928	6.2703	568465.16	4148930.16	568465.16_4148930.16	8.64591	2.88904	23.04267
568485.16	4148930.16	568485.16_4148930.16	5.61977	2.44129	5.93148	568485.16	4148930.16	568485.16_4148930.16	8.0232	2.70644	21.25558
568505.16	4148930.16	568505.16_4148930.16	5.39998	2.30724	5.70413	568505.16	4148930.16	568505.16_4148930.16	7.49253	2.54105	19.72886
568525.16	4148930.16	568525.16_4148930.16	5.1852	2.18483	5.47534	568525.16	4148930.16	568525.16_4148930.16	7.00829	2.39053	18.35074
568545.16	4148930.16	568545.16_4148930.16	4.91098	2.06504	5.17421	568545.16	4148930.16	568545.16_4148930.16	6.53015	2.25311	17.04931
568565.16	4148930.16	568565.16_4148930.16	4.63533	1.95409	4.87155	568565.16	4148930.16	568565.16_4148930.16	6.07929	2.12739	15.83708
568585.16	4148930.16	568585.16_4148930.16	4.39736	1.85587	4.61451	568585.16	4148930.16	568585.16_4148930.16	5.66548	2.01216	14.72695
568605.16	4148930.16	568605.16_4148930.16	4.17265	1.76587	4.37536	568605.16	4148930.16	568605.16_4148930.16	5.281	1.90623	13.69981
568625.16	4148930.16	568625.16_4148930.16	3.93722	1.67971	4.12511	568625.16	4148930.16	568625.16_4148930.16	4.91924	1.80861	12.73878
568645.16	4148930.16	568645.16_4148930.16	3.69342	1.59676	3.86509	568645.16	4148930.16	568645.16_4148930.16	4.57716	1.71842	11.84
568665.16	4148930.16	568665.16_4148930.16	3.50696	1.52631	3.66468	568665.16	4148930.16	568665.16_4148930.16	4.27542	1.63507	11.02776
568685.16	4148930.16	568685.16_4148930.16	3.31196	1.45803	3.45618	568685.16	4148930.16	568685.16_4148930.16	3.98964	1.55775	10.26477
568705.16	4148930.16	568705.16_4148930.16	3.12832	1.39447	3.25999	568705.16	4148930.16	568705.16_4148930.16	3.72574	1.48593	9.55408
568725.16	4148930.16	568725.16_4148930.16	2.94931	1.33403	3.06865	568725.16	4148930.16	568725.16_4148930.16	3.48166	1.4191	8.89655
567325.16	4148950.16	567325.16_4148950.16	0.0503	0.1175	0.04922	567325.16	4148950.16	567325.16_4148950.16	0.05451	0.13406	0.11084
567345.16	4148950.16	567345.16_4148950.16	0.05242	0.12555	0.05144	567345.16	4148950.16	567345.16_4148950.16	0.05679	0.14317	0.11555
567365.16	4148950.16	567365.16_4148950.16	0.05445	0.13362	0.05358	567365.16	4148950.16	567365.16_4148950.16	0.05909	0.15289	0.12031
567385.16	4148950.16	567385.16_4148950.16	0.05655	0.14228	0.05582	567385.16	4148950.16	567385.16_4148950.16	0.06151	0.16356	0.12533
567405.16	4148950.16	567405.16_4148950.16	0.05903	0.15276	0.05841	567405.16	4148950.16	567405.16_4148950.16	0.06426	0.17583	0.13094
567425.16	4148950.16	567425.16_4148950.16	0.06169	0.16441	0.06119	567425.16	4148950.16	567425.16_4148950.16	0.0672	0.18957	0.13692
567445.16	4148950.16	567445.16_4148950.16	0.06456	0.17755	0.06418	567445.16	4148950.16	567445.16_4148950.16	0.07058	0.20505	0.14334
567465.16	4148950.16	567465.16_4148950.16	0.06775	0.19276	0.06748	567465.16	4148950.16	567465.16_4148950.16	0.07407	0.22276	0.15031
567485.16	4148950.16	567485.16_4148950.16	0.07107	0.20944	0.07091	567485.16	4148950.16	567485.16_4148950.16	0.07783	0.24264	0.15769
567505.16	4148950.16	567505.16_4148950.16	0.07496	0.22975	0.07486	567505.16	4148950.16	567505.16_4148950.16	0.08202	0.26603	0.16589
567525.16	4148950.16	567525.16_4148950.16	0.07903	0.25237	0.07899	567525.16	4148950.16	567525.16_4148950.16	0.08649	0.29266	0.17461
567545.16	4148950.16	567545.16_4148950.16	0.08332	0.27782	0.08335	567545.16	4148950.16	567545.16_4148950.16	0.0913	0.32325	0.18396
567565.16	4148950.16	567565.16_4148950.16	0.08802	0.30754	0.08809	567565.16	4148950.16	567565.16_4148950.16	0.09657	0.35912	0.19415
567585.16	4148950.16	567585.16_4148950.16	0.09294	0.34109	0.09304	567585.16	4148950.16	567585.16_4148950.16	0.10224	0.40082	0.20508
567605.16	4148950.16	567605.16_4148950.16	0.09847	0.3815	0.09856	567605.16	4148950.16	567605.16_4148950.16	0.10855	0.45092	0.21714
567625.16	4148950.16	567625.16_4148950.16	0.10479	0.43128	0.10482	567625.16	4148950.16	567625.16_4148950.16	0.11563	0.51215	0.23058
567645.16	4148950.16	567645.16_4148950.16	0.11181	0.49198	0.11178	567645.16	4148950.16	567645.16_4148950.16	0.12352	0.5873	0.24548
567665.16	4148950.16	567665.16_4148950.16	0.11904	0.5625	0.11902	567665.16	4148950.16	567665.16_4148950.16	0.13201	0.67859	0.26162
567685.16	4148950.16	567685.16_4148950.16	0.12736	0.65268	0.12736	567685.16	4148950.16	567685.16_4148950.16	0.14165	0.79527	0.27988
567705.16	4148950.16	567705.16_4148950.16	0.1365	0.76627	0.1366	567705.16	4148950.16	567705.16_4148950.16	0.15241	0.94554	0.30032
567725.16	4148950.16	567725.16_4148950.16	0.14693	0.91649	0.14721	567725.16	4148950.16	567725.16_4148950.16	0.16469	1.14625	0.32362
567785.16	4148950.16	567785.16_4148950.16	0.18837	1.83524	0.18946	567785.16	4148950.16	567785.16_4148950.16	0.21371	2.40713	0.41698

567802.516   4148950.16   56785.16   414895.016   0.23684   3.2750   0.23814   5.6782.516   414895.016   0.23684   3.2750   0.23814   5.6782.516   414895.016   0.5785.516   414895.016   0.23684   3.2750   0.25708   5.6784.516   414895.016   0.5785.516   414895.016   0.23684   3.27508   0.25708	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
56784.16   414890.16   56786.16   414890.16   56786.16   414890.16   56800.16   41890.16   56800.16   41890.16   56800.16   41890.16   56800.16   41890.16   56800.16   41890.16   56800.16   41890.16   56800.16   41890.16   56810.16   41890.	567805.16	4148950.16	567805.16_4148950.16	0.20844	2.5168	0.20951	567805.16	4148950.16	567805.16_4148950.16	0.23658	3.31604	0.46041
F6808.16   4148950.16   56808.16   4148950.16   1.46950	567825.16	4148950.16	567825.16_4148950.16	0.23084	3.50279	0.23184	567825.16	4148950.16	567825.16_4148950.16	0.26304	4.62788	0.51155
568105.16   4148950.16   568105.16   4148950.16   1.6241   10.23186   1.63402   568105.16   4148950.16   568105.16   4148950.16   568125.16   41	567845.16	4148950.16	567845.16_4148950.16	0.25613	4.93426	0.25708	567845.16	4148950.16	567845.16_4148950.16	0.29406	6.35824	0.5733
568125.16   4148990.16   568125.16   4148990.16   568145.16   414899.16   568145.16   41489.16   569145.16   41489	568085.16	4148950.16	568085.16_4148950.16	1.40533	11.92161	1.44018	568085.16	4148950.16	568085.16_4148950.16	2.04799	16.45153	5.23314
	568105.16	4148950.16	568105.16_4148950.16	1.6241	10.23186	1.65402	568105.16	4148950.16	568105.16_4148950.16	2.45047	14.04652	6.31675
688165.16   414895.016   568165.16   414895.016   568165.16   414895.016   568165.16   414895.016   568165.16   414895.016   568205.16   414895.	568125.16	4148950.16	568125.16_4148950.16	1.87847	8.96286	1.90398	568125.16	4148950.16	568125.16_4148950.16	2.93893	12.07441	7.61546
	568145.16	4148950.16	568145.16_4148950.16	2.16513	7.92584	2.18791	568145.16	4148950.16	568145.16_4148950.16	3.54345	10.46751	9.24073
588205.16         4148990.16         568205.16_4148990.16         368205.16_4148990.16         368205.16_4148990.16         368205.16_4148990.16         7.64917         7.2277         20.73827           568225.16         4148950.16         568225.16_4148990.16         3.9784         3.23525         3.24479         568225.16         4148950.16         568225.16_4148950.16         10.6982         6.5743         33.71559           568265.16         4148950.16         568245.16_4148990.16         42.7983         4.29843         4.29831         568265.16         4148950.16         568265.16_4148950.16         11.78101         5.4765         37.2028           568265.16         4148950.16         568285.16_4148950.16         568265.16_4148950.16         568265.16         4148950.16         568265.16_4148950.16         11.78101         5.4765         37.2028           568365.16         4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16	568165.16	4148950.16	568165.16_4148950.16	2.51475	7.10851	2.52705	568165.16	4148950.16	568165.16_4148950.16	4.36448	9.17302	11.45861
568225.16         4148950.16         568225.16_4148950.16         3.97834         3.37258         3.24479         568225.16         4148950.16         568225.16_4148950.16         10.69882         6.5743         33.71259           568265.16         4148950.16         568225.16_4148950.16         4.27983         4.2860.1         3.26817         568265.16         4148950.16         568265.16_4148950.16         11.73101         5.48763         3.70228           568285.16         4148950.16         568265.16_4148950.16         568285.16_4148950.16         568285.16_4148950.16         568285.16_4148950.16         568285.16_4148950.16         568285.16_4148950.16         568305.16_4148950.16         5	568185.16	4148950.16	568185.16_4148950.16	2.9295	6.42367	2.88943	568185.16	4148950.16	568185.16_4148950.16	5.69356	8.12322	14.79774
56825.16         4148950.16         56826.16         428850.16         428850.16         428850.16         428850.16         428850.16         428850.16         428850.16         428850.16         428850.16         428850.16         428850.16         4148950.16         568265.16         4148950.16         568265.16         4148950.16         568285.16         4148950.16         568285.16         4148950.16         568285.16         4148950.16         568305.16	568205.16	4148950.16	568205.16_4148950.16	3.4438	5.84515	3.21999	568205.16	4148950.16	568205.16_4148950.16	7.64917	7.27257	20.73827
58265.16         4148950.16         568265.16_4148950.16         4.27932         4.5361         3.38012         568265.16         4148950.16         568265.16_4148950.16         1.78101         5.48765         37.20228           568285.16         4148950.16         568285.16_4148950.16         568285.16_4148950.16         568285.16_4148950.16         1.55147         5.0468         2.27267           568325.16         4148950.16         568305.16_4148950.16         5.68305.16_4148950.16         5.68305.16_4148950.16         5.68365.16_4148950.16	568225.16	4148950.16	568225.16_4148950.16	3.97834	5.32552	3.24479	568225.16	4148950.16	568225.16_4148950.16	10.69882	6.57443	33.71559
562825.16         4148950.16         568285.16         4148950.16         568285.16         4148950.16         568285.16         4148950.16         568285.16         4148950.16         568285.16         4148950.16         568285.16         4148950.16         10.85842         4.6008         29.22371           568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568325.16         4148950.16         568405.16         4148950.16         568405.16         4148950.16         568405.16         4148950.16         568405.14         4148950.16         568405.14         4148950.16         568405.14         4148950.16         568405.16         4148950.16         568405.16         4148950.16         568405.14         4148950.16         568	568245.16	4148950.16	568245.16_4148950.16	4.29833	4.92646	3.26387	568245.16	4148950.16	568245.16_4148950.16	12.79863	5.99064	44.603
568305.16         4148950.16         568305.16_4148950.16         52861         3.94102         5.12002         568355.16         4148950.16         568325.16_4148950.16         10.25668         4.75726         56835.16         4148950.16         568325.16_4148950.16         10.25668         4.31414         2.63576         568345.16         4148950.16         568325.16_4148950.16         9.38654         3.99883         4.6822         4.68324         568345.16         4148950.16         568345.16         414895	568265.16	4148950.16	568265.16_4148950.16	4.27932	4.5361	3.38012	568265.16	4148950.16	568265.16_4148950.16	11.78101	5.48765	37.20228
568325.16         4148950.16         568325.16_4148950.16         5.68325.16_4148950.16         5.68325.16_4148950.16         5.68325.16_4148950.16         5.68335.16_4148950.16         5.42908         3.41486         5.58307         568345.16         4148950.16         568345.16_4148950.16         9.38654         3.99583         24.68324           568335.16         4148950.16         568345.16_4148950.16         568345.16_4148950.16         8.61435         3.69482         22.75048           568385.16         4148950.16         568345.16_4148950.16         568405.16_4148	568285.16	4148950.16	568285.16_4148950.16	4.85696	4.22908	4.27955	568285.16	4148950.16	568285.16_4148950.16	11.55147	5.0498	32.74662
568345.16         4148950.16         568345.16_4148950.16         5.42908         3.4186         5.58307         568345.16         4148950.16         568365.16_4148950.16         9.38654         3.99583         24.68324           568385.16         4148950.16         568365.16_4148950.16         5.68385.16_4148950.16         5.1288         2.96612         5.32295         568385.16         4148950.16         568365.16_4148950.16         8.1325         3.45453         22.78048           568405.16         4148950.16         568405.16_4148950.16         5.1288         2.96612         5.32295         568305.16         4148950.16         568385.16_4148950.16         8.09623         3.2783         21.6329           568405.16         4148950.16         568425.16_4148950.16         5.0065         2.53976         5.28326         568425.16         4148950.16         568425.16_4148950.16         7.01877         3.02939         20.43315           568405.16         4148950.16         56845.16_4148950.16         56845.16_4148950.16         56845.16_4148950.16         6.6993         2.66744         18.0366           568485.16         4148950.16         56845.16_4148950.16         4.5892.0         2.26964         4.84715         568465.16_4148950.16         56845.16_4148950.16         6.6931         6.6744         18.0366	568305.16	4148950.16	568305.16_4148950.16	5.28661	3.94102	5.12002	568305.16	4148950.16	568305.16_4148950.16	10.85842	4.6608	29.22371
568365.16         4148950.16         568365.16_4148950.16         568365.16_4148950.16         568365.16_4148950.16         8.61435         3.69425         22.75048           568385.16         4148950.16         568385.16_4148950.16         568385.16_4148950.16         5.63405.16_4148950.16         5.63405.16_4148950.16         5.63405.16_4148950.16         8.0923         3.23783         21.6319           568405.16         4148950.16         568405.16_4148950.16         5.63405.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.6345.16_4148950.16         5.63465.16_4148950.16         5.63465.16_4148950.16         5.63465.16_4148950.16         5.63465.16_4148950.16         5.63465.16_4148950.16         5.63465.16_4148950.16         5.63465.16_4148950.16         6.6993         2.66744         1.80366           568405.16         4148950.16         568465.16_4148950.16         4.79762         2.39863         5.06187         568465.16_4148950.16         568495.16_4148950.16         6.6993         2.66744         1.80366           568455.16         4148950.16         568455.16_4148950.16         4148950.16         56855.	568325.16	4148950.16	568325.16_4148950.16	5.668	3.70983	5.77526	568325.16	4148950.16	568325.16_4148950.16	10.23668	4.31414	26.8576
568385.16         4148950.16         568385.16_4148950.16         568385.16_4148950.16         568385.16_4148950.16         568385.16_4148950.16         8.32554         3.45433         22.18319           568405.16         4148950.16         568405.16_4148950.16         5.68405.16_4148950.16         5.68405.16_4148950.16         5.68405.16_4148950.16         5.68405.16_4148950.16         5.68445.16_4148950.16         5.06455.16_4148950.16         5.06555.16_4148950.16         5.06555.16_4148950.16         5.06555.16_4148950.16         5.065555.16_4148950.16	568345.16	4148950.16	568345.16_4148950.16	5.42908	3.41486	5.58307	568345.16	4148950.16	568345.16_4148950.16	9.38654	3.99583	24.68324
568405.16         4148950.16         568405.16_4148950.16         5.43914         2.86874         5.73198         568405.16         4148950.16         568405.16_4148950.16         8.09623         3.23783         21.64329           568425.16         4148950.16         568425.16_4148950.16         5.6845.16_4148950.16         5.6845.16_4148950.16         5.6845.16_4148950.16         5.6845.16_4148950.16         5.6845.16_4148950.16         7.1877         3.02939         20.48315           56845.16         4148950.16         56845.16_4148950.16         5.08665         2.53976         2.58326         568445.16         4148950.16         568445.16_4148950.16         6.6933         2.66744         18.0366           568485.16         4148950.16         568485.16_4148950.16         4.79762         2.39863         5.06187         56845.16         4148950.16         568485.16_4148950.16         6.6993         2.66744         18.0366           568505.16         4148950.16         568485.16_4148950.16         4.79762         2.39863         5.06187         568405.16         4148950.16         568485.16_4148950.16         6.28414         2.50992         16.85704           568505.16         4148950.16         568855.16_4148950.16         4.02828         1.93463         4.21602         568545.16         4148950.16         56874.	568365.16	4148950.16	568365.16_4148950.16	4.95673	3.10388	5.08029	568365.16	4148950.16	568365.16_4148950.16	8.61435	3.69425	22.75048
568425.16         4148950.16         568425.16_4148950.16         5.21616         2.69455         5.4998         568425.16         4148950.16         568425.16_4148950.16         7.61877         3.02939         20.48315           568445.16         4148950.16         568445.16_4148950.16         5.00665         2.53976         5.28326         568445.16         4148950.16         568465.16_4148950.16         6.6993         2.66744         18.0366           568465.16         4148950.16         568485.16_4148950.16         4.68950.16         4.59928         2.26964         4.84715         568465.16         4148950.16         568485.16_4148950.16         6.6993         2.66744         18.0366           568505.16         4148950.16         568485.16_4148950.16         4.59928         2.26964         4.84715         568505.16         4148950.16         568485.16_4148950.16         5.88915         2.36568         15.7449           568505.16         4148950.16         568505.16_4148950.16         4.02828         1.93463         4.21602         568545.16         4148950.16         56855.16_4148950.16         5.88915         2.36568         15.7449           568505.16         4148950.16         568585.16_4148950.16         3.68485         1.7525         3.84539         568565.16         4148950.16         5	568385.16	4148950.16	568385.16_4148950.16	5.1288	2.96612	5.32295	568385.16	4148950.16	568385.16_4148950.16	8.32554	3.45453	22.18319
568445.16         4148950.16         568445.16_4148950.16         5.00665         2.53976         5.28326         568445.16         4148950.16         568465.16_4148950.16         7.13544         2.83999         19.26738           568465.16         4148950.16         568465.16_4148950.16         4.79762         2.39863         5.06187         568465.16         4148950.16         568465.16_4148950.16         6.6993         2.66744         18.0366           568485.16         4148950.16         568485.16_4148950.16         4.59928         2.26964         4.84715         568485.16         4148950.16         568485.16_4148950.16         6.28414         2.50992         16.85704           568505.16         4148950.16         568505.16_4148950.16         4.37503         2.14482         4.59971         568505.16         4148950.16         568505.16_4148950.16         5.88915         2.36568         15.74449           568505.16         4148950.16         568545.16_4148950.16         4.02828         1.93463         4.21602         568545.16         4148950.16         568555.16_4148950.16         4.22335         2.11214         13.83199           56855.16         4148950.16         568551.6_4148950.16         3.68485         1.7525         3.84539         568655.16         4148950.16         568585.16_4148950.16	568405.16	4148950.16	568405.16_4148950.16	5.43914	2.86874	5.73198	568405.16	4148950.16	568405.16_4148950.16	8.09623	3.23783	21.64329
568465.16         4148950.16         568465.16_4148950.16         4.79762         2.39863         5.06187         568465.16         4148950.16         568465.16_4148950.16         6.6993         2.66744         18.0366           568485.16         4148950.16         568485.16_4148950.16         568485.16_4148950.16         568485.16_4148950.16         568485.16_4148950.16         568505.16_4148950.16         568605.16_4148950.16         568605.16_4148950.16         568605.16_4148950.16         3.51476         1.67036         3.66504         568605.16         4148950.16         568605.16_4148950.16         4.64006         1.83775	568425.16	4148950.16	568425.16_4148950.16	5.21616	2.69455	5.4998	568425.16	4148950.16	568425.16_4148950.16	7.61877	3.02939	20.48315
568485.16         4148950.16         568485.16_4148950.16         4.59928         2.26964         4.84715         568485.16         4148950.16         568485.16_4148950.16         6.28414         2.50992         16.85704           568505.16         4148950.16         568505.16_4148950.16         4.37503         2.14482         4.59971         568505.16         4148950.16         568505.16_4148950.16         5.88915         2.36568         15.74449           568545.16         4148950.16         568545.16_4148950.16         402828         1.93463         4.21602         568565.16         4148950.16         56855.16_4148950.16         5.23235         2.11214         13.83199           56855.16         4148950.16         568565.16_4148950.16         3.83406         1.83707         4.00703         568565.16         4148950.16         56855.16_4148950.16         4.92335         2.00031         12.97335           56855.16         4148950.16         568605.16_4148950.16         3.68485         1.7525         3.84539         56855.16         4148950.16         568655.16_4148950.16         4.92335         2.00031         12.97335           568605.16         4148950.16         568605.16_4148950.16         3.68495         1.5746         3.66504         568605.16         4148950.16         568605.16_4148950.16	568445.16	4148950.16	568445.16_4148950.16	5.00665	2.53976	5.28326	568445.16	4148950.16	568445.16_4148950.16	7.13544	2.83999	19.26738
568505.16         4148950.16         568505.16_4148950.16         4.37503         2.14482         4.59971         568505.16         4148950.16         568505.16_4148950.16         5.88915         2.36568         15.74449           568545.16         4148950.16         568545.16_4148950.16         4.02828         1.93463         4.21602         568545.16         4148950.16         568545.16_4148950.16         5.23235         2.11214         13.83199           568565.16         4148950.16         568565.16_4148950.16         3.83606         1.83707         4.00703         568565.16         4148950.16         568565.16_4148950.16         4.92335         2.00031         12.97335           568585.16         4148950.16         568585.16_4148950.16         3.68485         1.7525         3.84539         568565.16         4148950.16         568565.16_4148950.16         4.64006         1.89722         12.18798           568605.16         4148950.16         568625.16_4148950.16         3.51476         1.67036         3.66504         568605.16         4148950.16         568655.16_4148950.16         4.3662         1.80191         11.43851           56865.16         4148950.16         568625.16_4148950.16         3.35365         1.59463         3.49339         568625.16         4148950.16         568651.6_4148950.16 <td>568465.16</td> <td>4148950.16</td> <td>568465.16_4148950.16</td> <td>4.79762</td> <td>2.39863</td> <td>5.06187</td> <td>568465.16</td> <td>4148950.16</td> <td>568465.16_4148950.16</td> <td>6.6993</td> <td>2.66744</td> <td>18.0366</td>	568465.16	4148950.16	568465.16_4148950.16	4.79762	2.39863	5.06187	568465.16	4148950.16	568465.16_4148950.16	6.6993	2.66744	18.0366
568545.16         4148950.16         568545.16_4148950.16         4.02828         1.93463         4.21602         568545.16         4148950.16         568545.16_4148950.16         5.23235         2.11214         13.83199           568565.16         4148950.16         568565.16_4148950.16         3.83606         1.83707         4.00703         568565.16         4148950.16         568565.16_4148950.16         4.92335         2.0031         12.97335           568585.16         4148950.16         568565.16_4148950.16         3.68485         1.7525         3.84539         568565.16         4148950.16         568585.16_4148950.16         4.64006         1.89722         12.18798           568605.16         4148950.16         568605.16_4148950.16         3.51476         1.67036         3.66504         568605.16         4148950.16         568605.16_4148950.16         4.3662         1.80191         11.43851           568625.16         4148950.16         568605.16_4148950.16         3.53565         1.59463         3.49339         568625.16         4148950.16         568625.16_4148950.16         4.10842         1.71318         10.73451           568645.16         4148950.16         568665.16_4148950.16         3.1813         1.5213         3.30934         568665.16         4148950.16         568665.16_4148950.16	568485.16	4148950.16	568485.16_4148950.16	4.59928	2.26964	4.84715	568485.16	4148950.16	568485.16_4148950.16	6.28414	2.50992	16.85704
568565.16         4148950.16         568565.16_4148950.16         3.83606         1.83707         4.00703         568565.16         4148950.16         568565.16_4148950.16         4.92335         2.0031         12.97335           568585.16         4148950.16         568585.16_4148950.16         3.68485         1.7525         3.84539         568585.16         4148950.16         568585.16_4148950.16         4.64006         1.89722         12.18798           568605.16         4148950.16         568605.16_4148950.16         3.51476         1.67036         3.66504         568605.16         4148950.16         568605.16_4148950.16         4.3662         1.80191         11.43851           568625.16         4148950.16         568625.16_4148950.16         3.251365         1.59463         3.49339         568625.16         4148950.16         568625.16_4148950.16         4.10842         1.71318         10.73451           568645.16         4148950.16         568645.16_4148950.16         3.1813         1.5213         3.30934         568645.16         4148950.16         568645.16_4148950.16         3.62953         1.5575         9.44035           56865.16         4148950.16         568665.16_4148950.16         3.01815         1.45328         3.13537         568665.16         4148950.16         568653.16_4148950.16	568505.16	4148950.16	568505.16_4148950.16	4.37503	2.14482	4.59971	568505.16	4148950.16	568505.16_4148950.16	5.88915	2.36568	15.74449
568585.16         4148950.16         568585.16_4148950.16         3.68485         1.7525         3.84539         568585.16         4148950.16         568585.16_4148950.16         4.64006         1.89722         12.18798           56805.16         4148950.16         568605.16_4148950.16         3.68485         1.7525         3.84539         56805.16         4148950.16         568605.16_4148950.16         4.3662         1.80191         11.43851           568625.16         4148950.16         568625.16_4148950.16         3.53565         1.59463         3.49339         568625.16         4148950.16         568625.16_4148950.16         4.10842         1.71318         10.73451           568645.16         4148950.16         568645.16_4148950.16         3.1813         1.5213         3.30934         568645.16         4148950.16         568645.16_4148950.16         3.86146         1.63175         10.06638           56865.16         4148950.16         568665.16_4148950.16         3.01815         1.45328         3.13537         568665.16         4148950.16         568665.16_4148950.16         3.62953         1.55755         9.44035           568705.16         4148950.16         568705.16_4148950.16         2.86736         1.39072         2.97522         568655.16         4148950.16         568705.16_4148950.16	568545.16	4148950.16	568545.16_4148950.16	4.02828	1.93463	4.21602	568545.16	4148950.16	568545.16_4148950.16	5.23235	2.11214	13.83199
568605.16         4148950.16         568605.16_4148950.16         3.51476         1.67036         3.66504         568605.16         4148950.16         568605.16_4148950.16         4.3662         1.80191         11.43851           568625.16         4148950.16         568625.16_4148950.16         568625.16_4148950.16         3.5365         1.59463         3.49339         568625.16         4148950.16         568625.16_4148950.16         4.10842         1.71318         10.73451           568645.16         4148950.16         568625.16_4148950.16         3.86146         1.63175         10.06638           56865.16         4148950.16         568665.16_4148950.16         3.01815         1.45328         3.13537         568665.16         4148950.16         568665.16_4148950.16         3.62953         1.55575         9.44035           56865.16         4148950.16         568665.16_4148950.16         3.01815         1.45328         3.13537         568665.16         4148950.16         568665.16_4148950.16         3.62953         1.55575         9.44035           568705.16         4148950.16         568685.16_4148950.16         2.86736         1.39072         2.97522         568685.16         4148950.16         568685.16_4148950.16         3.21141         1.41845         8.30222           568725.16         <	568565.16	4148950.16	568565.16_4148950.16	3.83606	1.83707	4.00703	568565.16	4148950.16	568565.16_4148950.16	4.92335	2.00031	12.97335
568625.16         4148950.16         568625.16_4148950.16         3.35365         1.59463         3.49339         568625.16         4148950.16         568625.16_4148950.16         4.10842         1.71318         10.73451           568645.16         4148950.16         568645.16_4148950.16         3.1813         1.5213         3.30934         568645.16         4148950.16         568645.16_4148950.16         3.86146         1.63175         10.06638           56865.16         4148950.16         568665.16_4148950.16         3.01815         1.45328         3.13537         568665.16         4148950.16         568665.16_4148950.16         3.62953         1.5575         9.44035           568685.16         4148950.16         568685.16_4148950.16         2.86736         1.39072         2.97522         568685.16         4148950.16         568685.16_4148950.16         3.41278         1.48498         8.85305           568705.16         4148950.16         568705.16_4148950.16         2.73086         1.33362         2.82964         568705.16         4148950.16         568705.16_4148950.16         3.21141         1.41845         8.30222           568725.16         4148970.16         568725.16_4148950.16         2.5841         1.27694         2.67423         568725.16         4148970.16         567345.16_4148970.16	568585.16	4148950.16	568585.16_4148950.16	3.68485	1.7525	3.84539	568585.16	4148950.16	568585.16_4148950.16	4.64006	1.89722	12.18798
568645.16         4148950.16         568645.16_4148950.16         3.1813         1.5213         3.30934         568645.16         4148950.16         568645.16_4148950.16         3.86146         1.63175         10.06638           568665.16         4148950.16         568665.16_4148950.16         3.01815         1.45328         3.13537         568665.16         4148950.16         568665.16_4148950.16         3.62953         1.55575         9.44035           568685.16         4148950.16         568685.16_4148950.16         2.86736         1.39072         2.97522         568685.16         4148950.16         568685.16_4148950.16         3.41278         1.48498         8.85305           568705.16         4148950.16         568705.16_4148950.16         2.73086         1.33362         2.82964         568705.16         4148950.16         568705.16_4148950.16         3.21141         1.41845         8.30222           568725.16         4148950.16         568725.16_4148950.16         2.5841         1.27694         2.67423         568725.16         4148950.16         568725.16_4148950.16         3.02029         1.35736         7.78397           567345.16         4148970.16         567345.16_4148970.16         0.05341         0.12691         0.05368         567345.16         4148970.16         567345.16_4148970.16	568605.16	4148950.16	568605.16_4148950.16	3.51476	1.67036	3.66504	568605.16	4148950.16	568605.16_4148950.16	4.3662	1.80191	11.43851
568665.16         4148950.16         568665.16         4148950.16         568665.16         4148950.16         568665.16         4148950.16         3.62953         1.55575         9.44035           568685.16         4148950.16         568685.16         4148950.16         568665.16         4148950.16         568665.16         4148950.16         3.62953         1.55575         9.44035           568705.16         4148950.16         568685.16         4148950.16         568685.16         4148950.16         3.62953         1.48498         8.85305           568705.16         4148950.16         568705.16         4148950.16         568705.16         4148950.16         568705.16         4148950.16         568705.16         4148950.16         3.21141         1.41845         8.30222           568725.16         4148950.16         568725.16         4148950.16         568725.16         4148950.16         568725.16         4148950.16         568725.16         4148950.16         568725.16         4148950.16         567345.16         4148970.16         567345.16         4148970.16         567345.16         4148970.16         567345.16         4148970.16         567365.16         4148970.16         567365.16         4148970.16         567365.16         4148970.16         567365.16         4148970.16         <	568625.16	4148950.16	568625.16_4148950.16	3.35365	1.59463	3.49339	568625.16	4148950.16	568625.16_4148950.16	4.10842	1.71318	10.73451
568685.16         4148950.16         568685.16_4148950.16         2.86736         1.39072         2.97522         568685.16         4148950.16         568685.16_4148950.16         3.41278         1.48498         8.85305           568705.16         4148950.16         568705.16_4148950.16         2.73086         1.33362         2.82964         568705.16         4148950.16         568705.16_4148950.16         3.21141         1.41845         8.30222           568725.16         4148950.16         568725.16_4148950.16         2.5841         1.27694         2.67423         568725.16         4148950.16         568725.16_4148950.16         3.02029         1.35736         7.78397           567345.16         4148970.16         567345.16_4148970.16         0.05341         0.12691         0.05368         567345.16         4148970.16         567345.16_4148970.16         0.05777         0.14471         0.12006           567365.16         4148970.16         567365.16_4148970.16         0.05785         0.13533         0.05597         567365.16         4148970.16         567385.16_4148970.16         0.06274         0.16581         0.13039           567385.16         4148970.16         567385.16_4148970.16         0.06274         0.16581         0.13039	568645.16	4148950.16	568645.16_4148950.16	3.1813	1.5213	3.30934	568645.16	4148950.16	568645.16_4148950.16	3.86146	1.63175	10.06638
568705.16         4148950.16         568705.16_4148950.16         2.73086         1.33362         2.82964         568705.16         4148950.16         568705.16_4148950.16         3.21141         1.41845         8.30222           568725.16         4148950.16         568725.16_4148950.16         2.5841         1.27694         2.67423         568725.16         4148950.16         568725.16_4148950.16         3.02029         1.35736         7.78397           567345.16         4148970.16         567345.16_4148970.16         0.05341         0.12691         0.05368         567345.16         4148970.16         567345.16_4148970.16         0.05777         0.14471         0.12006           567365.16         4148970.16         567365.16_4148970.16         0.05555         0.13533         0.05597         567365.16         4148970.16         567365.16_4148970.16         0.06017         0.1547         0.12507           567385.16         4148970.16         567385.16_4148970.16         0.05785         0.14466         0.05841         567385.16         4148970.16         567385.16_4148970.16         0.06274         0.16581         0.13039	568665.16	4148950.16	568665.16_4148950.16	3.01815	1.45328	3.13537	568665.16	4148950.16	568665.16_4148950.16	3.62953	1.55575	9.44035
568725.16         4148950.16         568725.16_4148950.16         2.5841         1.27694         2.67423         568725.16         4148950.16         568725.16_4148950.16         3.02029         1.35736         7.78397           567345.16         4148970.16         567345.16_4148970.16         0.05341         0.12691         0.05368         567345.16         4148970.16         567345.16_4148970.16         0.05777         0.14471         0.12006           567365.16         4148970.16         567365.16_4148970.16         0.05555         0.13533         0.05597         567365.16         4148970.16         567365.16_4148970.16         0.06017         0.1547         0.12507           567385.16         4148970.16         567385.16_4148970.16         0.06274         0.16581         0.13039	568685.16	4148950.16	568685.16_4148950.16	2.86736	1.39072	2.97522	568685.16	4148950.16	568685.16_4148950.16	3.41278	1.48498	8.85305
567345.16         4148970.16         567345.16_4148970.16         0.05341         0.12691         0.05368         567345.16         4148970.16         567345.16_4148970.16         0.05777         0.14471         0.12006           567365.16         4148970.16         567365.16_4148970.16         0.05555         0.13533         0.05597         567365.16         4148970.16         567365.16_4148970.16         0.06017         0.12507           567385.16         4148970.16         567385.16_4148970.16         0.06274         0.16581         0.13039	568705.16	4148950.16	568705.16_4148950.16	2.73086	1.33362	2.82964	568705.16	4148950.16	568705.16_4148950.16	3.21141	1.41845	8.30222
567365.16       4148970.16       567365.16_4148970.16       0.05555       0.13533       0.05597       567365.16       4148970.16       567365.16_4148970.16       0.06017       0.1547       0.12507         567385.16       4148970.16       567385.16_4148970.16       0.06274       0.16581       0.13039	568725.16	4148950.16	568725.16_4148950.16	2.5841	1.27694	2.67423	568725.16	4148950.16	568725.16_4148950.16	3.02029	1.35736	7.78397
567385.16 4148970.16 567385.16_4148970.16 0.05785 0.14466 0.05841 567385.16 4148970.16 567385.16_4148970.16 0.06274 0.16581 0.13039	567345.16	4148970.16	567345.16_4148970.16	0.05341	0.12691	0.05368	567345.16	4148970.16	567345.16_4148970.16	0.05777	0.14471	0.12006
-	567365.16	4148970.16	567365.16_4148970.16	0.05555	0.13533	0.05597	567365.16	4148970.16	567365.16_4148970.16	0.06017	0.1547	0.12507
567405.16 4148970.16 567405.16_4148970.16 0.06023 0.15474 0.06095 567405.16 4148970.16 567405.16_4148970.16 0.06546 0.17807 0.13602	567385.16	4148970.16	567385.16_4148970.16	0.05785	0.14466	0.05841	567385.16	4148970.16	567385.16_4148970.16	0.06274	0.16581	0.13039
	567405.16	4148970.16	567405.16_4148970.16	0.06023	0.15474	0.06095	567405.16	4148970.16	567405.16_4148970.16	0.06546	0.17807	0.13602

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567425.16	4148970.16	567425.16_4148970.16	0.06285	0.1662	0.06371	567425.16	4148970.16	567425.16_4148970.16	0.06842	0.1919	0.14208
567445.16	4148970.16	567445.16_4148970.16	0.06594	0.18016	0.06689	567445.16	4148970.16	567445.16_4148970.16	0.07176	0.20799	0.1488
567465.16	4148970.16	567465.16_4148970.16	0.06913	0.19532	0.07018	567465.16	4148970.16	567465.16_4148970.16	0.07535	0.22593	0.15589
567485.16	4148970.16	567485.16_4148970.16	0.07235	0.2115	0.07351	567485.16	4148970.16	567485.16_4148970.16	0.07901	0.2459	0.16333
567505.16	4148970.16	567505.16_4148970.16	0.07641	0.23252	0.07758	567505.16	4148970.16	567505.16_4148970.16	0.08337	0.26998	0.17181
567525.16	4148970.16	567525.16_4148970.16	0.08058	0.25552	0.08177	567525.16	4148970.16	567525.16_4148970.16	0.08795	0.29725	0.18078
567545.16	4148970.16	567545.16_4148970.16	0.08497	0.28134	0.08618	567545.16	4148970.16	567545.16_4148970.16	0.09288	0.3286	0.1904
567565.16	4148970.16	567565.16_4148970.16	0.08968	0.31099	0.0909	567565.16	4148970.16	567565.16_4148970.16	0.09823	0.36516	0.20082
567585.16	4148970.16	567585.16_4148970.16	0.09495	0.3464	0.09617	567585.16	4148970.16	567585.16_4148970.16	0.10417	0.40871	0.21231
567605.16	4148970.16	567605.16_4148970.16	0.10068	0.38795	0.1019	567605.16	4148970.16	567605.16_4148970.16	0.11067	0.46058	0.22488
567625.16	4148970.16	567625.16_4148970.16	0.10694	0.4374	0.10819	567625.16	4148970.16	567625.16_4148970.16	0.11785	0.52319	0.23873
567645.16	4148970.16	567645.16_4148970.16	0.11418	0.49961	0.11545	567645.16	4148970.16	567645.16_4148970.16	0.12597	0.60106	0.25434
567665.16	4148970.16	567665.16_4148970.16	0.12178	0.573	0.12319	567665.16	4148970.16	567665.16_4148970.16	0.13481	0.69651	0.27143
567685.16	4148970.16	567685.16_4148970.16	0.13044	0.66667	0.13203	567685.16	4148970.16	567685.16_4148970.16	0.14481	0.81844	0.29076
567705.16	4148970.16	567705.16_4148970.16	0.13987	0.78403	0.14173	567705.16	4148970.16	567705.16_4148970.16	0.15595	0.97511	0.31235
567725.16	4148970.16	567725.16_4148970.16	0.15154	0.94974	0.15358	567725.16	4148970.16	567725.16_4148970.16	0.16912	1.18887	0.33764
567765.16	4148970.16	567765.16_4148970.16	0.17747	1.44929	0.17998	567765.16	4148970.16	567765.16_4148970.16	0.20028	1.86592	0.39819
567785.16	4148970.16	567785.16_4148970.16	0.19385	1.85786	0.1963	567785.16	4148970.16	567785.16_4148970.16	0.21988	2.42005	0.43651
567805.16	4148970.16	567805.16_4148970.16	0.21451	2.44882	0.2165	567805.16	4148970.16	567805.16_4148970.16	0.24365	3.20312	0.48333
567825.16	4148970.16	567825.16_4148970.16	0.23402	3.10387	0.23599	567825.16	4148970.16	567825.16_4148970.16	0.26951	4.20016	0.53692
567845.16	4148970.16	567845.16_4148970.16	0.25956	4.02109	0.26137	567845.16	4148970.16	567845.16_4148970.16	0.30163	5.5268	0.60536
567865.16	4148970.16	567865.16_4148970.16	0.29627	5.61465	0.29777	567865.16	4148970.16	567865.16_4148970.16	0.34327	7.25376	0.69626
568065.16	4148970.16	568065.16_4148970.16	1.165	10.06507	1.19999	568065.16	4148970.16	568065.16_4148970.16	1.60963	13.9419	4.10441
568085.16	4148970.16	568085.16_4148970.16	1.32975	8.78046	1.36486	568085.16	4148970.16	568085.16_4148970.16	1.89489	12.09046	4.89027
568105.16	4148970.16	568105.16_4148970.16	1.51489	7.76324	1.55116	568105.16	4148970.16	568105.16_4148970.16	2.23014	10.53705	5.80812
568125.16	4148970.16	568125.16_4148970.16	1.73465	6.95374	1.77195	568125.16	4148970.16	568125.16_4148970.16	2.63748	9.25442	6.91604
568145.16	4148970.16	568145.16_4148970.16	1.99857	6.28069	2.03692	568145.16	4148970.16	568145.16_4148970.16	3.15158	8.19138	8.34484
568165.16	4148970.16	568165.16_4148970.16	2.33256	5.72334	2.37222	568165.16	4148970.16	568165.16_4148970.16	3.84111	7.30466	10.35268
568205.16	4148970.16	568205.16_4148970.16	3.19606	4.79583	3.198	568205.16	4148970.16	568205.16_4148970.16	6.13651	5.955	18.04338
568225.16	4148970.16	568225.16_4148970.16	3.53732	4.43519	3.39987	568225.16	4148970.16	568225.16_4148970.16	7.29339	5.44434	22.87966
568245.16	4148970.16	568245.16_4148970.16	3.70464	4.14945	3.50768	568245.16	4148970.16	568245.16_4148970.16	7.77355	5.01342	24.77029
568265.16	4148970.16	568265.16_4148970.16	3.69548	3.89354	3.60101	568265.16	4148970.16	568265.16_4148970.16	7.30651	4.64198	22.94323
568285.16	4148970.16	568285.16_4148970.16	3.73329	3.6632	3.74277	568285.16	4148970.16	568285.16_4148970.16	6.87417	4.31276	20.45049
568305.16	4148970.16	568305.16_4148970.16	3.87764	3.43791	3.95659	568305.16	4148970.16	568305.16_4148970.16	6.72731	4.02358	18.98517
568325.16	4148970.16	568325.16_4148970.16	4.11075	3.24655	4.26121	568325.16	4148970.16	568325.16_4148970.16	6.67693	3.75879	18.25272
568345.16	4148970.16	568345.16_4148970.16	4.05237	3.01257	4.2072	568345.16	4148970.16	568345.16_4148970.16	6.47162	3.51607	17.59933
568365.16	4148970.16	568365.16_4148970.16	3.90384	2.7874	4.04045	568365.16	4148970.16	568365.16_4148970.16	6.24925	3.28427	16.95588
568385.16	4148970.16	568385.16_4148970.16	4.06734	2.67275	4.2408	568385.16	4148970.16	568385.16_4148970.16	6.17347	3.09174	16.74784
568425.16	4148970.16	568425.16_4148970.16	4.16934	2.44252	4.38658	568425.16	4148970.16	568425.16_4148970.16	5.84157	2.74337	15.85379

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568445.16	4148970.16	568445.16_4148970.16	4.03927	2.31278	4.24949	568445.16	4148970.16	568445.16_4148970.16	5.56731	2.58669	15.14381
568465.16	4148970.16	568465.16_4148970.16	3.91381	2.19685	4.11429	568465.16	4148970.16	568465.16_4148970.16	5.28871	2.44233	14.3875
568485.16	4148970.16	568485.16_4148970.16	3.76931	2.08719	3.9533	568485.16	4148970.16	568485.16_4148970.16	5.01015	2.3091	13.60193
568505.16	4148970.16	568505.16_4148970.16	3.61052	1.98236	3.77405	568505.16	4148970.16	568505.16_4148970.16	4.74104	2.18596	12.82533
568525.16	4148970.16	568525.16_4148970.16	3.44702	1.88269	3.59052	568525.16	4148970.16	568525.16_4148970.16	4.47992	2.07199	12.08263
568545.16	4148970.16	568545.16_4148970.16	3.35438	1.8023	3.48626	568545.16	4148970.16	568545.16_4148970.16	4.26596	1.96665	11.42331
568565.16	4148970.16	568565.16_4148970.16	3.21727	1.71817	3.33893	568565.16	4148970.16	568565.16_4148970.16	4.04549	1.86881	10.78704
568585.16	4148970.16	568585.16_4148970.16	3.10054	1.64272	3.21577	568585.16	4148970.16	568585.16_4148970.16	3.84032	1.77773	10.20022
568605.16	4148970.16	568605.16_4148970.16	2.96858	1.56879	3.07715	568605.16	4148970.16	568605.16_4148970.16	3.64051	1.69347	9.63931
568625.16	4148970.16	568625.16_4148970.16	2.85705	1.50301	2.95794	568625.16	4148970.16	568625.16_4148970.16	3.45365	1.61382	9.11403
568645.16	4148970.16	568645.16_4148970.16	2.73684	1.43936	2.82915	568645.16	4148970.16	568645.16_4148970.16	3.27253	1.54023	8.61038
568665.16	4148970.16	568665.16_4148970.16	2.61962	1.37972	2.7041	568665.16	4148970.16	568665.16_4148970.16	3.09953	1.47148	8.13103
568685.16	4148970.16	568685.16_4148970.16	2.49211	1.32098	2.56998	568685.16	4148970.16	568685.16_4148970.16	2.93195	1.40822	7.66913
568705.16	4148970.16	568705.16_4148970.16	2.36542	1.26488	2.43707	568705.16	4148970.16	568705.16_4148970.16	2.77228	1.34899	7.22775
568725.16	4148970.16	568725.16_4148970.16	2.26601	1.21677	2.33099	568725.16	4148970.16	568725.16_4148970.16	2.62674	1.29239	6.82276
567365.16	4148990.16	567365.16_4148990.16	0.05679	0.1378	0.05835	567365.16	4148990.16	567365.16_4148990.16	0.06123	0.15717	0.12953
567385.16	4148990.16	567385.16_4148990.16	0.05919	0.14754	0.06087	567385.16	4148990.16	567385.16_4148990.16	0.06389	0.16864	0.13502
567405.16	4148990.16	567405.16_4148990.16	0.06164	0.15788	0.06345	567405.16	4148990.16	567405.16_4148990.16	0.06669	0.18123	0.14078
567425.16	4148990.16	567425.16_4148990.16	0.06427	0.16938	0.06618	567425.16	4148990.16	567425.16_4148990.16	0.0697	0.19534	0.14693
567445.16	4148990.16	567445.16_4148990.16	0.06752	0.18401	0.06946	567445.16	4148990.16	567445.16_4148990.16	0.0732	0.212	0.15385
567465.16	4148990.16	567465.16_4148990.16	0.07083	0.19975	0.07281	567465.16	4148990.16	567465.16_4148990.16	0.07685	0.23055	0.16112
567485.16	4148990.16	567485.16_4148990.16	0.07453	0.21808	0.07651	567485.16	4148990.16	567485.16_4148990.16	0.08086	0.25192	0.16904
567505.16	4148990.16	567505.16_4148990.16	0.07817	0.23729	0.08019	567505.16	4148990.16	567505.16_4148990.16	0.08504	0.27569	0.17731
567525.16	4148990.16	567525.16_4148990.16	0.08233	0.26035	0.08435	567525.16	4148990.16	567525.16_4148990.16	0.08968	0.30362	0.18645
567545.16	4148990.16	567545.16_4148990.16	0.08687	0.28702	0.08888	567545.16	4148990.16	567545.16_4148990.16	0.09476	0.33615	0.19639
567565.16	4148990.16	567565.16_4148990.16	0.09182	0.31796	0.09383	567565.16	4148990.16	567565.16_4148990.16	0.10032	0.37431	0.20724
567585.16	4148990.16	567585.16_4148990.16	0.09725	0.35443	0.09929	567585.16	4148990.16	567585.16_4148990.16	0.10643	0.41961	0.21916
567605.16	4148990.16	567605.16_4148990.16	0.10319	0.39758	0.10529	567605.16	4148990.16	567605.16_4148990.16	0.11316	0.47383	0.23228
567625.16	4148990.16	567625.16_4148990.16	0.10974	0.44946	0.11195	567625.16	4148990.16	567625.16_4148990.16	0.12061	0.53962	0.24681
567645.16	4148990.16	567645.16_4148990.16	0.117	0.51268	0.11935	567645.16	4148990.16	567645.16_4148990.16	0.1289	0.62053	0.26296
567665.16	4148990.16	567665.16_4148990.16	0.12532	0.59313	0.12781	567665.16	4148990.16	567665.16_4148990.16	0.13829	0.72256	0.2812
567685.16	4148990.16	567685.16_4148990.16	0.13446	0.6931	0.1371	567685.16	4148990.16	567685.16_4148990.16	0.14875	0.85137	0.30155
567705.16	4148990.16	567705.16_4148990.16	0.14444	0.81866	0.1472	567705.16	4148990.16	567705.16_4148990.16	0.16045	1.0163	0.32432
567745.16	4148990.16	567745.16_4148990.16	0.16824	1.19556	0.17086	567745.16	4148990.16	567745.16_4148990.16	0.18886	1.51698	0.37986
567765.16	4148990.16	567765.16_4148990.16	0.18303	1.48265	0.18522	567765.16	4148990.16	567765.16_4148990.16	0.20651	1.89772	0.41474
567785.16	4148990.16	567785.16_4148990.16	0.20031	1.85846	0.20187	567785.16	4148990.16	567785.16_4148990.16	0.22714	2.40041	0.45635
567805.16	4148990.16	567805.16_4148990.16	0.22091	2.34307	0.22173	567805.16	4148990.16	567805.16_4148990.16	0.25155	3.05513	0.50708
567825.16	4148990.16	567825.16_4148990.16	0.24231	2.88198	0.24279	567825.16	4148990.16	567825.16_4148990.16	0.27916	3.86224	0.56754
567845.16	4148990.16	567845.16_4148990.16	0.27001	3.59992	0.27017	567845.16	4148990.16	567845.16_4148990.16	0.3132	4.8945	0.64455

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567865.16	4148990.16	567865.16_4148990.16	0.30144	4.45174	0.30174	567865.16	4148990.16	567865.16_4148990.16	0.35336	6.13808	0.73964
567885.16	4148990.16	567885.16_4148990.16	0.34174	5.71394	0.34259	567885.16	4148990.16	567885.16_4148990.16	0.40297	7.59887	0.86077
567905.16	4148990.16	567905.16_4148990.16	0.38836	7.90977	0.39095	567905.16	4148990.16	567905.16_4148990.16	0.46207	9.15316	1.01131
568045.16	4148990.16	568045.16_4148990.16	0.98703	8.12355	1.02078	568045.16	4148990.16	568045.16_4148990.16	1.30996	11.31128	3.342
568065.16	4148990.16	568065.16_4148990.16	1.12108	7.28937	1.15985	568065.16	4148990.16	568065.16_4148990.16	1.52476	10.03323	3.93785
568085.16	4148990.16	568085.16_4148990.16	1.27534	6.60379	1.31953	568085.16	4148990.16	568085.16_4148990.16	1.77775	8.92378	4.64754
568105.16	4148990.16	568105.16_4148990.16	1.45167	6.00758	1.50032	568105.16	4148990.16	568105.16_4148990.16	2.07581	7.9628	5.48563
568125.16	4148990.16	568125.16_4148990.16	1.65495	5.47752	1.7047	568125.16	4148990.16	568125.16_4148990.16	2.4324	7.13738	6.50313
568145.16	4148990.16	568145.16_4148990.16	1.90347	5.02071	1.95955	568145.16	4148990.16	568145.16_4148990.16	2.90543	6.43062	7.86484
568185.16	4148990.16	568185.16_4148990.16	2.53493	4.2509	2.64507	568185.16	4148990.16	568185.16_4148990.16	4.14936	5.31256	12.06883
568205.16	4148990.16	568205.16_4148990.16	2.85689	3.95311	2.96934	568205.16	4148990.16	568205.16_4148990.16	4.85445	4.87523	14.61054
568225.16	4148990.16	568225.16_4148990.16	3.06888	3.69911	3.14444	568225.16	4148990.16	568225.16_4148990.16	5.36453	4.5033	16.4509
568245.16	4148990.16	568245.16_4148990.16	3.18576	3.48497	3.26916	568245.16	4148990.16	568245.16_4148990.16	5.51543	4.18396	17.09195
568265.16	4148990.16	568265.16_4148990.16	3.17852	3.28619	3.30205	568265.16	4148990.16	568265.16_4148990.16	5.33178	3.90941	16.59192
568285.16	4148990.16	568285.16_4148990.16	3.24101	3.15083	3.40678	568285.16	4148990.16	568285.16_4148990.16	5.06857	3.64691	15.49908
568305.16	4148990.16	568305.16_4148990.16	3.14852	2.96211	3.29551	568305.16	4148990.16	568305.16_4148990.16	4.8562	3.44531	14.50337
568325.16	4148990.16	568325.16_4148990.16	3.20303	2.81116	3.35233	568325.16	4148990.16	568325.16_4148990.16	4.79851	3.24983	13.90303
568345.16	4148990.16	568345.16_4148990.16	3.28736	2.67256	3.44232	568345.16	4148990.16	568345.16_4148990.16	4.79646	3.06901	13.55511
568365.16	4148990.16	568365.16_4148990.16	3.32623	2.53452	3.48036	568365.16	4148990.16	568365.16_4148990.16	4.77843	2.90233	13.3111
568385.16	4148990.16	568385.16_4148990.16	3.36961	2.41479	3.52747	568385.16	4148990.16	568385.16_4148990.16	4.7402	2.74591	13.10213
568425.16	4148990.16	568425.16_4148990.16	3.35512	2.19542	3.51592	568425.16	4148990.16	568425.16_4148990.16	4.54829	2.46441	12.52265
568445.16	4148990.16	568445.16_4148990.16	3.28689	2.0912	3.44232	568445.16	4148990.16	568445.16_4148990.16	4.39745	2.33767	12.10537
568465.16	4148990.16	568465.16_4148990.16	3.20867	1.99586	3.35521	568465.16	4148990.16	568465.16_4148990.16	4.2287	2.21943	11.63065
568485.16	4148990.16	568485.16_4148990.16	3.12148	1.90744	3.2549	568485.16	4148990.16	568485.16_4148990.16	4.05039	2.10905	11.11566
568505.16	4148990.16	568505.16_4148990.16	3.0037	1.81891	3.12034	568505.16	4148990.16	568505.16_4148990.16	3.86435	2.00593	10.57445
568525.16	4148990.16	568525.16_4148990.16	2.86624	1.73102	2.96711	568525.16	4148990.16	568525.16_4148990.16	3.67141	1.90945	10.03122
568565.16	4148990.16	568565.16_4148990.16	2.71477	1.5956	2.80073	568565.16	4148990.16	568565.16_4148990.16	3.36168	1.73543	9.07179
568585.16	4148990.16	568585.16_4148990.16	2.62285	1.52945	2.70395	568585.16	4148990.16	568585.16_4148990.16	3.20958	1.6563	8.61986
568605.16	4148990.16	568605.16_4148990.16	2.52778	1.46602	2.60394	568605.16	4148990.16	568605.16_4148990.16	3.06273	1.58247	8.19117
568625.16	4148990.16	568625.16_4148990.16	2.43945	1.40743	2.50982	568625.16	4148990.16	568625.16_4148990.16	2.92253	1.51286	7.78662
568645.16	4148990.16	568645.16_4148990.16	2.35339	1.35251	2.41777	568645.16	4148990.16	568645.16_4148990.16	2.78749	1.44741	7.40116
568665.16	4148990.16	568665.16_4148990.16	2.24386	1.29507	2.30355	568665.16	4148990.16	568665.16_4148990.16	2.65193	1.38793	7.02244
568685.16	4148990.16	568685.16_4148990.16	2.14712	1.2431	2.20242	568685.16	4148990.16	568685.16_4148990.16	2.5237	1.33069	6.6605
568705.16	4148990.16	568705.16_4148990.16	2.05911	1.19547	2.10965	568705.16	4148990.16	568705.16_4148990.16	2.40235	1.27686	6.31503
568725.16	4148990.16	568725.16_4148990.16	1.99065	1.15455	2.03563	568725.16	4148990.16	568725.16_4148990.16	2.29061	1.22537	5.99531
567325.16	4149010.16	567325.16_4149010.16	0.05352	0.12332	0.05571	567325.16	4149010.16	567325.16_4149010.16	0.05743	0.13995	0.12318
567385.16	4149010.16	567385.16_4149010.16	0.06054	0.15087	0.06295	567385.16	4149010.16	567385.16_4149010.16	0.06517	0.17205	0.139
567405.16	4149010.16	567405.16_4149010.16	0.06304	0.16144	0.06552	567405.16	4149010.16	567405.16_4149010.16	0.06801	0.18501	0.14482
567425.16	4149010.16	567425.16_4149010.16	0.06593	0.17407	0.06842	567425.16	4149010.16	567425.16_4149010.16	0.07123	0.19991	0.15123

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567445.16	4149010.16	567445.16_4149010.16	0.06916	0.18874	0.07164	567445.16	4149010.16	567445.16_4149010.16	0.07473	0.21695	0.15818
567465.16	4149010.16	567465.16_4149010.16	0.07258	0.20502	0.07503	567465.16	4149010.16	567465.16_4149010.16	0.07848	0.23618	0.1656
567485.16	4149010.16	567485.16_4149010.16	0.07637	0.22394	0.07878	567485.16	4149010.16	567485.16_4149010.16	0.08259	0.25834	0.17369
567505.16	4149010.16	567505.16_4149010.16	0.08017	0.24405	0.08258	567505.16	4149010.16	567505.16_4149010.16	0.08692	0.28318	0.18222
567525.16	4149010.16	567525.16_4149010.16	0.08443	0.26774	0.08683	567525.16	4149010.16	567525.16_4149010.16	0.09169	0.3122	0.19158
567545.16	4149010.16	567545.16_4149010.16	0.08895	0.29453	0.09136	567545.16	4149010.16	567545.16_4149010.16	0.09684	0.3458	0.20172
567565.16	4149010.16	567565.16_4149010.16	0.09406	0.32681	0.09651	567565.16	4149010.16	567565.16_4149010.16	0.10258	0.38579	0.21295
567585.16	4149010.16	567585.16_4149010.16	0.09958	0.3643	0.10209	567585.16	4149010.16	567585.16_4149010.16	0.10885	0.43309	0.22524
567605.16	4149010.16	567605.16_4149010.16	0.10585	0.41033	0.10842	567605.16	4149010.16	567605.16_4149010.16	0.11588	0.4905	0.23894
567625.16	4149010.16	567625.16_4149010.16	0.11277	0.46589	0.11538	567625.16	4149010.16	567625.16_4149010.16	0.12366	0.56028	0.2541
567645.16	4149010.16	567645.16_4149010.16	0.12032	0.53301	0.12295	567645.16	4149010.16	567645.16_4149010.16	0.13229	0.64576	0.27087
567665.16	4149010.16	567665.16_4149010.16	0.12882	0.61709	0.13138	567665.16	4149010.16	567665.16_4149010.16	0.14198	0.75261	0.28967
567685.16	4149010.16	567685.16_4149010.16	0.13802	0.71991	0.14041	567685.16	4149010.16	567685.16_4149010.16	0.15276	0.88608	0.3106
567725.16	4149010.16	567725.16_4149010.16	0.16066	1.02439	0.16201	567725.16	4149010.16	567725.16_4149010.16	0.17912	1.27624	0.362
567745.16	4149010.16	567745.16_4149010.16	0.17423	1.24094	0.17475	567745.16	4149010.16	567745.16_4149010.16	0.19518	1.55604	0.39397
567765.16	4149010.16	567765.16_4149010.16	0.18962	1.51	0.18919	567765.16	4149010.16	567765.16_4149010.16	0.21362	1.9101	0.43176
567785.16	4149010.16	567785.16_4149010.16	0.20739	1.83876	0.20599	567785.16	4149010.16	567785.16_4149010.16	0.23508	2.35267	0.47731
567805.16	4149010.16	567805.16_4149010.16	0.22759	2.22501	0.2254	567805.16	4149010.16	567805.16_4149010.16	0.26004	2.89499	0.53257
567825.16	4149010.16	567825.16_4149010.16	0.25121	2.6809	0.24838	567825.16	4149010.16	567825.16_4149010.16	0.28945	3.55469	0.60043
567845.16	4149010.16	567845.16_4149010.16	0.27954	3.22795	0.27629	567845.16	4149010.16	567845.16_4149010.16	0.32454	4.35189	0.6843
567865.16	4149010.16	567865.16_4149010.16	0.31288	3.86919	0.30964	567865.16	4149010.16	567865.16_4149010.16	0.3662	5.2944	0.78753
567885.16	4149010.16	567885.16_4149010.16	0.35519	4.73024	0.35301	567885.16	4149010.16	567885.16_4149010.16	0.41699	6.39942	0.91709
567905.16	4149010.16	567905.16_4149010.16	0.39892	5.65266	0.39943	567905.16	4149010.16	567905.16_4149010.16	0.47462	7.46249	1.07149
568005.16	4149010.16	568005.16_4149010.16	0.74753	6.68955	0.77387	568005.16	4149010.16	568005.16_4149010.16	0.94879	9.44367	2.39439
568125.16	4149010.16	568125.16_4149010.16	1.5711	4.2798	1.62981	568125.16	4149010.16	568125.16_4149010.16	2.24797	5.53301	6.19302
568145.16	4149010.16	568145.16_4149010.16	1.8111	4.00364	1.89038	568145.16	4149010.16	568145.16_4149010.16	2.64682	5.0707	7.44388
568165.16	4149010.16	568165.16_4149010.16	2.05529	3.71778	2.16473	568165.16	4149010.16	568165.16_4149010.16	3.07098	4.66302	8.90551
568185.16	4149010.16	568185.16_4149010.16	2.30965	3.47784	2.44795	568185.16	4149010.16	568185.16_4149010.16	3.51633	4.30639	10.46834
568205.16	4149010.16	568205.16_4149010.16	2.51938	3.2682	2.65313	568205.16	4149010.16	568205.16_4149010.16	3.90266	3.99555	11.8013
568225.16	4149010.16	568225.16_4149010.16	2.67262	3.08646	2.80186	568225.16	4149010.16	568225.16_4149010.16	4.1629	3.72148	12.71969
568245.16	4149010.16	568245.16_4149010.16	2.76457	2.92522	2.91352	568245.16	4149010.16	568245.16_4149010.16	4.25237	3.4849	13.09852
568265.16	4149010.16	568265.16_4149010.16	2.78489	2.7781	2.96141	568265.16	4149010.16	568265.16_4149010.16	4.18894	3.28217	13.01265
568285.16	4149010.16	568285.16_4149010.16	2.80508	2.66875	2.9962	568285.16	4149010.16	568285.16_4149010.16	4.04735	3.09291	12.53242
568305.16	4149010.16	568305.16_4149010.16	2.69235	2.52612	2.85568	568305.16	4149010.16	568305.16_4149010.16	3.87232	2.94449	11.89267
568325.16	4149010.16	568325.16_4149010.16	2.68699	2.42247	2.83963	568325.16	4149010.16	568325.16_4149010.16	3.77803	2.79592	11.44524
568345.16	4149010.16	568345.16_4149010.16	2.68705	2.31655	2.82104	568345.16	4149010.16	568345.16_4149010.16	3.73383	2.66234	11.07883
568365.16	4149010.16	568365.16_4149010.16	2.70424	2.21776	2.82749	568365.16	4149010.16	568365.16_4149010.16	3.71605	2.53691	10.79199
568385.16	4149010.16	568385.16_4149010.16	2.72456	2.12571	2.84469	568385.16	4149010.16	568385.16_4149010.16	3.69825	2.41758	10.56737
568425.16	4149010.16	568425.16_4149010.16	2.73001	1.9567	2.84841	568425.16	4149010.16	568425.16_4149010.16	3.60734	2.19887	10.1419

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568445.16	4149010.16	568445.16_4149010.16	2.70612	1.87847	2.82044	568445.16	4149010.16	568445.16_4149010.16	3.52691	2.09848	9.87387
568465.16	4149010.16	568465.16_4149010.16	2.66428	1.80377	2.77067	568465.16	4149010.16	568465.16_4149010.16	3.42665	2.00328	9.55991
568485.16	4149010.16	568485.16_4149010.16	2.6114	1.73333	2.707	568485.16	4149010.16	568485.16_4149010.16	3.31311	1.91285	9.20994
568505.16	4149010.16	568505.16_4149010.16	2.52702	1.66035	2.61041	568505.16	4149010.16	568505.16_4149010.16	3.18664	1.82928	8.82918
568525.16	4149010.16	568525.16_4149010.16	2.41148	1.58351	2.48417	568525.16	4149010.16	568525.16_4149010.16	3.04439	1.74915	8.42888
568545.16	4149010.16	568545.16_4149010.16	2.35381	1.52533	2.42058	568545.16	4149010.16	568545.16_4149010.16	2.9276	1.67379	8.06447
568565.16	4149010.16	568565.16_4149010.16	2.31574	1.4749	2.37794	568565.16	4149010.16	568565.16_4149010.16	2.82339	1.60154	7.71482
568585.16	4149010.16	568585.16_4149010.16	2.23702	1.4165	2.2948	568585.16	4149010.16	568585.16_4149010.16	2.70772	1.53477	7.35951
568605.16	4149010.16	568605.16_4149010.16	2.16216	1.36163	2.21524	568605.16	4149010.16	568605.16_4149010.16	2.59664	1.47153	7.02076
568625.16	4149010.16	568625.16_4149010.16	2.09154	1.31036	2.1397	568625.16	4149010.16	568625.16_4149010.16	2.48981	1.41152	6.69985
568645.16	4149010.16	568645.16_4149010.16	2.03188	1.26436	2.07533	568645.16	4149010.16	568645.16_4149010.16	2.38822	1.35388	6.39778
568665.16	4149010.16	568665.16_4149010.16	1.95748	1.21685	1.99759	568665.16	4149010.16	568665.16_4149010.16	2.28635	1.30078	6.10238
568685.16	4149010.16	568685.16_4149010.16	1.87565	1.1695	1.91327	568685.16	4149010.16	568685.16_4149010.16	2.18576	1.25133	5.8133
568705.16	4149010.16	568705.16_4149010.16	1.81114	1.12862	1.845	568705.16	4149010.16	568705.16_4149010.16	2.0921	1.20318	5.53954
568725.16	4149010.16	568725.16_4149010.16	1.74366	1.08862	1.77404	568725.16	4149010.16	568725.16_4149010.16	2.00141	1.158	5.27845
567325.16	4149030.16	567325.16_4149030.16	0.05462	0.12598	0.05731	567325.16	4149030.16	567325.16_4149030.16	0.05849	0.14278	0.12623
567345.16	4149030.16	567345.16_4149030.16	0.0569	0.13467	0.05961	567345.16	4149030.16	567345.16_4149030.16	0.06097	0.15274	0.13126
567405.16	4149030.16	567405.16_4149030.16	0.06463	0.16629	0.06729	567405.16	4149030.16	567405.16_4149030.16	0.06949	0.18977	0.14828
567425.16	4149030.16	567425.16_4149030.16	0.06751	0.179	0.07014	567425.16	4149030.16	567425.16_4149030.16	0.07272	0.20509	0.1547
567445.16	4149030.16	567445.16_4149030.16	0.07064	0.19337	0.07323	567445.16	4149030.16	567445.16_4149030.16	0.07623	0.22246	0.16162
567465.16	4149030.16	567465.16_4149030.16	0.0743	0.21085	0.0768	567465.16	4149030.16	567465.16_4149030.16	0.08015	0.24273	0.16929
567485.16	4149030.16	567485.16_4149030.16	0.07804	0.22976	0.0805	567485.16	4149030.16	567485.16_4149030.16	0.08431	0.26554	0.17745
567505.16	4149030.16	567505.16_4149030.16	0.0822	0.25191	0.08461	567505.16	4149030.16	567505.16_4149030.16	0.08888	0.29203	0.18637
567525.16	4149030.16	567525.16_4149030.16	0.08657	0.27659	0.08896	567525.16	4149030.16	567525.16_4149030.16	0.09379	0.32244	0.19598
567545.16	4149030.16	567545.16_4149030.16	0.09128	0.30496	0.09366	567545.16	4149030.16	567545.16_4149030.16	0.09914	0.35791	0.20643
567565.16	4149030.16	567565.16_4149030.16	0.0962	0.33676	0.0986	567565.16	4149030.16	567565.16_4149030.16	0.1049	0.39917	0.21772
567585.16	4149030.16	567585.16_4149030.16	0.10222	0.37829	0.10453	567585.16	4149030.16	567585.16_4149030.16	0.11155	0.44991	0.23058
567605.16	4149030.16	567605.16_4149030.16	0.10848	0.42551	0.11069	567605.16	4149030.16	567605.16_4149030.16	0.11873	0.50992	0.2445
567625.16	4149030.16	567625.16_4149030.16	0.1156	0.48414	0.11757	567625.16	4149030.16	567625.16_4149030.16	0.1268	0.58339	0.26005
567645.16	4149030.16	567645.16_4149030.16	0.12344	0.55539	0.12504	567645.16	4149030.16	567645.16_4149030.16	0.13577	0.67329	0.27733
567665.16	4149030.16	567665.16_4149030.16	0.1324	0.64528	0.13337	567665.16	4149030.16	567665.16_4149030.16	0.14594	0.78514	0.29688
567705.16	4149030.16	567705.16_4149030.16	0.1524	0.88329	0.15171	567705.16	4149030.16	567705.16_4149030.16	0.16978	1.09277	0.34355
567725.16	4149030.16	567725.16_4149030.16	0.16438	1.04646	0.16257	567725.16	4149030.16	567725.16_4149030.16	0.18422	1.30502	0.37266
567745.16	4149030.16	567745.16_4149030.16	0.17849	1.25066	0.17541	567745.16	4149030.16	567745.16_4149030.16	0.20099	1.56878	0.40749
567765.16	4149030.16	567765.16_4149030.16	0.1953	1.50335	0.19096	567765.16	4149030.16	567765.16_4149030.16	0.22062	1.89315	0.44976
567785.16	4149030.16	567785.16_4149030.16	0.21351	1.78369	0.20814	567785.16	4149030.16	567785.16_4149030.16	0.2429	2.27708	0.50004
567805.16	4149030.16	567805.16_4149030.16	0.23595	2.12761	0.2297	567805.16	4149030.16	567805.16_4149030.16	0.26946	2.73992	0.56205
567825.16	4149030.16	567825.16_4149030.16	0.26043	2.49759	0.25367	567825.16	4149030.16	567825.16_4149030.16	0.2999	3.2747	0.63623
567845.16	4149030.16	567845.16_4149030.16	0.29047	2.9428	0.28374	567845.16	4149030.16	567845.16_4149030.16	0.33626	3.90306	0.72745

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567865.16	4149030.16	567865.16_4149030.16	0.32668	3.46843	0.32115	567865.16	4149030.16	567865.16_4149030.16	0.37946	4.62605	0.83937
567885.16	4149030.16	567885.16_4149030.16	0.36598	4.00308	0.36339	567885.16	4149030.16	567885.16_4149030.16	0.42891	5.40229	0.97308
567985.16	4149030.16	567985.16_4149030.16	0.66123	4.87314	0.68929	567985.16	4149030.16	567985.16_4149030.16	0.81859	6.78887	2.0746
568025.16	4149030.16	568025.16_4149030.16	0.82251	4.42363	0.86105	568025.16	4149030.16	568025.16_4149030.16	1.05995	6.16237	2.76116
568045.16	4149030.16	568045.16_4149030.16	0.92575	4.23498	0.96698	568045.16	4149030.16	568045.16_4149030.16	1.2118	5.78989	3.19338
568065.16	4149030.16	568065.16_4149030.16	1.04251	4.0279	1.08523	568065.16	4149030.16	568065.16_4149030.16	1.38661	5.40645	3.70575
568085.16	4149030.16	568085.16_4149030.16	1.17036	3.79638	1.21683	568085.16	4149030.16	568085.16_4149030.16	1.58536	5.02547	4.31542
568105.16	4149030.16	568105.16_4149030.16	1.32277	3.58428	1.37863	568105.16	4149030.16	568105.16_4149030.16	1.81684	4.66918	5.05086
568125.16	4149030.16	568125.16_4149030.16	1.49505	3.37645	1.56437	568125.16	4149030.16	568125.16_4149030.16	2.0795	4.33552	5.91525
568145.16	4149030.16	568145.16_4149030.16	1.71651	3.22179	1.81223	568145.16	4149030.16	568145.16_4149030.16	2.40289	4.03085	6.95854
568165.16	4149030.16	568165.16_4149030.16	1.89286	3.01486	2.01229	568165.16	4149030.16	568165.16_4149030.16	2.70103	3.7541	7.9996
568185.16	4149030.16	568185.16_4149030.16	2.07542	2.85453	2.20591	568185.16	4149030.16	568185.16_4149030.16	2.98731	3.50607	8.98383
568205.16	4149030.16	568205.16_4149030.16	2.22194	2.70604	2.34973	568205.16	4149030.16	568205.16_4149030.16	3.21908	3.28187	9.77113
568225.16	4149030.16	568225.16_4149030.16	2.34417	2.57624	2.4819	568225.16	4149030.16	568225.16_4149030.16	3.37921	3.08122	10.35002
568245.16	4149030.16	568245.16_4149030.16	2.42331	2.45656	2.58148	568245.16	4149030.16	568245.16_4149030.16	3.44768	2.90792	10.64022
568265.16	4149030.16	568265.16_4149030.16	2.44311	2.34221	2.61928	568265.16	4149030.16	568265.16_4149030.16	3.43073	2.76039	10.68499
568285.16	4149030.16	568285.16_4149030.16	2.45087	2.25418	2.6346	568285.16	4149030.16	568285.16_4149030.16	3.35885	2.62366	10.49128
568305.16	4149030.16	568305.16_4149030.16	2.37359	2.15318	2.53671	568305.16	4149030.16	568305.16_4149030.16	3.24137	2.51102	10.09039
568325.16	4149030.16	568325.16_4149030.16	2.34562	2.08083	2.49058	568325.16	4149030.16	568325.16_4149030.16	3.14528	2.39942	9.73629
568345.16	4149030.16	568345.16_4149030.16	2.30745	2.00325	2.43378	568345.16	4149030.16	568345.16_4149030.16	3.07313	2.3003	9.43232
568365.16	4149030.16	568365.16_4149030.16	2.281	1.92797	2.38963	568365.16	4149030.16	568365.16_4149030.16	3.02639	2.20786	9.14828
568385.16	4149030.16	568385.16_4149030.16	2.2728	1.85933	2.3708	568385.16	4149030.16	568385.16_4149030.16	2.99525	2.11828	8.89033
568425.16	4149030.16	568425.16_4149030.16	2.27623	1.73709	2.3643	568425.16	4149030.16	568425.16_4149030.16	2.93046	1.95053	8.45376
568445.16	4149030.16	568445.16_4149030.16	2.2582	1.6765	2.34084	568445.16	4149030.16	568445.16_4149030.16	2.87908	1.87259	8.23307
568465.16	4149030.16	568465.16_4149030.16	2.22772	1.61743	2.30327	568465.16	4149030.16	568465.16_4149030.16	2.81438	1.79811	7.99627
568485.16	4149030.16	568485.16_4149030.16	2.19425	1.5625	2.26184	568485.16	4149030.16	568485.16_4149030.16	2.74011	1.72604	7.74315
568505.16	4149030.16	568505.16_4149030.16	2.13362	1.50368	2.1936	568505.16	4149030.16	568505.16_4149030.16	2.65352	1.65905	7.46626
568525.16	4149030.16	568525.16_4149030.16	2.07469	1.44877	2.12898	568525.16	4149030.16	568525.16_4149030.16	2.56415	1.59388	7.18346
568545.16	4149030.16	568545.16_4149030.16	2.03467	1.40203	2.08483	568545.16	4149030.16	568545.16_4149030.16	2.47856	1.53089	6.90744
568585.16	4149030.16	568585.16_4149030.16	1.92304	1.30538	1.96554	568585.16	4149030.16	568585.16_4149030.16	2.3041	1.41514	6.34989
568605.16	4149030.16	568605.16_4149030.16	1.86679	1.25975	1.90464	568605.16	4149030.16	568605.16_4149030.16	2.21975	1.36143	6.07986
568625.16	4149030.16	568625.16_4149030.16	1.80601	1.21462	1.83954	568625.16	4149030.16	568625.16_4149030.16	2.13636	1.31078	5.81794
568645.16	4149030.16	568645.16_4149030.16	1.75906	1.17525	1.78846	568645.16	4149030.16	568645.16_4149030.16	2.05774	1.26128	5.57168
568665.16	4149030.16	568665.16_4149030.16	1.71286	1.13782	1.7389	568665.16	4149030.16	568665.16_4149030.16	1.98055	1.21401	5.33431
568685.16	4149030.16	568685.16_4149030.16	1.65183	1.09775	1.67584	568685.16	4149030.16	568685.16_4149030.16	1.90296	1.17064	5.10087
568705.16	4149030.16	568705.16_4149030.16	1.59914	1.0616	1.6203	568705.16	4149030.16	568705.16_4149030.16	1.82882	1.12855	4.87768
568725.16	4149030.16	568725.16_4149030.16	1.53296	1.02275	1.55256	568725.16	4149030.16	568725.16_4149030.16	1.75464	1.09002	4.66204
567325.16	4149050.16	567325.16_4149050.16	0.0557	0.12898	0.05848	567325.16	4149050.16	567325.16_4149050.16	0.05957	0.14602	0.12863
567345.16	4149050.16	567345.16_4149050.16	0.05813	0.13827	0.06083	567345.16	4149050.16	567345.16_4149050.16	0.06215	0.15646	0.13374

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567365.16	4149050.16	567365.16_4149050.16	0.06051	0.14776	0.06316	567365.16	4149050.16	567365.16_4149050.16	0.06482	0.16775	0.13903
567425.16	4149050.16	567425.16_4149050.16	0.06899	0.18413	0.07139	567425.16	4149050.16	567425.16_4149050.16	0.07421	0.21084	0.15741
567445.16	4149050.16	567445.16_4149050.16	0.07225	0.19928	0.07456	567445.16	4149050.16	567445.16_4149050.16	0.07784	0.22907	0.16449
567465.16	4149050.16	567465.16_4149050.16	0.07577	0.21642	0.07799	567465.16	4149050.16	567465.16_4149050.16	0.08176	0.24984	0.17214
567485.16	4149050.16	567485.16_4149050.16	0.07983	0.23712	0.08191	567485.16	4149050.16	567485.16_4149050.16	0.08615	0.27413	0.1806
567505.16	4149050.16	567505.16_4149050.16	0.08395	0.25947	0.08592	567505.16	4149050.16	567505.16_4149050.16	0.09078	0.30163	0.18958
567525.16	4149050.16	567525.16_4149050.16	0.08848	0.28558	0.09032	567525.16	4149050.16	567525.16_4149050.16	0.09587	0.33372	0.19942
567545.16	4149050.16	567545.16_4149050.16	0.09339	0.31574	0.09505	567545.16	4149050.16	567545.16_4149050.16	0.10142	0.37123	0.21014
567565.16	4149050.16	567565.16_4149050.16	0.0987	0.35084	0.10012	567565.16	4149050.16	567565.16_4149050.16	0.10751	0.4154	0.22184
567585.16	4149050.16	567585.16_4149050.16	0.10419	0.39021	0.10534	567585.16	4149050.16	567585.16_4149050.16	0.11406	0.46715	0.23444
567605.16	4149050.16	567605.16_4149050.16	0.11061	0.43982	0.11127	567605.16	4149050.16	567605.16_4149050.16	0.1215	0.5302	0.24865
567625.16	4149050.16	567625.16_4149050.16	0.1182	0.50336	0.11809	567625.16	4149050.16	567625.16_4149050.16	0.12999	0.60778	0.26484
567645.16	4149050.16	567645.16_4149050.16	0.12658	0.58025	0.1255	567645.16	4149050.16	567645.16_4149050.16	0.13945	0.70193	0.28296
567705.16	4149050.16	567705.16_4149050.16	0.15694	0.91584	0.15215	567705.16	4149050.16	567705.16_4149050.16	0.17504	1.12345	0.35401
567725.16	4149050.16	567725.16_4149050.16	0.16983	1.07684	0.16372	567725.16	4149050.16	567725.16_4149050.16	0.1903	1.32755	0.38641
567745.16	4149050.16	567745.16_4149050.16	0.18448	1.26525	0.1772	567745.16	4149050.16	567745.16_4149050.16	0.20778	1.57092	0.42514
567765.16	4149050.16	567765.16_4149050.16	0.20131	1.48252	0.19311	567765.16	4149050.16	567765.16_4149050.16	0.22792	1.85763	0.47172
567785.16	4149050.16	567785.16_4149050.16	0.2211	1.73431	0.21231	567785.16	4149050.16	567785.16_4149050.16	0.25142	2.19279	0.52803
567805.16	4149050.16	567805.16_4149050.16	0.2443	2.02249	0.23538	567805.16	4149050.16	567805.16_4149050.16	0.27884	2.57998	0.59591
567825.16	4149050.16	567825.16_4149050.16	0.27043	2.33515	0.26215	567825.16	4149050.16	567825.16_4149050.16	0.31045	3.01708	0.67709
567845.16	4149050.16	567845.16_4149050.16	0.30086	2.68165	0.29444	567845.16	4149050.16	567845.16_4149050.16	0.34731	3.50546	0.77492
567865.16	4149050.16	567865.16_4149050.16	0.33662	3.06487	0.33396	567865.16	4149050.16	567865.16_4149050.16	0.39032	4.03779	0.89287
567965.16	4149050.16	567965.16_4149050.16	0.5853	3.82243	0.61435	567965.16	4149050.16	567965.16_4149050.16	0.71446	5.233	1.82047
568005.16	4149050.16	568005.16_4149050.16	0.733	3.57702	0.76775	568005.16	4149050.16	568005.16_4149050.16	0.9163	4.85224	2.39643
568025.16	4149050.16	568025.16_4149050.16	0.81782	3.44311	0.854	568025.16	4149050.16	568025.16_4149050.16	1.03753	4.62972	2.74687
568045.16	4149050.16	568045.16_4149050.16	0.91944	3.32856	0.95744	568045.16	4149050.16	568045.16_4149050.16	1.17824	4.39332	3.16421
568065.16	4149050.16	568065.16_4149050.16	1.01759	3.15048	1.05899	568065.16	4149050.16	568065.16_4149050.16	1.33122	4.14844	3.64435
568085.16	4149050.16	568085.16_4149050.16	1.13794	3.0015	1.18747	568085.16	4149050.16	568085.16_4149050.16	1.50806	3.90697	4.21925
568105.16	4149050.16	568105.16_4149050.16	1.27483	2.85803	1.33574	568105.16	4149050.16	568105.16_4149050.16	1.70588	3.67327	4.87573
568125.16	4149050.16	568125.16_4149050.16	1.43015	2.72808	1.50833	568125.16	4149050.16	568125.16_4149050.16	1.92306	3.45119	5.60966
568145.16	4149050.16	568145.16_4149050.16	1.60355	2.61769	1.70645	568145.16	4149050.16	568145.16_4149050.16	2.16693	3.2426	6.40417
568165.16	4149050.16	568165.16_4149050.16	1.7377	2.47807	1.85066	568165.16	4149050.16	568165.16_4149050.16	2.37792	3.05145	7.13268
568185.16	4149050.16	568185.16_4149050.16	1.86407	2.35977	1.97753	568185.16	4149050.16	568185.16_4149050.16	2.56677	2.87451	7.7747
568205.16	4149050.16	568205.16_4149050.16	1.97439	2.2517	2.09198	568205.16	4149050.16	568205.16_4149050.16	2.72053	2.71211	8.30496
568225.16	4149050.16	568225.16_4149050.16	2.07161	2.15537	2.20335	568225.16	4149050.16	568225.16_4149050.16	2.83141	2.56573	8.71502
568245.16	4149050.16	568245.16_4149050.16	2.14238	2.06736	2.29237	568245.16	4149050.16	568245.16_4149050.16	2.8889	2.43677	8.95498
568265.16	4149050.16	568265.16_4149050.16	2.16024	1.97799	2.32285	568265.16	4149050.16	568265.16_4149050.16	2.89128	2.32824	9.04362
568285.16	4149050.16	568285.16_4149050.16	2.18348	1.91662	2.35262	568285.16	4149050.16	568285.16_4149050.16	2.85823	2.22399	8.98405
568305.16	4149050.16	568305.16_4149050.16	2.12762	1.8413	2.28262	568305.16	4149050.16	568305.16_4149050.16	2.78167	2.14001	8.73965

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568325.16	4149050.16	568325.16_4149050.16	2.09003	1.78702	2.22326	568325.16	4149050.16	568325.16_4149050.16	2.69947	2.05751	8.44995
568345.16	4149050.16	568345.16_4149050.16	2.04132	1.73134	2.15773	568345.16	4149050.16	568345.16_4149050.16	2.62261	1.9836	8.18995
568365.16	4149050.16	568365.16_4149050.16	1.98882	1.67294	2.09054	568365.16	4149050.16	568365.16_4149050.16	2.55877	1.91645	7.94716
568385.16	4149050.16	568385.16_4149050.16	1.961	1.62308	2.04814	568385.16	4149050.16	568385.16_4149050.16	2.51228	1.85027	7.70906
568425.16	4149050.16	568425.16_4149050.16	1.94821	1.53843	2.01621	568425.16	4149050.16	568425.16_4149050.16	2.44184	1.72179	7.25525
568445.16	4149050.16	568445.16_4149050.16	1.94245	1.49779	2.00247	568445.16	4149050.16	568445.16_4149050.16	2.40283	1.66051	7.04219
568465.16	4149050.16	568465.16_4149050.16	1.90927	1.44987	1.96222	568465.16	4149050.16	568465.16_4149050.16	2.35406	1.60436	6.83045
568485.16	4149050.16	568485.16_4149050.16	1.87176	1.40335	1.91903	568485.16	4149050.16	568485.16_4149050.16	2.29875	1.54973	6.61965
568505.16	4149050.16	568505.16_4149050.16	1.83856	1.36096	1.88172	568505.16	4149050.16	568505.16_4149050.16	2.23956	1.49567	6.40841
568525.16	4149050.16	568525.16_4149050.16	1.80647	1.32117	1.84664	568525.16	4149050.16	568525.16_4149050.16	2.17718	1.44279	6.19412
568545.16	4149050.16	568545.16_4149050.16	1.75745	1.2777	1.79544	568545.16	4149050.16	568545.16_4149050.16	2.11026	1.3935	5.97308
568565.16	4149050.16	568565.16_4149050.16	1.69634	1.23188	1.73237	568565.16	4149050.16	568565.16_4149050.16	2.04008	1.34674	5.7472
568585.16	4149050.16	568585.16_4149050.16	1.66848	1.19826	1.70039	568585.16	4149050.16	568585.16_4149050.16	1.97747	1.29878	5.53429
568605.16	4149050.16	568605.16_4149050.16	1.63019	1.1625	1.65759	568605.16	4149050.16	568605.16_4149050.16	1.91325	1.25333	5.31932
568625.16	4149050.16	568625.16_4149050.16	1.58096	1.12449	1.60465	568625.16	4149050.16	568625.16_4149050.16	1.84819	1.21092	5.10551
568645.16	4149050.16	568645.16_4149050.16	1.53691	1.08933	1.55739	568645.16	4149050.16	568645.16_4149050.16	1.78506	1.16965	4.89881
568665.16	4149050.16	568665.16_4149050.16	1.49977	1.05758	1.51721	568665.16	4149050.16	568665.16_4149050.16	1.72393	1.12929	4.69981
568685.16	4149050.16	568685.16_4149050.16	1.45338	1.02402	1.4687	568685.16	4149050.16	568685.16_4149050.16	1.66296	1.0917	4.50475
568705.16	4149050.16	568705.16_4149050.16	1.40466	0.99078	1.41801	568705.16	4149050.16	568705.16_4149050.16	1.60304	1.05603	4.31648
568725.16	4149050.16	568725.16_4149050.16	1.35939	0.95962	1.37083	568725.16	4149050.16	568725.16_4149050.16	1.54532	1.02157	4.13978
567485.16	4149070.16	567485.16_4149070.16	0.08091	0.24204	0.08216	567485.16	4149070.16	567485.16_4149070.16	0.08771	0.2825	0.18258
567505.16	4149070.16	567505.16_4149070.16	0.08521	0.26573	0.08616	567505.16	4149070.16	567505.16_4149070.16	0.09253	0.31154	0.19178
567525.16	4149070.16	567525.16_4149070.16	0.08972	0.29229	0.09032	567525.16	4149070.16	567525.16_4149070.16	0.09773	0.34501	0.20166
567545.16	4149070.16	567545.16_4149070.16	0.09466	0.32338	0.0948	567545.16	4149070.16	567545.16_4149070.16	0.10343	0.38428	0.21249
567565.16	4149070.16	567565.16_4149070.16	0.10029	0.36129	0.09978	567565.16	4149070.16	567565.16_4149070.16	0.10981	0.43111	0.22457
567585.16	4149070.16	567585.16_4149070.16	0.1067	0.4077	0.10533	567585.16	4149070.16	567585.16_4149070.16	0.11695	0.48723	0.23808
567605.16	4149070.16	567605.16_4149070.16	0.11417	0.46594	0.11168	567605.16	4149070.16	567605.16_4149070.16	0.12504	0.55515	0.25344
567625.16	4149070.16	567625.16_4149070.16	0.12172	0.53063	0.11811	567625.16	4149070.16	567625.16_4149070.16	0.13373	0.63477	0.2702
567685.16	4149070.16	567685.16_4149070.16	0.15016	0.81343	0.14271	567685.16	4149070.16	567685.16_4149070.16	0.16673	0.98228	0.33737
567705.16	4149070.16	567705.16_4149070.16	0.16198	0.94353	0.15343	567705.16	4149070.16	567705.16_4149070.16	0.18067	1.1446	0.36794
567725.16	4149070.16	567725.16_4149070.16	0.17542	1.09437	0.16607	567725.16	4149070.16	567725.16_4149070.16	0.19656	1.33518	0.40436
567745.16	4149070.16	567745.16_4149070.16	0.191	1.26823	0.18123	567745.16	4149070.16	567745.16_4149070.16	0.21486	1.55676	0.44798
567765.16	4149070.16	567765.16_4149070.16	0.20847	1.45863	0.19873	567765.16	4149070.16	567765.16_4149070.16	0.23574	1.80905	0.49972
567785.16	4149070.16	567785.16_4149070.16	0.22911	1.67593	0.22005	567785.16	4149070.16	567785.16_4149070.16	0.26005	2.09627	0.5617
567805.16	4149070.16	567805.16_4149070.16	0.25337	1.92071	0.24585	567805.16	4149070.16	567805.16_4149070.16	0.28834	2.41883	0.63578
567825.16	4149070.16	567825.16_4149070.16	0.27996	2.17055	0.27517	567825.16	4149070.16	567825.16_4149070.16	0.32041	2.76842	0.72303
567845.16	4149070.16	567845.16_4149070.16	0.31111	2.44284	0.3107	567845.16	4149070.16	567845.16_4149070.16	0.35764	3.14384	0.82703
567945.16	4149070.16	567945.16_4149070.16	0.53207	3.2745	0.56023	567945.16	4149070.16	567945.16_4149070.16	0.63524	4.32723	1.62521
567965.16	4149070.16	567965.16_4149070.16	0.5892	3.18628	0.61827	567965.16	4149070.16	567965.16_4149070.16	0.71287	4.21835	1.84846

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568005.16	4149070.16	568005.16_4149070.16	0.72617	2.93211	0.75616	568005.16	4149070.16	568005.16_4149070.16	0.9003	3.85769	2.39576
568025.16	4149070.16	568025.16_4149070.16	0.80856	2.81317	0.8407	568025.16	4149070.16	568025.16_4149070.16	1.01291	3.66849	2.73694
568045.16	4149070.16	568045.16_4149070.16	0.89955	2.6947	0.9359	568045.16	4149070.16	568045.16_4149070.16	1.1391	3.48388	3.13448
568065.16	4149070.16	568065.16_4149070.16	0.99539	2.56498	1.03776	568065.16	4149070.16	568065.16_4149070.16	1.27758	3.30366	3.5889
568085.16	4149070.16	568085.16_4149070.16	1.1113	2.46212	1.16364	568085.16	4149070.16	568085.16_4149070.16	1.43384	3.12962	4.11135
568105.16	4149070.16	568105.16_4149070.16	1.23328	2.35519	1.30036	568105.16	4149070.16	568105.16_4149070.16	1.6075	2.9619	4.67798
568125.16	4149070.16	568125.16_4149070.16	1.3567	2.24988	1.44237	568125.16	4149070.16	568125.16_4149070.16	1.77968	2.80236	5.26575
568145.16	4149070.16	568145.16_4149070.16	1.48741	2.16371	1.58661	568145.16	4149070.16	568145.16_4149070.16	1.95092	2.65018	5.84905
568165.16	4149070.16	568165.16_4149070.16	1.5842	2.05833	1.68114	568165.16	4149070.16	568165.16_4149070.16	2.10072	2.51302	6.35997
568185.16	4149070.16	568185.16_4149070.16	1.68181	1.97137	1.77983	568185.16	4149070.16	568185.16_4149070.16	2.23463	2.38189	6.81756
568205.16	4149070.16	568205.16_4149070.16	1.76973	1.88963	1.87694	568205.16	4149070.16	568205.16_4149070.16	2.34548	2.26175	7.20753
568225.16	4149070.16	568225.16_4149070.16	1.84859	1.81573	1.97054	568225.16	4149070.16	568225.16_4149070.16	2.4284	2.15246	7.51741
568245.16	4149070.16	568245.16_4149070.16	1.89803	1.74269	2.03341	568245.16	4149070.16	568245.16_4149070.16	2.47426	2.05753	7.71019
568265.16	4149070.16	568265.16_4149070.16	1.9282	1.67968	2.0744	568265.16	4149070.16	568265.16_4149070.16	2.48733	1.97237	7.81434
568285.16	4149070.16	568285.16_4149070.16	1.9426	1.62921	2.09125	568285.16	4149070.16	568285.16_4149070.16	2.47041	1.89472	7.80531
568305.16	4149070.16	568305.16_4149070.16	1.90903	1.57498	2.04784	568305.16	4149070.16	568305.16_4149070.16	2.42055	1.82965	7.66064
568325.16	4149070.16	568325.16_4149070.16	1.87748	1.53552	2.00056	568325.16	4149070.16	568325.16_4149070.16	2.35641	1.76716	7.44158
568345.16	4149070.16	568345.16_4149070.16	1.83472	1.49745	1.93947	568345.16	4149070.16	568345.16_4149070.16	2.28735	1.71073	7.21131
568365.16	4149070.16	568365.16_4149070.16	1.77304	1.45226	1.86579	568365.16	4149070.16	568365.16_4149070.16	2.22024	1.66188	6.9965
568385.16	4149070.16	568385.16_4149070.16	1.73193	1.41506	1.81216	568385.16	4149070.16	568385.16_4149070.16	2.16499	1.61321	6.79152
568425.16	4149070.16	568425.16_4149070.16	1.72632	1.36811	1.78115	568425.16	4149070.16	568425.16_4149070.16	2.08401	1.51162	6.37649
568445.16	4149070.16	568445.16_4149070.16	1.75545	1.409	1.79169	568445.16	4149070.16	568445.16_4149070.16	2.03443	1.45735	6.15642
568465.16	4149070.16	568465.16_4149070.16	1.79044	1.37389	1.77478	568465.16	4149070.16	568465.16_4149070.16	1.98559	1.40857	5.94164
568485.16	4149070.16	568485.16_4149070.16	1.62161	1.25662	1.65547	568485.16	4149070.16	568485.16_4149070.16	1.95794	1.386	5.764
568505.16	4149070.16	568505.16_4149070.16	1.59345	1.22382	1.62459	568505.16	4149070.16	568505.16_4149070.16	1.91228	1.34427	5.57958
568525.16	4149070.16	568525.16_4149070.16	1.54562	1.18502	1.57604	568525.16	4149070.16	568525.16_4149070.16	1.86078	1.30566	5.39283
568545.16	4149070.16	568545.16_4149070.16	1.51157	1.15237	1.54085	568545.16	4149070.16	568545.16_4149070.16	1.81043	1.2659	5.21327
568565.16	4149070.16	568565.16_4149070.16	1.47171	1.11859	1.49938	568565.16	4149070.16	568565.16_4149070.16	1.75804	1.22692	5.03359
568605.16	4149070.16	568605.16_4149070.16	1.4229	1.06475	1.44327	568605.16	4149070.16	568605.16_4149070.16	1.65972	1.15072	4.69037
568625.16	4149070.16	568625.16_4149070.16	1.384	1.03381	1.40148	568625.16	4149070.16	568625.16_4149070.16	1.60824	1.11551	4.51594
568645.16	4149070.16	568645.16_4149070.16	1.34393	1.0032	1.35927	568645.16	4149070.16	568645.16_4149070.16	1.557	1.08155	4.34293
568665.16	4149070.16	568665.16_4149070.16	1.31194	0.9762	1.32491	568665.16	4149070.16	568665.16_4149070.16	1.50813	1.04778	4.17501
568685.16	4149070.16	568685.16_4149070.16	1.28679	0.95235	1.2966	568685.16	4149070.16	568685.16_4149070.16	1.46065	1.01424	4.01157
568705.16	4149070.16	568705.16_4149070.16	1.25101	0.92544	1.25852	568705.16	4149070.16	568705.16_4149070.16	1.41295	0.98325	3.8517
568725.16	4149070.16	568725.16_4149070.16	1.21444	0.89889	1.22018	568725.16	4149070.16	568725.16_4149070.16	1.36655	0.95357	3.70117
567325.16	4149090.16	567325.16_4149090.16	0.0578	0.136	0.05968	567325.16	4149090.16	567325.16_4149090.16	0.06177	0.15366	0.13166
567345.16	4149090.16	567345.16_4149090.16	0.06016	0.14529	0.06186	567345.16	4149090.16	567345.16_4149090.16	0.06439	0.16467	0.13669
567365.16	4149090.16	567365.16_4149090.16	0.06275	0.15586	0.06424	567365.16	4149090.16	567365.16_4149090.16	0.06726	0.17706	0.14212
567385.16	4149090.16	567385.16_4149090.16	0.06547	0.16738	0.06674	567385.16	4149090.16	567385.16_4149090.16	0.0703	0.19085	0.14793

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567405.16	4149090.16	567405.16_4149090.16	0.06829	0.17983	0.06933	567405.16	4149090.16	567405.16_4149090.16	0.07352	0.20621	0.15407
567465.16	4149090.16	567465.16_4149090.16	0.07836	0.22849	0.07843	567465.16	4149090.16	567465.16_4149090.16	0.08499	0.26631	0.1758
567485.16	4149090.16	567485.16_4149090.16	0.08217	0.24889	0.0818	567485.16	4149090.16	567485.16_4149090.16	0.08944	0.29227	0.18419
567505.16	4149090.16	567505.16_4149090.16	0.08699	0.27586	0.08593	567505.16	4149090.16	567505.16_4149090.16	0.0946	0.32357	0.19388
567525.16	4149090.16	567525.16_4149090.16	0.09143	0.30293	0.08974	567525.16	4149090.16	567525.16_4149090.16	0.0999	0.35845	0.20387
567545.16	4149090.16	567545.16_4149090.16	0.09691	0.33801	0.09431	567545.16	4149090.16	567545.16_4149090.16	0.10598	0.40051	0.21534
567565.16	4149090.16	567565.16_4149090.16	0.10273	0.3781	0.09912	567565.16	4149090.16	567565.16_4149090.16	0.11259	0.44955	0.22791
567585.16	4149090.16	567585.16_4149090.16	0.10922	0.42606	0.10448	567585.16	4149090.16	567585.16_4149090.16	0.11996	0.50764	0.24206
567605.16	4149090.16	567605.16_4149090.16	0.11648	0.48344	0.11052	567605.16	4149090.16	567605.16_4149090.16	0.12815	0.57654	0.25813
567785.16	4149090.16	567785.16_4149090.16	0.23802	1.6154	0.23297	567785.16	4149090.16	567785.16_4149090.16	0.26888	1.99114	0.601
567805.16	4149090.16	567805.16_4149090.16	0.26218	1.81041	0.26044	567805.16	4149090.16	567805.16_4149090.16	0.29738	2.25321	0.67987
567825.16	4149090.16	567825.16_4149090.16	0.28903	2.00644	0.29188	567825.16	4149090.16	567825.16_4149090.16	0.32972	2.52786	0.77174
567905.16	4149090.16	567905.16_4149090.16	0.43577	2.67573	0.46017	567905.16	4149090.16	567905.16_4149090.16	0.50922	3.47096	1.29021
567925.16	4149090.16	567925.16_4149090.16	0.48431	2.75718	0.50976	567925.16	4149090.16	567925.16_4149090.16	0.56931	3.56333	1.46201
567945.16	4149090.16	567945.16_4149090.16	0.53611	2.76894	0.56095	567945.16	4149090.16	567945.16_4149090.16	0.63594	3.56392	1.65389
567965.16	4149090.16	567965.16_4149090.16	0.59101	2.71195	0.61495	567965.16	4149090.16	567965.16_4149090.16	0.70951	3.48781	1.86988
568005.16	4149090.16	568005.16_4149090.16	0.72122	2.50545	0.74812	568005.16	4149090.16	568005.16_4149090.16	0.88414	3.19935	2.4033
568025.16	4149090.16	568025.16_4149090.16	0.79784	2.39035	0.82879	568025.16	4149090.16	568025.16_4149090.16	0.98694	3.03635	2.73067
568045.16	4149090.16	568045.16_4149090.16	0.88513	2.28576	0.9215	568045.16	4149090.16	568045.16_4149090.16	1.10331	2.87825	3.10417
568065.16	4149090.16	568065.16_4149090.16	0.97184	2.16685	1.01523	568065.16	4149090.16	568065.16_4149090.16	1.22268	2.72766	3.5142
568085.16	4149090.16	568085.16_4149090.16	1.07131	2.06965	1.12739	568085.16	4149090.16	568085.16_4149090.16	1.35413	2.58583	3.96774
568105.16	4149090.16	568105.16_4149090.16	1.1737	1.97861	1.24679	568105.16	4149090.16	568105.16_4149090.16	1.49626	2.45235	4.44056
568125.16	4149090.16	568125.16_4149090.16	1.27188	1.89192	1.35741	568125.16	4149090.16	568125.16_4149090.16	1.63029	2.32731	4.89851
568145.16	4149090.16	568145.16_4149090.16	1.37737	1.82653	1.4646	568145.16	4149090.16	568145.16_4149090.16	1.76008	2.20708	5.33257
568165.16	4149090.16	568165.16_4149090.16	1.44839	1.73927	1.53017	568165.16	4149090.16	568165.16_4149090.16	1.86986	2.10278	5.70672
568185.16	4149090.16	568185.16_4149090.16	1.52801	1.6709	1.61413	568185.16	4149090.16	568185.16_4149090.16	1.97018	2.00058	6.05356
568205.16	4149090.16	568205.16_4149090.16	1.60005	1.60531	1.69788	568205.16	4149090.16	568205.16_4149090.16	2.05447	1.9077	6.35577
568225.16	4149090.16	568225.16_4149090.16	1.66564	1.54637	1.77732	568225.16	4149090.16	568225.16_4149090.16	2.11916	1.82265	6.59874
568245.16	4149090.16	568245.16_4149090.16	1.70932	1.4889	1.83168	568245.16	4149090.16	568245.16_4149090.16	2.15791	1.74805	6.75757
568265.16	4149090.16	568265.16_4149090.16	1.73277	1.43688	1.86193	568265.16	4149090.16	568265.16_4149090.16	2.17173	1.68204	6.85099
568285.16	4149090.16	568285.16_4149090.16	1.73141	1.38927	1.86006	568285.16	4149090.16	568285.16_4149090.16	2.16083	1.62435	6.85884
568305.16	4149090.16	568305.16_4149090.16	1.71837	1.35227	1.83964	568305.16	4149090.16	568305.16_4149090.16	2.12881	1.57141	6.77651
568325.16	4149090.16	568325.16_4149090.16	1.68805	1.31988	1.79952	568325.16	4149090.16	568325.16_4149090.16	2.07882	1.5241	6.61692
568345.16	4149090.16	568345.16_4149090.16	1.64842	1.29127	1.74375	568345.16	4149090.16	568345.16_4149090.16	2.02	1.48115	6.41849
568365.16	4149090.16	568365.16_4149090.16	1.59591	1.26012	1.67696	568365.16	4149090.16	568365.16_4149090.16	1.95839	1.44339	6.22167
568385.16	4149090.16	568385.16_4149090.16	1.55526	1.23477	1.62671	568385.16	4149090.16	568385.16_4149090.16	1.90274	1.4065	6.04161
568425.16	4149090.16	568425.16_4149090.16	1.53465	1.27097	1.58086	568425.16	4149090.16	568425.16_4149090.16	1.81084	1.32873	5.67985
568445.16	4149090.16	568445.16_4149090.16	1.57107	1.24863	1.57374	568445.16	4149090.16	568445.16_4149090.16	1.761	1.28746	5.47752
568465.16	4149090.16	568465.16_4149090.16	1.56324	1.22221	1.54802	568465.16	4149090.16	568465.16_4149090.16	1.71694	1.25132	5.27875

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568485.16	4149090.16	568485.16_4149090.16	1.4186	1.11948	1.44567	568485.16	4149090.16	568485.16_4149090.16	1.6926	1.23734	5.11062
568505.16	4149090.16	568505.16_4149090.16	1.38879	1.0933	1.41359	568505.16	4149090.16	568505.16_4149090.16	1.65358	1.20616	4.9363
568525.16	4149090.16	568525.16_4149090.16	1.35498	1.06571	1.37852	568525.16	4149090.16	568525.16_4149090.16	1.6129	1.17571	4.76843
568545.16	4149090.16	568545.16_4149090.16	1.32723	1.04087	1.3493	568545.16	4149090.16	568545.16_4149090.16	1.57261	1.1447	4.60957
568565.16	4149090.16	568565.16_4149090.16	1.29705	1.0155	1.31738	568565.16	4149090.16	568565.16_4149090.16	1.53128	1.11412	4.45592
568585.16	4149090.16	568585.16_4149090.16	1.27557	0.99393	1.29304	568585.16	4149090.16	568585.16_4149090.16	1.49152	1.08326	4.31027
568605.16	4149090.16	568605.16_4149090.16	1.25432	0.97282	1.26868	568605.16	4149090.16	568605.16_4149090.16	1.45153	1.05261	4.16766
568625.16	4149090.16	568625.16_4149090.16	1.22034	0.94713	1.23292	568625.16	4149090.16	568625.16_4149090.16	1.40957	1.0242	4.02309
568645.16	4149090.16	568645.16_4149090.16	1.19137	0.92376	1.20218	568645.16	4149090.16	568645.16_4149090.16	1.36878	0.99575	3.88059
568665.16	4149090.16	568665.16_4149090.16	1.16783	0.90286	1.17643	568665.16	4149090.16	568665.16_4149090.16	1.32917	0.96726	3.73964
568685.16	4149090.16	568685.16_4149090.16	1.14279	0.88176	1.14909	568685.16	4149090.16	568685.16_4149090.16	1.28973	0.93964	3.59923
568705.16	4149090.16	568705.16_4149090.16	1.11193	0.8588	1.11643	568705.16	4149090.16	568705.16_4149090.16	1.25067	0.91366	3.46165
568725.16	4149090.16	568725.16_4149090.16	1.07485	0.83372	1.07863	568725.16	4149090.16	568725.16_4149090.16	1.21198	0.88938	3.33021
567325.16	4149110.16	567325.16_4149110.16	0.0587	0.1396	0.05963	567325.16	4149110.16	567325.16_4149110.16	0.06283	0.15787	0.13242
567345.16	4149110.16	567345.16_4149110.16	0.06109	0.14918	0.06174	567345.16	4149110.16	567345.16_4149110.16	0.06551	0.16934	0.13748
567365.16	4149110.16	567365.16_4149110.16	0.06379	0.16035	0.0641	567365.16	4149110.16	567365.16_4149110.16	0.06848	0.18234	0.14302
567385.16	4149110.16	567385.16_4149110.16	0.06629	0.17118	0.06629	567385.16	4149110.16	567385.16_4149110.16	0.07146	0.19634	0.14867
567405.16	4149110.16	567405.16_4149110.16	0.06943	0.18521	0.06899	567405.16	4149110.16	567405.16_4149110.16	0.07492	0.21282	0.15511
567425.16	4149110.16	567425.16_4149110.16	0.07269	0.20051	0.07176	567425.16	4149110.16	567425.16_4149110.16	0.07859	0.23131	0.16196
567485.16	4149110.16	567485.16_4149110.16	0.08414	0.26013	0.08125	567485.16	4149110.16	567485.16_4149110.16	0.09156	0.3041	0.18629
567505.16	4149110.16	567505.16_4149110.16	0.08842	0.28509	0.08472	567505.16	4149110.16	567505.16_4149110.16	0.0966	0.33571	0.19582
567525.16	4149110.16	567525.16_4149110.16	0.09287	0.31279	0.08827	567525.16	4149110.16	567525.16_4149110.16	0.10203	0.37199	0.20618
567545.16	4149110.16	567545.16_4149110.16	0.09872	0.35057	0.09303	567545.16	4149110.16	567545.16_4149110.16	0.10843	0.41617	0.21849
567565.16	4149110.16	567565.16_4149110.16	0.10485	0.393	0.09808	567565.16	4149110.16	567565.16_4149110.16	0.11535	0.4672	0.2321
567585.16	4149110.16	567585.16_4149110.16	0.11166	0.44307	0.10383	567585.16	4149110.16	567585.16_4149110.16	0.12302	0.52698	0.24762
567645.16	4149110.16	567645.16_4149110.16	0.13656	0.64812	0.12676	567645.16	4149110.16	567645.16_4149110.16	0.1515	0.77306	0.31011
567665.16	4149110.16	567665.16_4149110.16	0.14706	0.7404	0.13732	567665.16	4149110.16	567665.16_4149110.16	0.16344	0.88284	0.3385
567685.16	4149110.16	567685.16_4149110.16	0.15905	0.84682	0.14988	567685.16	4149110.16	567685.16_4149110.16	0.17698	1.00883	0.37194
567705.16	4149110.16	567705.16_4149110.16	0.17229	0.96343	0.1642	567705.16	4149110.16	567705.16_4149110.16	0.1922	1.15064	0.41091
567725.16	4149110.16	567725.16_4149110.16	0.18728	1.09127	0.18077	567725.16	4149110.16	567725.16_4149110.16	0.20947	1.30886	0.45633
567745.16	4149110.16	567745.16_4149110.16	0.20426	1.2292	0.19985	567745.16	4149110.16	567745.16_4149110.16	0.22909	1.48298	0.50914
567765.16	4149110.16	567765.16_4149110.16	0.22362	1.37716	0.2219	567765.16	4149110.16	567765.16_4149110.16	0.25146	1.67222	0.57054
567785.16	4149110.16	567785.16_4149110.16	0.24578	1.53487	0.24744	567785.16	4149110.16	567785.16_4149110.16	0.27704	1.87493	0.64199
568065.16	4149110.16	568065.16_4149110.16	0.94619	1.88645	0.99359	568065.16	4149110.16	568065.16_4149110.16	1.16938	2.32024	3.42116
568085.16	4149110.16	568085.16_4149110.16	1.03458	1.80077	1.0974	568085.16	4149110.16	568085.16_4149110.16	1.28141	2.1975	3.81285
568105.16	4149110.16	568105.16_4149110.16	1.12039	1.71897	1.19619	568105.16	4149110.16	568105.16_4149110.16	1.39198	2.08299	4.19603
568125.16	4149110.16	568125.16_4149110.16	1.19993	1.6423	1.27825	568125.16	4149110.16	568125.16_4149110.16	1.49685	1.97585	4.54808
568145.16	4149110.16	568145.16_4149110.16	1.26984	1.56884	1.34275	568145.16	4149110.16	568145.16_4149110.16	1.59256	1.87846	4.86691
568165.16	4149110.16	568165.16_4149110.16	1.33648	1.50282	1.40735	568165.16	4149110.16	568165.16_4149110.16	1.6794	1.7882	5.16244

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568185.16	4149110.16	568185.16_4149110.16	1.40124	1.44269	1.4788	568185.16	4149110.16	568185.16_4149110.16	1.75698	1.70506	5.43445
568205.16	4149110.16	568205.16_4149110.16	1.45606	1.38312	1.54541	568205.16	4149110.16	568205.16_4149110.16	1.82178	1.63083	5.67235
568225.16	4149110.16	568225.16_4149110.16	1.50754	1.33154	1.60872	568225.16	4149110.16	568225.16_4149110.16	1.87246	1.56214	5.86408
568245.16	4149110.16	568245.16_4149110.16	1.5479	1.28561	1.65705	568245.16	4149110.16	568245.16_4149110.16	1.90514	1.50015	5.99447
568265.16	4149110.16	568265.16_4149110.16	1.57408	1.24525	1.68776	568265.16	4149110.16	568265.16_4149110.16	1.91908	1.44489	6.07691
568285.16	4149110.16	568285.16_4149110.16	1.5765	1.20648	1.68975	568285.16	4149110.16	568285.16_4149110.16	1.91365	1.39769	6.09676
568305.16	4149110.16	568305.16_4149110.16	1.55303	1.16863	1.65866	568305.16	4149110.16	568305.16_4149110.16	1.88852	1.35779	6.0406
568325.16	4149110.16	568325.16_4149110.16	1.53108	1.14348	1.62978	568325.16	4149110.16	568325.16_4149110.16	1.8506	1.31969	5.92774
568345.16	4149110.16	568345.16_4149110.16	1.49599	1.12049	1.58348	568345.16	4149110.16	568345.16_4149110.16	1.80183	1.28615	5.76538
568365.16	4149110.16	568365.16_4149110.16	1.45387	1.09919	1.52579	568365.16	4149110.16	568365.16_4149110.16	1.7484	1.25608	5.58715
568385.16	4149110.16	568385.16_4149110.16	1.4091	1.07847	1.46956	568385.16	4149110.16	568385.16_4149110.16	1.69488	1.22874	5.41826
568425.16	4149110.16	568425.16_4149110.16	1.3628	1.05558	1.40421	568425.16	4149110.16	568425.16_4149110.16	1.60247	1.17246	5.10376
568445.16	4149110.16	568445.16_4149110.16	1.34632	1.09959	1.37771	568445.16	4149110.16	568445.16_4149110.16	1.55905	1.14485	4.93783
568465.16	4149110.16	568465.16_4149110.16	1.31321	1.07756	1.33849	568465.16	4149110.16	568465.16_4149110.16	1.5214	1.12176	4.77012
568485.16	4149110.16	568485.16_4149110.16	1.26153	0.99669	1.28497	568485.16	4149110.16	568485.16_4149110.16	1.48564	1.10253	4.60084
568505.16	4149110.16	568505.16_4149110.16	1.23455	0.97794	1.25615	568505.16	4149110.16	568505.16_4149110.16	1.45076	1.07898	4.438
568525.16	4149110.16	568525.16_4149110.16	1.20458	0.95739	1.22453	568525.16	4149110.16	568525.16_4149110.16	1.41566	1.05596	4.28017
568545.16	4149110.16	568545.16_4149110.16	1.18105	0.93931	1.19853	568545.16	4149110.16	568545.16_4149110.16	1.38165	1.03205	4.1317
568565.16	4149110.16	568565.16_4149110.16	1.15591	0.92045	1.1708	568565.16	4149110.16	568565.16_4149110.16	1.34722	1.00838	3.99053
568585.16	4149110.16	568585.16_4149110.16	1.13202	0.90206	1.14422	568585.16	4149110.16	568585.16_4149110.16	1.31296	0.98463	3.85757
568605.16	4149110.16	568605.16_4149110.16	1.1131	0.88576	1.12267	568605.16	4149110.16	568605.16_4149110.16	1.27957	0.96033	3.7324
568625.16	4149110.16	568625.16_4149110.16	1.09178	0.86844	1.09943	568625.16	4149110.16	568625.16_4149110.16	1.24569	0.93654	3.61023
568645.16	4149110.16	568645.16_4149110.16	1.06525	0.849	1.07189	568645.16	4149110.16	568645.16_4149110.16	1.21156	0.91379	3.48878
568665.16	4149110.16	568665.16_4149110.16	1.04187	0.83097	1.04719	568665.16	4149110.16	568665.16_4149110.16	1.1781	0.89091	3.36839
568685.16	4149110.16	568685.16_4149110.16	1.01835	0.81299	1.0221	568685.16	4149110.16	568685.16_4149110.16	1.14515	0.86843	3.24841
568705.16	4149110.16	568705.16_4149110.16	0.99547	0.79538	0.99741	568705.16	4149110.16	568705.16_4149110.16	1.11293	0.84629	3.13094
568725.16	4149110.16	568725.16_4149110.16	0.97011	0.77679	0.97083	568725.16	4149110.16	568725.16_4149110.16	1.08143	0.8251	3.01872
567325.16	4149130.16	567325.16_4149130.16	0.05947	0.1431	0.05905	567325.16	4149130.16	567325.16_4149130.16	0.06385	0.16228	0.13284
567345.16	4149130.16	567345.16_4149130.16	0.062	0.15338	0.06113	567345.16	4149130.16	567345.16_4149130.16	0.06665	0.17437	0.13804
567365.16	4149130.16	567365.16_4149130.16	0.06458	0.16428	0.06325	567365.16	4149130.16	567365.16_4149130.16	0.06962	0.18771	0.14354
567385.16	4149130.16	567385.16_4149130.16	0.06721	0.17588	0.06539	567385.16	4149130.16	567385.16_4149130.16	0.07274	0.20249	0.14936
567405.16	4149130.16	567405.16_4149130.16	0.07047	0.19067	0.068	567405.16	4149130.16	567405.16_4149130.16	0.07632	0.21981	0.156
567425.16	4149130.16	567425.16_4149130.16	0.07378	0.20653	0.07065	567425.16	4149130.16	567425.16_4149130.16	0.08009	0.23914	0.16306
567445.16	4149130.16	567445.16_4149130.16	0.07747	0.22496	0.07358	567445.16	4149130.16	567445.16_4149130.16	0.08422	0.2613	0.17083
567505.16	4149130.16	567505.16_4149130.16	0.09031	0.29678	0.08385	567505.16	4149130.16	567505.16_4149130.16	0.09888	0.34891	0.19898
567525.16	4149130.16	567525.16_4149130.16	0.09519	0.32725	0.08785	567525.16	4149130.16	567525.16_4149130.16	0.10464	0.38715	0.21045
567545.16	4149130.16	567545.16_4149130.16	0.10113	0.36586	0.09297	567545.16	4149130.16	567545.16_4149130.16	0.11121	0.43251	0.22386
567565.16	4149130.16	567565.16_4149130.16	0.1075	0.40975	0.09867	567565.16	4149130.16	567565.16_4149130.16	0.11839	0.48476	0.23901
567625.16	4149130.16	567625.16_4149130.16	0.13089	0.58688	0.12178	567625.16	4149130.16	567625.16_4149130.16	0.14494	0.6954	0.30009

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
567645.16	4149130.16	567645.16_4149130.16	0.14086	0.66655	0.1325	567645.16	4149130.16	567645.16_4149130.16	0.15605	0.78784	0.32763
567665.16	4149130.16	567665.16_4149130.16	0.1525	0.76015	0.14537	567665.16	4149130.16	567665.16_4149130.16	0.16873	0.89343	0.35994
567685.16	4149130.16	567685.16_4149130.16	0.1645	0.85596	0.159	567685.16	4149130.16	567685.16_4149130.16	0.18259	1.00953	0.39666
567705.16	4149130.16	567705.16_4149130.16	0.17842	0.96354	0.17492	567705.16	4149130.16	567705.16_4149130.16	0.19838	1.13864	0.43923
567725.16	4149130.16	567725.16_4149130.16	0.19388	1.07702	0.19272	567725.16	4149130.16	567725.16_4149130.16	0.21614	1.27893	0.48792
567745.16	4149130.16	567745.16_4149130.16	0.21162	1.19932	0.21311	567745.16	4149130.16	567745.16_4149130.16	0.23641	1.43026	0.54406
567765.16	4149130.16	567765.16_4149130.16	0.23119	1.32268	0.23568	567765.16	4149130.16	567765.16_4149130.16	0.25913	1.58933	0.60811
567885.16	4149130.16	567885.16_4149130.16	0.40495	1.96265	0.42319	567885.16	4149130.16	567885.16_4149130.16	0.46727	2.46219	1.20831
567905.16	4149130.16	567905.16_4149130.16	0.4446	2.01503	0.46151	567905.16	4149130.16	567905.16_4149130.16	0.51653	2.53084	1.35338
567925.16	4149130.16	567925.16_4149130.16	0.48836	2.04685	0.50417	567925.16	4149130.16	567925.16_4149130.16	0.57096	2.56258	1.5178
567945.16	4149130.16	567945.16_4149130.16	0.53359	2.04091	0.5496	567945.16	4149130.16	567945.16_4149130.16	0.62994	2.55565	1.70223
567965.16	4149130.16	567965.16_4149130.16	0.58412	2.01716	0.60232	567965.16	4149130.16	567965.16_4149130.16	0.69505	2.51513	1.91089
567985.16	4149130.16	567985.16_4149130.16	0.64111	1.97642	0.66276	567985.16	4149130.16	567985.16_4149130.16	0.76677	2.44506	2.14456
568005.16	4149130.16	568005.16_4149130.16	0.69534	1.8922	0.72069	568005.16	4149130.16	568005.16_4149130.16	0.84207	2.34915	2.39532
568025.16	4149130.16	568025.16_4149130.16	0.76212	1.81971	0.793	568025.16	4149130.16	568025.16_4149130.16	0.92551	2.24272	2.67575
568045.16	4149130.16	568045.16_4149130.16	0.83937	1.75271	0.87962	568045.16	4149130.16	568045.16_4149130.16	1.01801	2.13039	2.98605
568065.16	4149130.16	568065.16_4149130.16	0.90964	1.66408	0.96249	568065.16	4149130.16	568065.16_4149130.16	1.10917	2.01769	3.30794
568085.16	4149130.16	568085.16_4149130.16	0.97039	1.56648	1.03469	568085.16	4149130.16	568085.16_4149130.16	1.19219	1.90885	3.62134
568105.16	4149130.16	568105.16_4149130.16	1.0438	1.49949	1.11313	568105.16	4149130.16	568105.16_4149130.16	1.28161	1.80898	3.92774
568345.16	4149130.16	568345.16_4149130.16	1.36814	0.98032	1.44641	568345.16	4149130.16	568345.16_4149130.16	1.61937	1.12188	5.21266
568365.16	4149130.16	568365.16_4149130.16	1.33108	0.96311	1.39622	568365.16	4149130.16	568365.16_4149130.16	1.57346	1.09775	5.05678
568385.16	4149130.16	568385.16_4149130.16	1.2887	0.94647	1.34025	568385.16	4149130.16	568385.16_4149130.16	1.52512	1.07646	4.89921
568405.16	4149130.16	568405.16_4149130.16	1.25481	0.93476	1.29794	568405.16	4149130.16	568405.16_4149130.16	1.47878	1.05563	4.75512
568425.16	4149130.16	568425.16_4149130.16	1.22851	0.9262	1.26545	568425.16	4149130.16	568425.16_4149130.16	1.43535	1.03507	4.617
568445.16	4149130.16	568445.16_4149130.16	1.19829	0.91463	1.22859	568445.16	4149130.16	568445.16_4149130.16	1.39457	1.01644	4.47581
568465.16	4149130.16	568465.16_4149130.16	1.17246	0.90383	1.19679	568465.16	4149130.16	568465.16_4149130.16	1.35715	0.99794	4.33198
568485.16	4149130.16	568485.16_4149130.16	1.14343	0.89025	1.16434	568485.16	4149130.16	568485.16_4149130.16	1.32244	0.98066	4.18535
568505.16	4149130.16	568505.16_4149130.16	1.11622	0.87639	1.1353	568505.16	4149130.16	568505.16_4149130.16	1.28961	0.96337	4.03808
568525.16	4149130.16	568525.16_4149130.16	1.08955	0.86193	1.10698	568525.16	4149130.16	568525.16_4149130.16	1.25803	0.94608	3.8926
568545.16	4149130.16	568545.16_4149130.16	1.06896	0.84957	1.08348	568545.16	4149130.16	568545.16_4149130.16	1.22763	0.92774	3.75263
568565.16	4149130.16	568565.16_4149130.16	1.04463	0.83501	1.05606	568565.16	4149130.16	568565.16_4149130.16	1.19731	0.90996	3.61859
568585.16	4149130.16	568585.16_4149130.16	1.01914	0.81953	1.0277	568585.16	4149130.16	568585.16_4149130.16	1.16711	0.89226	3.49237
568605.16	4149130.16	568605.16_4149130.16	0.99186	0.8029	0.99858	568605.16	4149130.16	568605.16_4149130.16	1.13673	0.87474	3.37337
568645.16	4149130.16	568645.16_4149130.16	0.95403	0.77636	0.95776	568645.16	4149130.16	568645.16_4149130.16	1.07925	0.83726	3.15595
568665.16	4149130.16	568665.16_4149130.16	0.93348	0.76207	0.93619	568665.16	4149130.16	568665.16_4149130.16	1.05078	0.81887	3.05077
568685.16	4149130.16	568685.16_4149130.16	0.91386	0.74808	0.91521	568685.16	4149130.16	568685.16_4149130.16	1.02289	0.80047	2.94707
568705.16	4149130.16	568705.16_4149130.16	0.89178	0.73285	0.89197	568705.16	4149130.16	568705.16_4149130.16	0.99545	0.78269	2.84546
568725.16	4149130.16	568725.16_4149130.16	0.87455	0.71966	0.87326	568725.16	4149130.16	568725.16_4149130.16	0.96903	0.76435	2.74914
567325.16	4149150.16	567325.16_4149150.16	0.06019	0.14672	0.05801	567325.16	4149150.16	567325.16_4149150.16	0.0649	0.16696	0.13319

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567345.16	4149150.16	567345.16_4149150.16	0.06271	0.15713	0.05997	567345.16	4149150.16	567345.16_4149150.16	0.06776	0.17949	0.1385
567365.16	4149150.16	567365.16_4149150.16	0.0656	0.16936	0.0622	567365.16	4149150.16	567365.16_4149150.16	0.07093	0.19375	0.14438
567385.16	4149150.16	567385.16_4149150.16	0.06846	0.18214	0.06442	567385.16	4149150.16	567385.16_4149150.16	0.07422	0.20947	0.15058
567405.16	4149150.16	567405.16_4149150.16	0.07175	0.19735	0.067	567405.16	4149150.16	567405.16_4149150.16	0.07787	0.2275	0.15748
567425.16	4149150.16	567425.16_4149150.16	0.07524	0.21427	0.06976	567425.16	4149150.16	567425.16_4149150.16	0.0818	0.24784	0.16499
567445.16	4149150.16	567445.16_4149150.16	0.07901	0.23342	0.07278	567445.16	4149150.16	567445.16_4149150.16	0.08607	0.27095	0.17325
567465.16	4149150.16	567465.16_4149150.16	0.08283	0.25402	0.07588	567465.16	4149150.16	567465.16_4149150.16	0.0906	0.29693	0.1822
567525.16	4149150.16	567525.16_4149150.16	0.09781	0.34225	0.08919	567525.16	4149150.16	567525.16_4149150.16	0.10741	0.40209	0.21712
567545.16	4149150.16	567545.16_4149150.16	0.10366	0.38011	0.09482	567545.16	4149150.16	567545.16_4149150.16	0.11408	0.44783	0.23197
567605.16	4149150.16	567605.16_4149150.16	0.12584	0.53533	0.11847	567605.16	4149150.16	567605.16_4149150.16	0.13896	0.63012	0.29191
567625.16	4149150.16	567625.16_4149150.16	0.1353	0.6048	0.12923	567625.16	4149150.16	567625.16_4149150.16	0.14934	0.70886	0.31856
567645.16	4149150.16	567645.16_4149150.16	0.14608	0.68439	0.14163	567645.16	4149150.16	567645.16_4149150.16	0.16103	0.7976	0.34933
567665.16	4149150.16	567665.16_4149150.16	0.15694	0.76376	0.15445	567665.16	4149150.16	567665.16_4149150.16	0.17366	0.89397	0.38374
567685.16	4149150.16	567685.16_4149150.16	0.16956	0.85288	0.1692	567685.16	4149150.16	567685.16_4149150.16	0.18803	1.00039	0.42319
567705.16	4149150.16	567705.16_4149150.16	0.18394	0.94958	0.18578	567705.16	4149150.16	567705.16_4149150.16	0.20433	1.1159	0.46815
567725.16	4149150.16	567725.16_4149150.16	0.20005	1.0508	0.20413	567725.16	4149150.16	567725.16_4149150.16	0.22265	1.23889	0.51914
567825.16	4149150.16	567825.16_4149150.16	0.31304	1.55409	0.3274	567825.16	4149150.16	567825.16_4149150.16	0.35362	1.88661	0.89352
567845.16	4149150.16	567845.16_4149150.16	0.34289	1.633	0.35786	567845.16	4149150.16	567845.16_4149150.16	0.38919	1.99575	0.99654
567865.16	4149150.16	567865.16_4149150.16	0.37373	1.68777	0.38845	567865.16	4149150.16	567865.16_4149150.16	0.42777	2.08484	1.10999
567905.16	4149150.16	567905.16_4149150.16	0.44864	1.78277	0.46164	567905.16	4149150.16	567905.16_4149150.16	0.51839	2.20132	1.38443
567925.16	4149150.16	567925.16_4149150.16	0.48973	1.79942	0.50308	567925.16	4149150.16	567925.16_4149150.16	0.56968	2.22014	1.54708
567945.16	4149150.16	567945.16_4149150.16	0.53367	1.79677	0.54885	567945.16	4149150.16	567945.16_4149150.16	0.62543	2.2129	1.72819
567965.16	4149150.16	567965.16_4149150.16	0.58327	1.78455	0.60137	567965.16	4149150.16	567965.16_4149150.16	0.68649	2.18182	1.92897
567985.16	4149150.16	567985.16_4149150.16	0.63466	1.74806	0.65652	567985.16	4149150.16	567985.16_4149150.16	0.75157	2.12873	2.14602
568005.16	4149150.16	568005.16_4149150.16	0.68698	1.6888	0.71382	568005.16	4149150.16	568005.16_4149150.16	0.82005	2.05651	2.37903
568025.16	4149150.16	568025.16_4149150.16	0.75047	1.63699	0.78532	568025.16	4149150.16	568025.16_4149150.16	0.89473	1.97167	2.63693
568045.16	4149150.16	568045.16_4149150.16	0.81746	1.57706	0.86321	568045.16	4149150.16	568045.16_4149150.16	0.97432	1.87845	2.91126
568065.16	4149150.16	568065.16_4149150.16	0.87635	1.49797	0.93281	568065.16	4149150.16	568065.16_4149150.16	1.05076	1.78264	3.18371
568085.16	4149150.16	568085.16_4149150.16	0.92406	1.40857	0.98566	568085.16	4149150.16	568085.16_4149150.16	1.11788	1.68815	3.43543
568105.16	4149150.16	568105.16_4149150.16	0.97608	1.3368	1.03541	568105.16	4149150.16	568105.16_4149150.16	1.18741	1.59855	3.67094
568125.16	4149150.16	568125.16_4149150.16	1.024	1.27007	1.07799	568125.16	4149150.16	568125.16_4149150.16	1.25223	1.51519	3.88626
568145.16	4149150.16	568145.16_4149150.16	1.09227	1.22975	1.14598	568145.16	4149150.16	568145.16_4149150.16	1.32454	1.43807	4.10631
568165.16	4149150.16	568165.16_4149150.16	1.13703	1.17222	1.1944	568165.16	4149150.16	568165.16_4149150.16	1.37966	1.36801	4.29815
568185.16	4149150.16	568185.16_4149150.16	1.18357	1.12238	1.24855	568185.16	4149150.16	568185.16_4149150.16	1.42979	1.30309	4.47831
568205.16	4149150.16	568205.16_4149150.16	1.21793	1.07104	1.29174	568205.16	4149150.16	568205.16_4149150.16	1.47042	1.24647	4.63244
568225.16	4149150.16	568225.16_4149150.16	1.25369	1.02938	1.3346	568225.16	4149150.16	568225.16_4149150.16	1.50302	1.19338	4.75631
568245.16	4149150.16	568245.16_4149150.16	1.27619	0.98915	1.36005	568245.16	4149150.16	568245.16_4149150.16	1.52345	1.14691	4.83895
568265.16	4149150.16	568265.16_4149150.16	1.29157	0.95491	1.37668	568265.16	4149150.16	568265.16_4149150.16	1.53302	1.10523	4.89338
568285.16	4149150.16	568285.16_4149150.16	1.2993	0.92666	1.38482	568285.16	4149150.16	568285.16_4149150.16	1.53194	1.0682	4.91572

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568305.16	4149150.16	568305.16_4149150.16	1.28278	0.89592	1.36342	568305.16	4149150.16	568305.16_4149150.16	1.51737	1.03841	4.89003
568325.16	4149150.16	568325.16_4149150.16	1.26357	0.87341	1.3371	568325.16	4149150.16	568325.16_4149150.16	1.49341	1.01146	4.82666
568345.16	4149150.16	568345.16_4149150.16	1.24133	0.85719	1.30901	568345.16	4149150.16	568345.16_4149150.16	1.46146	0.98742	4.72937
568365.16	4149150.16	568365.16_4149150.16	1.2116	0.84326	1.27026	568365.16	4149150.16	568365.16_4149150.16	1.423	0.96668	4.60087
568385.16	4149150.16	568385.16_4149150.16	1.18266	0.83369	1.22862	568385.16	4149150.16	568385.16_4149150.16	1.38201	0.94773	4.46181
568405.16	4149150.16	568405.16_4149150.16	1.14795	0.82317	1.18419	568405.16	4149150.16	568405.16_4149150.16	1.33946	0.93145	4.3271
568725.16	4149150.16	568725.16_4149150.16	0.78976	0.66402	0.78704	568725.16	4149150.16	568725.16_4149150.16	0.8728	0.70706	2.51439
567325.16	4149170.16	567325.16_4149170.16	0.06095	0.15057	0.0568	567325.16	4149170.16	567325.16_4149170.16	0.06601	0.17193	0.13388
567345.16	4149170.16	567345.16_4149170.16	0.06349	0.16119	0.05873	567345.16	4149170.16	567345.16_4149170.16	0.06894	0.18495	0.13943
567365.16	4149170.16	567365.16_4149170.16	0.06681	0.17518	0.06137	567365.16	4149170.16	567365.16_4149170.16	0.07235	0.20027	0.14592
567385.16	4149170.16	567385.16_4149170.16	0.06964	0.18806	0.0636	567385.16	4149170.16	567385.16_4149170.16	0.07571	0.21655	0.15244
567405.16	4149170.16	567405.16_4149170.16	0.07307	0.20403	0.06643	567405.16	4149170.16	567405.16_4149170.16	0.07951	0.23539	0.1599
567425.16	4149170.16	567425.16_4149170.16	0.07666	0.2216	0.06947	567425.16	4149170.16	567425.16_4149170.16	0.08356	0.25656	0.16804
567445.16	4149170.16	567445.16_4149170.16	0.08049	0.24125	0.07283	567445.16	4149170.16	567445.16_4149170.16	0.08794	0.28051	0.17704
567465.16	4149170.16	567465.16_4149170.16	0.08469	0.2637	0.07667	567465.16	4149170.16	567465.16_4149170.16	0.09273	0.30779	0.18713
567485.16	4149170.16	567485.16_4149170.16	0.08933	0.28954	0.08111	567485.16	4149170.16	567485.16_4149170.16	0.09798	0.33896	0.19854
567585.16	4149170.16	567585.16_4149170.16	0.12138	0.49187	0.1164	567585.16	4149170.16	567585.16_4149170.16	0.13351	0.57467	0.28507
567605.16	4149170.16	567605.16_4149170.16	0.12974	0.54889	0.1264	567605.16	4149170.16	567605.16_4149170.16	0.14298	0.64137	0.3103
567625.16	4149170.16	567625.16_4149170.16	0.14018	0.62025	0.13857	567625.16	4149170.16	567625.16_4149170.16	0.15396	0.71758	0.33971
567645.16	4149170.16	567645.16_4149170.16	0.15019	0.68779	0.15057	567645.16	4149170.16	567645.16_4149170.16	0.16557	0.79884	0.37189
567665.16	4149170.16	567665.16_4149170.16	0.16184	0.76392	0.16415	567665.16	4149170.16	567665.16_4149170.16	0.17881	0.88809	0.40842
567685.16	4149170.16	567685.16_4149170.16	0.17496	0.84543	0.17908	567685.16	4149170.16	567685.16_4149170.16	0.19368	0.98413	0.44955
567705.16	4149170.16	567705.16_4149170.16	0.19004	0.93336	0.19567	567705.16	4149170.16	567705.16_4149170.16	0.21053	1.08641	0.49617
567805.16	4149170.16	567805.16_4149170.16	0.292	1.35175	0.30331	567805.16	4149170.16	567805.16_4149170.16	0.32809	1.61602	0.83153
567825.16	4149170.16	567825.16_4149170.16	0.31886	1.41936	0.33058	567825.16	4149170.16	567825.16_4149170.16	0.35968	1.70809	0.92392
567845.16	4149170.16	567845.16_4149170.16	0.34674	1.46918	0.35832	567845.16	4149170.16	567845.16_4149170.16	0.39387	1.78667	1.02587
567865.16	4149170.16	567865.16_4149170.16	0.37625	1.50535	0.38737	567865.16	4149170.16	567865.16_4149170.16	0.43106	1.85013	1.13953
567885.16	4149170.16	567885.16_4149170.16	0.41038	1.54358	0.42129	567885.16	4149170.16	567885.16_4149170.16	0.47237	1.8999	1.26864
567925.16	4149170.16	567925.16_4149170.16	0.49019	1.59759	0.50307	567925.16	4149170.16	567925.16_4149170.16	0.56679	1.94501	1.57384
567945.16	4149170.16	567945.16_4149170.16	0.5331	1.59875	0.54842	567945.16	4149170.16	567945.16_4149170.16	0.61913	1.93796	1.74762
567965.16	4149170.16	567965.16_4149170.16	0.57968	1.58936	0.59848	567965.16	4149170.16	567965.16_4149170.16	0.67514	1.91339	1.93593
567985.16	4149170.16	567985.16_4149170.16	0.62766	1.56216	0.65131	567985.16	4149170.16	567985.16_4149170.16	0.73458	1.87247	2.13748
568005.16	4149170.16	568005.16_4149170.16	0.6801	1.52698	0.71084	568005.16	4149170.16	568005.16_4149170.16	0.79768	1.81694	2.35507
568025.16	4149170.16	568025.16_4149170.16	0.73554	1.48237	0.77539	568025.16	4149170.16	568025.16_4149170.16	0.86318	1.74926	2.58572
568045.16	4149170.16	568045.16_4149170.16	0.7904	1.42663	0.8395	568045.16	4149170.16	568045.16_4149170.16	0.92914	1.67261	2.81985
568065.16	4149170.16	568065.16_4149170.16	0.84244	1.3634	0.89741	568065.16	4149170.16	568065.16_4149170.16	0.99372	1.59191	3.04584
568085.16	4149170.16	568085.16_4149170.16	0.87988	1.2833	0.93414	568085.16	4149170.16	568085.16_4149170.16	1.04849	1.51152	3.24821
568105.16	4149170.16	568105.16_4149170.16	0.92452	1.22056	0.97438	568105.16	4149170.16	568105.16_4149170.16	1.10603	1.43284	3.44105
568125.16	4149170.16	568125.16_4149170.16	0.96996	1.16412	1.01706	568125.16	4149170.16	568125.16_4149170.16	1.16515	1.35837	3.6227

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568145.16	4149170.16	568145.16_4149170.16	1.0221	1.11805	1.07132	568145.16	4149170.16	568145.16_4149170.16	1.21761	1.28635	3.79875
568165.16	4149170.16	568165.16_4149170.16	1.0523	1.05769	1.1059	568165.16	4149170.16	568165.16_4149170.16	1.26091	1.22502	3.95262
568185.16	4149170.16	568185.16_4149170.16	1.0908	1.01043	1.15072	568185.16	4149170.16	568185.16_4149170.16	1.30156	1.16566	4.10025
568205.16	4149170.16	568205.16_4149170.16	1.1282	0.96867	1.19503	568205.16	4149170.16	568205.16_4149170.16	1.33614	1.11101	4.23023
568225.16	4149170.16	568225.16_4149170.16	1.15053	0.92457	1.22196	568225.16	4149170.16	568225.16_4149170.16	1.36068	1.0639	4.32652
568245.16	4149170.16	568245.16_4149170.16	1.17826	0.89224	1.25165	568245.16	4149170.16	568245.16_4149170.16	1.37837	1.01879	4.39702
568265.16	4149170.16	568265.16_4149170.16	1.18719	0.85733	1.26115	568265.16	4149170.16	568265.16_4149170.16	1.3854	0.98122	4.43878
568285.16	4149170.16	568285.16_4149170.16	1.17491	0.81983	1.24867	568285.16	4149170.16	568285.16_4149170.16	1.38138	0.95055	4.44865
568305.16	4149170.16	568305.16_4149170.16	1.16576	0.79342	1.23604	568305.16	4149170.16	568305.16_4149170.16	1.37066	0.92133	4.43104
568325.16	4149170.16	568325.16_4149170.16	1.15763	0.77594	1.22081	568325.16	4149170.16	568325.16_4149170.16	1.35312	0.89608	4.38596
568345.16	4149170.16	568345.16_4149170.16	1.13921	0.76035	1.19646	568345.16	4149170.16	568345.16_4149170.16	1.32709	0.87432	4.31092
568365.16	4149170.16	568365.16_4149170.16	1.11837	0.74937	1.16972	568365.16	4149170.16	568365.16_4149170.16	1.29562	0.85518	4.21
568385.16	4149170.16	568385.16_4149170.16	1.09293	0.74048	1.13502	568385.16	4149170.16	568385.16_4149170.16	1.25996	0.83869	4.08952
568405.16	4149170.16	568405.16_4149170.16	1.06135	0.73124	1.09379	568405.16	4149170.16	568405.16_4149170.16	1.22205	0.82496	3.96533
568425.16	4149170.16	568425.16_4149170.16	1.03498	0.7257	1.06185	568425.16	4149170.16	568425.16_4149170.16	1.18472	0.81192	3.84965
568445.16	4149170.16	568445.16_4149170.16	0.99677	0.71429	1.02281	568445.16	4149170.16	568445.16_4149170.16	1.14758	0.8023	3.73798
568465.16	4149170.16	568465.16_4149170.16	0.97272	0.70944	0.99747	568465.16	4149170.16	568465.16_4149170.16	1.11374	0.79136	3.6308
568485.16	4149170.16	568485.16_4149170.16	0.95162	0.70539	0.97312	568485.16	4149170.16	568485.16_4149170.16	1.08208	0.7806	3.52207
568505.16	4149170.16	568505.16_4149170.16	0.92653	0.69859	0.94442	568505.16	4149170.16	568505.16_4149170.16	1.05204	0.771	3.40972
568525.16	4149170.16	568525.16_4149170.16	0.90302	0.69182	0.91772	568525.16	4149170.16	568525.16_4149170.16	1.02372	0.76136	3.29515
568585.16	4149170.16	568585.16_4149170.16	0.83399	0.66784	0.8418	568585.16	4149170.16	568585.16_4149170.16	0.94528	0.73212	2.95123
568605.16	4149170.16	568605.16_4149170.16	0.8134	0.6596	0.81897	568605.16	4149170.16	568605.16_4149170.16	0.92082	0.72176	2.84358
568625.16	4149170.16	568625.16_4149170.16	0.79718	0.65289	0.80039	568625.16	4149170.16	568625.16_4149170.16	0.89764	0.71059	2.74264
568665.16	4149170.16	568665.16_4149170.16	0.76717	0.63889	0.76666	568665.16	4149170.16	568665.16_4149170.16	0.853	0.68738	2.55641
568685.16	4149170.16	568685.16_4149170.16	0.74881	0.6294	0.74715	568685.16	4149170.16	568685.16_4149170.16	0.83127	0.67621	2.46933
568705.16	4149170.16	568705.16_4149170.16	0.73304	0.62077	0.73002	568705.16	4149170.16	568705.16_4149170.16	0.81045	0.66452	2.38732
568725.16	4149170.16	568725.16_4149170.16	0.71726	0.61168	0.71339	568725.16	4149170.16	568725.16_4149170.16	0.79035	0.65282	2.31089
567325.16	4149190.16	567325.16_4149190.16	0.06189	0.15493	0.05599	567325.16	4149190.16	567325.16_4149190.16	0.06724	0.17728	0.13539
567345.16	4149190.16	567345.16_4149190.16	0.06453	0.16597	0.05812	567345.16	4149190.16	567345.16_4149190.16	0.07027	0.19087	0.14138
567365.16	4149190.16	567365.16_4149190.16	0.06854	0.18271	0.06173	567365.16	4149190.16	567365.16_4149190.16	0.07402	0.20749	0.14879
567385.16	4149190.16	567385.16_4149190.16	0.07105	0.1945	0.06383	567385.16	4149190.16	567385.16_4149190.16	0.07734	0.22395	0.15564
567405.16	4149190.16	567405.16_4149190.16	0.07454	0.21084	0.06705	567405.16	4149190.16	567405.16_4149190.16	0.08123	0.24346	0.16378
567425.16	4149190.16	567425.16_4149190.16	0.07829	0.22914	0.07065	567425.16	4149190.16	567425.16_4149190.16	0.08544	0.26544	0.17282
567445.16	4149190.16	567445.16_4149190.16	0.08233	0.24971	0.0747	567445.16	4149190.16	567445.16_4149190.16	0.08999	0.29027	0.18292
567465.16	4149190.16	567465.16_4149190.16	0.08691	0.27387	0.07951	567465.16	4149190.16	567465.16_4149190.16	0.09503	0.31864	0.19438
567485.16	4149190.16	567485.16_4149190.16	0.09161	0.29984	0.08465	567485.16	4149190.16	567485.16_4149190.16	0.10041	0.35036	0.20716
567505.16	4149190.16	567505.16_4149190.16	0.09695	0.33027	0.09071	567505.16	4149190.16	567505.16_4149190.16	0.10638	0.38655	0.22174
567565.16	4149190.16	567565.16_4149190.16	0.11729	0.45407	0.11489	567565.16	4149190.16	567565.16_4149190.16	0.12848	0.52687	0.27895
567585.16	4149190.16	567585.16_4149190.16	0.12515	0.50409	0.12447	567585.16	4149190.16	567585.16_4149190.16	0.1373	0.58464	0.30298

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567605.16	4149190.16	567605.16_4149190.16	0.13487	0.56619	0.13577	567605.16	4149190.16	567605.16_4149190.16	0.14749	0.65012	0.33067
567625.16	4149190.16	567625.16_4149190.16	0.14437	0.62615	0.14701	567625.16	4149190.16	567625.16_4149190.16	0.15836	0.71985	0.3608
567645.16	4149190.16	567645.16_4149190.16	0.15487	0.69008	0.15911	567645.16	4149190.16	567645.16_4149190.16	0.17046	0.79515	0.39428
567665.16	4149190.16	567665.16_4149190.16	0.16693	0.76003	0.1724	567665.16	4149190.16	567665.16_4149190.16	0.18411	0.87611	0.43191
567685.16	4149190.16	567685.16_4149190.16	0.18086	0.83583	0.1871	567685.16	4149190.16	567685.16_4149190.16	0.19957	0.96201	0.47434
567785.16	4149190.16	567785.16_4149190.16	0.27333	1.18901	0.28181	567785.16	4149190.16	567785.16_4149190.16	0.30569	1.40158	0.77707
567805.16	4149190.16	567805.16_4149190.16	0.29824	1.25045	0.30701	567805.16	4149190.16	567805.16_4149190.16	0.33413	1.48005	0.86102
567825.16	4149190.16	567825.16_4149190.16	0.32425	1.29861	0.33318	567825.16	4149190.16	567825.16_4149190.16	0.36488	1.54918	0.95393
567845.16	4149190.16	567845.16_4149190.16	0.34997	1.32718	0.35906	567845.16	4149190.16	567845.16_4149190.16	0.39752	1.606	1.05593
567865.16	4149190.16	567865.16_4149190.16	0.38045	1.36223	0.38979	567865.16	4149190.16	567865.16_4149190.16	0.43393	1.65427	1.17153
567885.16	4149190.16	567885.16_4149190.16	0.41355	1.3907	0.42351	567885.16	4149190.16	567885.16_4149190.16	0.47343	1.69019	1.29977
567905.16	4149190.16	567905.16_4149190.16	0.4518	1.42151	0.46302	567905.16	4149190.16	567905.16_4149190.16	0.51675	1.71297	1.44183
567945.16	4149190.16	567945.16_4149190.16	0.53009	1.43131	0.54634	567945.16	4149190.16	567945.16_4149190.16	0.6102	1.71353	1.75739
567985.16	4149190.16	567985.16_4149190.16	0.61839	1.40534	0.64556	567985.16	4149190.16	567985.16_4149190.16	0.71548	1.66152	2.11993
568005.16	4149190.16	568005.16_4149190.16	0.66325	1.37334	0.69826	568005.16	4149190.16	568005.16_4149190.16	0.77067	1.61771	2.31557
568025.16	4149190.16	568025.16_4149190.16	0.71234	1.33978	0.75524	568025.16	4149190.16	568025.16_4149190.16	0.82757	1.56378	2.51692
568045.16	4149190.16	568045.16_4149190.16	0.76091	1.29767	0.80928	568045.16	4149190.16	568045.16_4149190.16	0.88397	1.50024	2.71363
568065.16	4149190.16	568065.16_4149190.16	0.80514	1.24558	0.8543	568065.16	4149190.16	568065.16_4149190.16	0.93809	1.43268	2.89879
568085.16	4149190.16	568085.16_4149190.16	0.8362	1.17718	0.88191	568085.16	4149190.16	568085.16_4149190.16	0.98696	1.36559	3.06581
568105.16	4149190.16	568105.16_4149190.16	0.87296	1.1204	0.91536	568105.16	4149190.16	568105.16_4149190.16	1.03462	1.29692	3.22626
568125.16	4149190.16	568125.16_4149190.16	0.91345	1.07061	0.95608	568125.16	4149190.16	568125.16_4149190.16	1.0803	1.2307	3.37975
568145.16	4149190.16	568145.16_4149190.16	0.95676	1.0259	1.00316	568145.16	4149190.16	568145.16_4149190.16	1.1233	1.16495	3.52582
568165.16	4149190.16	568165.16_4149190.16	0.98676	0.9737	1.03767	568165.16	4149190.16	568165.16_4149190.16	1.15994	1.10741	3.65592
568185.16	4149190.16	568185.16_4149190.16	1.0164	0.92682	1.07171	568185.16	4149190.16	568185.16_4149190.16	1.19241	1.05353	3.77545
568205.16	4149190.16	568205.16_4149190.16	1.04286	0.88376	1.10244	568205.16	4149190.16	568205.16_4149190.16	1.21926	1.00402	3.87861
568225.16	4149190.16	568225.16_4149190.16	1.0607	0.84193	1.12325	568225.16	4149190.16	568225.16_4149190.16	1.2387	0.95985	3.9563
568245.16	4149190.16	568245.16_4149190.16	1.08344	0.81037	1.14706	568245.16	4149190.16	568245.16_4149190.16	1.25256	0.9176	4.01277
568265.16	4149190.16	568265.16_4149190.16	1.08829	0.77549	1.15215	568265.16	4149190.16	568265.16_4149190.16	1.25775	0.88253	4.04463
568285.16	4149190.16	568285.16_4149190.16	1.08205	0.74226	1.14594	568285.16	4149190.16	568285.16_4149190.16	1.25515	0.85243	4.05322
568305.16	4149190.16	568305.16_4149190.16	1.07639	0.71741	1.13762	568305.16	4149190.16	568305.16_4149190.16	1.24686	0.82495	4.03977
568325.16	4149190.16	568325.16_4149190.16	1.06548	0.69737	1.11991	568325.16	4149190.16	568325.16_4149190.16	1.23192	0.8011	4.00256
568345.16	4149190.16	568345.16_4149190.16	1.05183	0.68251	1.09983	568345.16	4149190.16	568345.16_4149190.16	1.21094	0.78029	3.94509
568365.16	4149190.16	568365.16_4149190.16	1.03182	0.66994	1.07568	568365.16	4149190.16	568365.16_4149190.16	1.18422	0.76286	3.86528
568385.16	4149190.16	568385.16_4149190.16	1.01291	0.66241	1.05129	568385.16	4149190.16	568385.16_4149190.16	1.15397	0.74726	3.76607
568405.16	4149190.16	568405.16_4149190.16	0.98451	0.65336	1.01547	568405.16	4149190.16	568405.16_4149190.16	1.12079	0.73502	3.65471
568425.16	4149190.16	568425.16_4149190.16	0.95609	0.64618	0.98082	568425.16	4149190.16	568425.16_4149190.16	1.087	0.72438	3.54584
568445.16	4149190.16	568445.16_4149190.16	0.92132	0.6365	0.94427	568445.16	4149190.16	568445.16_4149190.16	1.05305	0.71621	3.44268
568465.16	4149190.16	568465.16_4149190.16	0.90083	0.63404	0.92352	568465.16	4149190.16	568465.16_4149190.16	1.02169	0.7069	3.34733
568485.16	4149190.16	568485.16_4149190.16	0.88166	0.63202	0.90291	568485.16	4149190.16	568485.16_4149190.16	0.99179	0.69811	3.25195

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568505.16	4149190.16	568505.16_4149190.16	0.85738	0.62692	0.87575	568505.16	4149190.16	568505.16_4149190.16	0.96326	0.69084	3.15396
568525.16	4149190.16	568525.16_4149190.16	0.83321	0.62136	0.84781	568525.16	4149190.16	568525.16_4149190.16	0.93617	0.68389	3.05343
568545.16	4149190.16	568545.16_4149190.16	0.81171	0.61662	0.82274	568545.16	4149190.16	568545.16_4149190.16	0.9105	0.67663	2.95135
568565.16	4149190.16	568565.16_4149190.16	0.7909	0.61161	0.79938	568565.16	4149190.16	568565.16_4149190.16	0.88591	0.66929	2.84853
568585.16	4149190.16	568585.16_4149190.16	0.77241	0.60712	0.77881	568585.16	4149190.16	568585.16_4149190.16	0.86238	0.66149	2.74639
568605.16	4149190.16	568605.16_4149190.16	0.75436	0.60212	0.75891	568605.16	4149190.16	568605.16_4149190.16	0.8397	0.65354	2.64628
568625.16	4149190.16	568625.16_4149190.16	0.7354	0.59592	0.73839	568625.16	4149190.16	568625.16_4149190.16	0.81778	0.64565	2.54937
568645.16	4149190.16	568645.16_4149190.16	0.72053	0.59118	0.72146	568645.16	4149190.16	568645.16_4149190.16	0.79661	0.63686	2.45715
568665.16	4149190.16	568665.16_4149190.16	0.70243	0.58405	0.70193	568665.16	4149190.16	568665.16_4149190.16	0.77623	0.62859	2.36912
568685.16	4149190.16	568685.16_4149190.16	0.68403	0.57612	0.68226	568685.16	4149190.16	568685.16_4149190.16	0.75646	0.62025	2.2856
568705.16	4149190.16	568705.16_4149190.16	0.66867	0.56924	0.66543	568705.16	4149190.16	568705.16_4149190.16	0.73758	0.61125	2.20782
568725.16	4149190.16	568725.16_4149190.16	0.65471	0.56253	0.65037	568725.16	4149190.16	568725.16_4149190.16	0.71958	0.60193	2.13646
567325.16	4149210.16	567325.16_4149210.16	0.06293	0.15922	0.05603	567325.16	4149210.16	567325.16_4149210.16	0.06855	0.18276	0.13796
567345.16	4149210.16	567345.16_4149210.16	0.06589	0.17148	0.05879	567345.16	4149210.16	567345.16_4149210.16	0.07177	0.19716	0.1447
567365.16	4149210.16	567365.16_4149210.16	0.0692	0.18564	0.06203	567365.16	4149210.16	567365.16_4149210.16	0.07531	0.21341	0.15221
567385.16	4149210.16	567385.16_4149210.16	0.07252	0.20057	0.06539	567385.16	4149210.16	567385.16_4149210.16	0.07902	0.23134	0.16034
567405.16	4149210.16	567405.16_4149210.16	0.07619	0.21764	0.06925	567405.16	4149210.16	567405.16_4149210.16	0.08306	0.25157	0.16943
567425.16	4149210.16	567425.16_4149210.16	0.08025	0.23723	0.07369	567425.16	4149210.16	567425.16_4149210.16	0.08747	0.27445	0.17962
567445.16	4149210.16	567445.16_4149210.16	0.08466	0.25935	0.07867	567445.16	4149210.16	567445.16_4149210.16	0.09225	0.3002	0.19104
567465.16	4149210.16	567465.16_4149210.16	0.08921	0.2831	0.084	567465.16	4149210.16	567465.16_4149210.16	0.09738	0.32888	0.2037
567485.16	4149210.16	567485.16_4149210.16	0.09438	0.31102	0.0902	567485.16	4149210.16	567485.16_4149210.16	0.10306	0.36143	0.21807
567505.16	4149210.16	567505.16_4149210.16	0.10024	0.34359	0.09729	567505.16	4149210.16	567505.16_4149210.16	0.10935	0.39829	0.23438
567585.16	4149210.16	567585.16_4149210.16	0.12942	0.5165	0.13244	567585.16	4149210.16	567585.16_4149210.16	0.14133	0.59176	0.32143
567605.16	4149210.16	567605.16_4149210.16	0.13859	0.57092	0.14288	567605.16	4149210.16	567605.16_4149210.16	0.15158	0.65234	0.34959
567625.16	4149210.16	567625.16_4149210.16	0.14869	0.62908	0.15395	567625.16	4149210.16	567625.16_4149210.16	0.16291	0.71746	0.38071
567645.16	4149210.16	567645.16_4149210.16	0.15976	0.68926	0.16563	567645.16	4149210.16	567645.16_4149210.16	0.17547	0.78637	0.41504
567665.16	4149210.16	567665.16_4149210.16	0.17239	0.75408	0.17851	567665.16	4149210.16	567665.16_4149210.16	0.18963	0.8591	0.45366
567745.16	4149210.16	567745.16_4149210.16	0.23655	1.00171	0.24228	567745.16	4149210.16	567745.16_4149210.16	0.26273	1.15829	0.66049
567765.16	4149210.16	567765.16_4149210.16	0.25687	1.05692	0.2628	567765.16	4149210.16	567765.16_4149210.16	0.28595	1.22896	0.729
567785.16	4149210.16	567785.16_4149210.16	0.2786	1.10462	0.28493	567785.16	4149210.16	567785.16_4149210.16	0.31118	1.2946	0.80515
567805.16	4149210.16	567805.16_4149210.16	0.3023	1.14759	0.30918	567805.16	4149210.16	567805.16_4149210.16	0.33873	1.35452	0.88984
567825.16	4149210.16	567825.16_4149210.16	0.32941	1.19258	0.3369	567825.16	4149210.16	567825.16_4149210.16	0.36917	1.40827	0.98499
567845.16	4149210.16	567845.16_4149210.16	0.35608	1.21991	0.36421	567845.16	4149210.16	567845.16_4149210.16	0.40123	1.45267	1.08868
567865.16	4149210.16	567865.16_4149210.16	0.38566	1.24604	0.39456	567865.16	4149210.16	567865.16_4149210.16	0.43609	1.48829	1.20319
567885.16	4149210.16	567885.16_4149210.16	0.41824	1.27003	0.4283	567885.16	4149210.16	567885.16_4149210.16	0.4735	1.51422	1.32817
567905.16	4149210.16	567905.16_4149210.16	0.45192	1.28349	0.46363	567905.16	4149210.16	567905.16_4149210.16	0.5131	1.52953	1.46216
567925.16	4149210.16	567925.16_4149210.16	0.48845	1.29267	0.50277	567925.16	4149210.16	567925.16_4149210.16	0.55546	1.53399	1.60604
567985.16	4149210.16	567985.16_4149210.16	0.60673	1.27168	0.63777	567985.16	4149210.16	567985.16_4149210.16	0.69461	1.4856	2.0928
568005.16	4149210.16	568005.16_4149210.16	0.64767	1.24898	0.68553	568005.16	4149210.16	568005.16_4149210.16	0.74328	1.4506	2.26567

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568025.16	4149210.16	568025.16_4149210.16	0.68899	1.22012	0.73175	568025.16	4149210.16	568025.16_4149210.16	0.79194	1.40677	2.43534
568045.16	4149210.16	568045.16_4149210.16	0.7293	1.18449	0.77335	568045.16	4149210.16	568045.16_4149210.16	0.8395	1.3549	2.59762
568065.16	4149210.16	568065.16_4149210.16	0.76576	1.1402	0.80757	568065.16	4149210.16	568065.16_4149210.16	0.88475	1.29923	2.75111
568085.16	4149210.16	568085.16_4149210.16	0.7974	1.08904	0.8361	568085.16	4149210.16	568085.16_4149210.16	0.92695	1.24196	2.89562
568105.16	4149210.16	568105.16_4149210.16	0.82848	1.0384	0.86634	568105.16	4149210.16	568105.16_4149210.16	0.9667	1.18281	3.03222
568125.16	4149210.16	568125.16_4149210.16	0.86362	0.99341	0.90384	568125.16	4149210.16	568125.16_4149210.16	1.00486	1.1226	3.16227
568145.16	4149210.16	568145.16_4149210.16	0.89677	0.94853	0.94112	568145.16	4149210.16	568145.16_4149210.16	1.03972	1.06493	3.28231
568165.16	4149210.16	568165.16_4149210.16	0.92373	0.90188	0.97167	568165.16	4149210.16	568165.16_4149210.16	1.07022	1.01193	3.39077
568185.16	4149210.16	568185.16_4149210.16	0.94499	0.85563	0.99536	568185.16	4149210.16	568185.16_4149210.16	1.09601	0.96326	3.48713
568205.16	4149210.16	568205.16_4149210.16	0.96752	0.81564	1.02018	568205.16	4149210.16	568205.16_4149210.16	1.11763	0.91683	3.57113
568225.16	4149210.16	568225.16_4149210.16	0.98147	0.77573	1.03582	568225.16	4149210.16	568225.16_4149210.16	1.13294	0.8753	3.63345
568245.16	4149210.16	568245.16_4149210.16	0.99603	0.74237	1.05092	568245.16	4149210.16	568245.16_4149210.16	1.14323	0.83633	3.67709
568265.16	4149210.16	568265.16_4149210.16	0.99941	0.7086	1.0543	568265.16	4149210.16	568265.16_4149210.16	1.14702	0.80269	3.70139
568285.16	4149210.16	568285.16_4149210.16	0.99893	0.67928	1.05377	568285.16	4149210.16	568285.16_4149210.16	1.14548	0.77259	3.70881
568305.16	4149210.16	568305.16_4149210.16	0.99468	0.65476	1.04755	568305.16	4149210.16	568305.16_4149210.16	1.13878	0.74594	3.6976
568325.16	4149210.16	568325.16_4149210.16	0.98564	0.63443	1.03262	568325.16	4149210.16	568325.16_4149210.16	1.12663	0.72278	3.66798
568345.16	4149210.16	568345.16_4149210.16	0.9729	0.61824	1.0134	568345.16	4149210.16	568345.16_4149210.16	1.1092	0.70281	3.62247
568365.16	4149210.16	568365.16_4149210.16	0.95415	0.60414	0.9912	568365.16	4149210.16	568365.16_4149210.16	1.08662	0.68622	3.55981
568385.16	4149210.16	568385.16_4149210.16	0.94186	0.59773	0.97617	568385.16	4149210.16	568385.16_4149210.16	1.06125	0.67068	3.48079
568405.16	4149210.16	568405.16_4149210.16	0.91519	0.58749	0.94527	568405.16	4149210.16	568405.16_4149210.16	1.03238	0.65943	3.38401
568425.16	4149210.16	568425.16_4149210.16	0.88878	0.57988	0.91327	568425.16	4149210.16	568425.16_4149210.16	1.00243	0.64973	3.28357
568445.16	4149210.16	568445.16_4149210.16	0.86481	0.5749	0.88542	568445.16	4149210.16	568445.16_4149210.16	0.97249	0.64109	3.18842
568465.16	4149210.16	568465.16_4149210.16	0.84235	0.57126	0.86202	568465.16	4149210.16	568465.16_4149210.16	0.94321	0.63342	3.09957
568505.16	4149210.16	568505.16_4149210.16	0.79309	0.56174	0.81183	568505.16	4149210.16	568505.16_4149210.16	0.88791	0.62163	2.92663
568525.16	4149210.16	568525.16_4149210.16	0.77168	0.55836	0.78703	568525.16	4149210.16	568525.16_4149210.16	0.86222	0.616	2.83855
568545.16	4149210.16	568545.16_4149210.16	0.75305	0.55614	0.76412	568545.16	4149210.16	568545.16_4149210.16	0.83789	0.61014	2.74903
568565.16	4149210.16	568565.16_4149210.16	0.73447	0.55347	0.74214	568565.16	4149210.16	568565.16_4149210.16	0.81448	0.60442	2.65817
568585.16	4149210.16	568585.16_4149210.16	0.71396	0.54918	0.71974	568585.16	4149210.16	568585.16_4149210.16	0.79208	0.59912	2.56638
568605.16	4149210.16	568605.16_4149210.16	0.69717	0.54627	0.70144	568605.16	4149210.16	568605.16_4149210.16	0.77053	0.5931	2.4749
568625.16	4149210.16	568625.16_4149210.16	0.68014	0.54256	0.68319	568625.16	4149210.16	568625.16_4149210.16	0.74987	0.58708	2.38466
568645.16	4149210.16	568645.16_4149210.16	0.66491	0.56388	0.66638	568645.16	4149210.16	568645.16_4149210.16	0.7299	0.58059	2.29692
568685.16	4149210.16	568685.16_4149210.16	0.63009	0.52774	0.62881	568685.16	4149210.16	568685.16_4149210.16	0.69279	0.56824	2.13208
568705.16	4149210.16	568705.16_4149210.16	0.61424	0.52188	0.6115	568705.16	4149210.16	568705.16_4149210.16	0.67529	0.5616	2.05707
568725.16	4149210.16	568725.16_4149210.16	0.60251	0.51771	0.5982	568725.16	4149210.16	568725.16_4149210.16	0.65885	0.55408	1.98882
567325.16	4149230.16	567325.16_4149230.16	0.06421	0.16387	0.05745	567325.16	4149230.16	567325.16_4149230.16	0.06997	0.18848	0.14191
567345.16	4149230.16	567345.16_4149230.16	0.06743	0.17705	0.06088	567345.16	4149230.16	567345.16_4149230.16	0.07336	0.20356	0.14945
567365.16	4149230.16	567365.16_4149230.16	0.07076	0.1913	0.06454	567365.16	4149230.16	567365.16_4149230.16	0.07698	0.22025	0.15769
567385.16	4149230.16	567385.16_4149230.16	0.07412	0.20636	0.0684	567385.16	4149230.16	567385.16_4149230.16	0.08077	0.23865	0.16667
567405.16	4149230.16	567405.16_4149230.16	0.07822	0.22516	0.07317	567405.16	4149230.16	567405.16_4149230.16	0.08504	0.25982	0.17692

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567425.16	4149230.16	567425.16_4149230.16	0.08245	0.24533	0.07822	567425.16	4149230.16	567425.16_4149230.16	0.08961	0.28327	0.18819
567445.16	4149230.16	567445.16_4149230.16	0.08689	0.2674	0.08368	567445.16	4149230.16	567445.16_4149230.16	0.0945	0.30935	0.20067
567465.16	4149230.16	567465.16_4149230.16	0.09189	0.293	0.08984	567465.16	4149230.16	567465.16_4149230.16	0.09989	0.33874	0.21473
567485.16	4149230.16	567485.16_4149230.16	0.09747	0.32258	0.09671	567485.16	4149230.16	567485.16_4149230.16	0.10586	0.37177	0.23048
567525.16	4149230.16	567525.16_4149230.16	0.10956	0.38942	0.11165	567525.16	4149230.16	567525.16_4149230.16	0.11925	0.44832	0.26713
567545.16	4149230.16	567545.16_4149230.16	0.11612	0.42643	0.11963	567545.16	4149230.16	567545.16_4149230.16	0.12681	0.49205	0.28815
567605.16	4149230.16	567605.16_4149230.16	0.14257	0.57427	0.1482	567605.16	4149230.16	567605.16_4149230.16	0.15582	0.65088	0.36707
567625.16	4149230.16	567625.16_4149230.16	0.15324	0.62982	0.15884	567625.16	4149230.16	567625.16_4149230.16	0.16764	0.71085	0.39899
567725.16	4149230.16	567725.16_4149230.16	0.22345	0.89901	0.22707	567725.16	4149230.16	567725.16_4149230.16	0.2473	1.0275	0.62352
567745.16	4149230.16	567745.16_4149230.16	0.24195	0.94621	0.24571	567745.16	4149230.16	567745.16_4149230.16	0.2683	1.08752	0.68642
567765.16	4149230.16	567765.16_4149230.16	0.26108	0.98423	0.26543	567765.16	4149230.16	567765.16_4149230.16	0.29087	1.14302	0.75589
567785.16	4149230.16	567785.16_4149230.16	0.2828	1.02258	0.2881	567785.16	4149230.16	567785.16_4149230.16	0.31573	1.19501	0.83367
567805.16	4149230.16	567805.16_4149230.16	0.30564	1.05386	0.31195	567805.16	4149230.16	567805.16_4149230.16	0.34244	1.24129	0.9193
567825.16	4149230.16	567825.16_4149230.16	0.33168	1.08771	0.33895	567825.16	4149230.16	567825.16_4149230.16	0.3717	1.28303	1.01447
567845.16	4149230.16	567845.16_4149230.16	0.36036	1.12064	0.36855	567845.16	4149230.16	567845.16_4149230.16	0.4034	1.31765	1.11852
567865.16	4149230.16	567865.16_4149230.16	0.38875	1.14034	0.39799	567865.16	4149230.16	567865.16_4149230.16	0.4362	1.34467	1.22953
567885.16	4149230.16	567885.16_4149230.16	0.41869	1.15471	0.42933	567885.16	4149230.16	567885.16_4149230.16	0.47108	1.364	1.34825
567905.16	4149230.16	567905.16_4149230.16	0.45024	1.16403	0.46309	567905.16	4149230.16	567905.16_4149230.16	0.50799	1.37508	1.4748
567925.16	4149230.16	567925.16_4149230.16	0.48355	1.16865	0.49987	567925.16	4149230.16	567925.16_4149230.16	0.54688	1.37767	1.60966
567945.16	4149230.16	567945.16_4149230.16	0.5193	1.1708	0.54067	567945.16	4149230.16	567945.16_4149230.16	0.58771	1.37197	1.75316
568105.16	4149230.16	568105.16_4149230.16	0.7849	0.96431	0.82025	568105.16	4149230.16	568105.16_4149230.16	0.90447	1.08378	2.85373
568125.16	4149230.16	568125.16_4149230.16	0.81099	0.92031	0.84965	568125.16	4149230.16	568125.16_4149230.16	0.93565	1.03269	2.96192
568145.16	4149230.16	568145.16_4149230.16	0.83453	0.87606	0.87686	568145.16	4149230.16	568145.16_4149230.16	0.96384	0.98293	3.06002
568165.16	4149230.16	568165.16_4149230.16	0.85821	0.83494	0.90275	568165.16	4149230.16	568165.16_4149230.16	0.98922	0.93438	3.15022
568185.16	4149230.16	568185.16_4149230.16	0.87967	0.79559	0.92498	568185.16	4149230.16	568185.16_4149230.16	1.01083	0.88831	3.2308
568205.16	4149230.16	568205.16_4149230.16	0.8995	0.75908	0.94555	568205.16	4149230.16	568205.16_4149230.16	1.02827	0.84475	3.29913
568225.16	4149230.16	568225.16_4149230.16	0.90813	0.71984	0.95498	568225.16	4149230.16	568225.16_4149230.16	1.03994	0.80624	3.34801
568245.16	4149230.16	568245.16_4149230.16	0.92086	0.68824	0.96783	568245.16	4149230.16	568245.16_4149230.16	1.04807	0.76907	3.38292
568265.16	4149230.16	568265.16_4149230.16	0.92672	0.65763	0.97345	568265.16	4149230.16	568265.16_4149230.16	1.05123	0.73601	3.40276
568285.16	4149230.16	568285.16_4149230.16	0.92796	0.62982	0.97453	568285.16	4149230.16	568285.16_4149230.16	1.05004	0.70655	3.40847
568305.16	4149230.16	568305.16_4149230.16	0.92461	0.60534	0.96988	568305.16	4149230.16	568305.16_4149230.16	1.04452	0.68056	3.39882
568325.16	4149230.16	568325.16_4149230.16	0.91508	0.58349	0.95577	568325.16	4149230.16	568325.16_4149230.16	1.03431	0.6582	3.37444
568345.16	4149230.16	568345.16_4149230.16	0.90227	0.56548	0.937	568345.16	4149230.16	568345.16_4149230.16	1.01967	0.63883	3.33772
568365.16	4149230.16	568365.16_4149230.16	0.88877	0.55196	0.9201	568365.16	4149230.16	568365.16_4149230.16	1.00114	0.62196	3.28914
568385.16	4149230.16	568385.16_4149230.16	0.87279	0.54135	0.90323	568385.16	4149230.16	568385.16_4149230.16	0.97916	0.60768	3.22503
568405.16	4149230.16	568405.16_4149230.16	0.8493	0.53045	0.8783	568405.16	4149230.16	568405.16_4149230.16	0.95425	0.59656	3.14383
568425.16	4149230.16	568425.16_4149230.16	0.82906	0.52409	0.85397	568425.16	4149230.16	568425.16_4149230.16	0.92819	0.58658	3.05441
568465.16	4149230.16	568465.16_4149230.16	0.78051	0.51215	0.79878	568465.16	4149230.16	568465.16_4149230.16	0.87441	0.57221	2.88073
568485.16	4149230.16	568485.16_4149230.16	0.76476	0.51173	0.7821	568485.16	4149230.16	568485.16_4149230.16	0.84858	0.56533	2.8026

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568505.16	4149230.16	568505.16_4149230.16	0.74148	0.50748	0.75869	568505.16	4149230.16	568505.16_4149230.16	0.82334	0.56063	2.72493
568525.16	4149230.16	568525.16_4149230.16	0.72113	0.50479	0.73637	568525.16	4149230.16	568525.16_4149230.16	0.79917	0.55601	2.64689
568545.16	4149230.16	568545.16_4149230.16	0.7028	0.50308	0.71446	568545.16	4149230.16	568545.16_4149230.16	0.77591	0.55143	2.56775
568565.16	4149230.16	568565.16_4149230.16	0.68514	0.50149	0.69312	568565.16	4149230.16	568565.16_4149230.16	0.75355	0.54698	2.4874
568585.16	4149230.16	568585.16_4149230.16	0.66724	0.52603	0.67254	568585.16	4149230.16	568585.16_4149230.16	0.73214	0.54273	2.40578
568605.16	4149230.16	568605.16_4149230.16	0.65145	0.52286	0.65498	568605.16	4149230.16	568605.16_4149230.16	0.71144	0.5381	2.32329
568625.16	4149230.16	568625.16_4149230.16	0.6338	0.51895	0.63639	568625.16	4149230.16	568625.16_4149230.16	0.6919	0.5339	2.24064
568645.16	4149230.16	568645.16_4149230.16	0.61662	0.51478	0.61841	568645.16	4149230.16	568645.16_4149230.16	0.67325	0.5296	2.15883
568665.16	4149230.16	568665.16_4149230.16	0.59907	0.487	0.59996	568665.16	4149230.16	568665.16_4149230.16	0.65544	0.52531	2.07888
568685.16	4149230.16	568685.16_4149230.16	0.5844	0.48363	0.58375	568685.16	4149230.16	568685.16_4149230.16	0.63829	0.52035	2.00225
568705.16	4149230.16	568705.16_4149230.16	0.5713	0.48049	0.56888	568705.16	4149230.16	568705.16_4149230.16	0.62191	0.51498	1.9303
568725.16	4149230.16	568725.16_4149230.16	0.55905	0.49662	0.55514	568725.16	4149230.16	568725.16_4149230.16	0.6064	0.50936	1.86419
567325.16	4149250.16	567325.16_4149250.16	0.06604	0.16986	0.06059	567325.16	4149250.16	567325.16_4149250.16	0.07163	0.19468	0.14745
567345.16	4149250.16	567345.16_4149250.16	0.06919	0.18284	0.06432	567345.16	4149250.16	567345.16_4149250.16	0.07504	0.21006	0.15561
567365.16	4149250.16	567365.16_4149250.16	0.07237	0.19649	0.06822	567365.16	4149250.16	567365.16_4149250.16	0.07864	0.22694	0.16448
567385.16	4149250.16	567385.16_4149250.16	0.07625	0.21356	0.07295	567385.16	4149250.16	567385.16_4149250.16	0.08274	0.2463	0.17456
567405.16	4149250.16	567405.16_4149250.16	0.08055	0.23321	0.07822	567405.16	4149250.16	567405.16_4149250.16	0.08716	0.26804	0.18575
567425.16	4149250.16	567425.16_4149250.16	0.08506	0.25464	0.08379	567425.16	4149250.16	567425.16_4149250.16	0.09191	0.29208	0.19809
567445.16	4149250.16	567445.16_4149250.16	0.08963	0.27712	0.08956	567445.16	4149250.16	567445.16_4149250.16	0.09697	0.31841	0.21154
567465.16	4149250.16	567465.16_4149250.16	0.09485	0.30358	0.09599	567465.16	4149250.16	567465.16_4149250.16	0.10255	0.34802	0.22661
567505.16	4149250.16	567505.16_4149250.16	0.10621	0.36346	0.10976	567505.16	4149250.16	567505.16_4149250.16	0.11516	0.41621	0.26122
567525.16	4149250.16	567525.16_4149250.16	0.11227	0.39618	0.11695	567525.16	4149250.16	567525.16_4149250.16	0.12225	0.45479	0.28083
567545.16	4149250.16	567545.16_4149250.16	0.11968	0.43636	0.12499	567545.16	4149250.16	567545.16_4149250.16	0.13038	0.49785	0.30291
567565.16	4149250.16	567565.16_4149250.16	0.12814	0.48192	0.13362	567565.16	4149250.16	567565.16_4149250.16	0.13948	0.54472	0.32744
567705.16	4149250.16	567705.16_4149250.16	0.21119	0.81046	0.21302	567705.16	4149250.16	567705.16_4149250.16	0.2333	0.91837	0.59016
567725.16	4149250.16	567725.16_4149250.16	0.22841	0.85274	0.2304	567725.16	4149250.16	567725.16_4149250.16	0.2525	0.97016	0.64846
567745.16	4149250.16	567745.16_4149250.16	0.24702	0.89109	0.24983	567745.16	4149250.16	567745.16_4149250.16	0.27332	1.01897	0.71332
567765.16	4149250.16	567765.16_4149250.16	0.26605	0.92098	0.27013	567765.16	4149250.16	567765.16_4149250.16	0.29553	1.0634	0.78444
567785.16	4149250.16	567785.16_4149250.16	0.28731	0.95042	0.29273	567785.16	4149250.16	567785.16_4149250.16	0.31974	1.10441	0.86316
567805.16	4149250.16	567805.16_4149250.16	0.3107	0.97917	0.31733	567805.16	4149250.16	567805.16_4149250.16	0.34598	1.14154	0.94948
567825.16	4149250.16	567825.16_4149250.16	0.33647	1.00789	0.34409	567825.16	4149250.16	567825.16_4149250.16	0.37419	1.17355	1.04332
567845.16	4149250.16	567845.16_4149250.16	0.36333	1.03132	0.37194	567845.16	4149250.16	567845.16_4149250.16	0.40379	1.20006	1.14352
567865.16	4149250.16	567865.16_4149250.16	0.3892	1.04244	0.39911	567865.16	4149250.16	567865.16_4149250.16	0.4345	1.22089	1.24889
567885.16	4149250.16	567885.16_4149250.16	0.41831	1.05626	0.43012	567885.16	4149250.16	567885.16_4149250.16	0.46734	1.23566	1.36186
567905.16	4149250.16	567905.16_4149250.16	0.44711	1.06098	0.46184	567905.16	4149250.16	567905.16_4149250.16	0.50143	1.24378	1.48086
567925.16	4149250.16	567925.16_4149250.16	0.47793	1.0643	0.49694	567925.16	4149250.16	567925.16_4149250.16	0.53707	1.24516	1.60711
567945.16	4149250.16	567945.16_4149250.16	0.51008	1.06479	0.53446	567945.16	4149250.16	567945.16_4149250.16	0.57389	1.23992	1.7387
567985.16	4149250.16	567985.16_4149250.16	0.57565	1.05441	0.6096	567985.16	4149250.16	567985.16_4149250.16	0.6488	1.21084	2.00272
568005.16	4149250.16	568005.16_4149250.16	0.60624	1.03949	0.64198	568005.16	4149250.16	568005.16_4149250.16	0.68539	1.18745	2.12722

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568025.16	4149250.16	568025.16_4149250.16	0.63616	1.02045	0.6709	568025.16	4149250.16	568025.16_4149250.16	0.72105	1.15821	2.24682
568045.16	4149250.16	568045.16_4149250.16	0.66579	0.99756	0.69801	568045.16	4149250.16	568045.16_4149250.16	0.75554	1.12284	2.36392
568065.16	4149250.16	568065.16_4149250.16	0.69165	0.96621	0.72216	568065.16	4149250.16	568065.16_4149250.16	0.78785	1.08463	2.47752
568085.16	4149250.16	568085.16_4149250.16	0.71521	0.92999	0.74643	568085.16	4149250.16	568085.16_4149250.16	0.81811	1.04355	2.58613
568105.16	4149250.16	568105.16_4149250.16	0.74111	0.89522	0.77511	568105.16	4149250.16	568105.16_4149250.16	0.84711	0.99888	2.68861
568125.16	4149250.16	568125.16_4149250.16	0.76654	0.85968	0.804	568125.16	4149250.16	568125.16_4149250.16	0.874	0.95318	2.7816
568145.16	4149250.16	568145.16_4149250.16	0.78798	0.82151	0.82807	568145.16	4149250.16	568145.16_4149250.16	0.89777	0.90867	2.86392
568165.16	4149250.16	568165.16_4149250.16	0.80401	0.78121	0.84482	568165.16	4149250.16	568165.16_4149250.16	0.91791	0.86627	2.93639
568185.16	4149250.16	568185.16_4149250.16	0.82145	0.74497	0.86171	568185.16	4149250.16	568185.16_4149250.16	0.93535	0.8243	3.00187
568205.16	4149250.16	568205.16_4149250.16	0.83712	0.71057	0.877	568205.16	4149250.16	568205.16_4149250.16	0.94911	0.78421	3.05655
568225.16	4149250.16	568225.16_4149250.16	0.84556	0.67502	0.88555	568225.16	4149250.16	568225.16_4149250.16	0.95848	0.74766	3.09586
568245.16	4149250.16	568245.16_4149250.16	0.8522	0.64239	0.89214	568245.16	4149250.16	568245.16_4149250.16	0.96423	0.71338	3.12224
568265.16	4149250.16	568265.16_4149250.16	0.85619	0.61242	0.89577	568265.16	4149250.16	568265.16_4149250.16	0.96644	0.68186	3.13766
568285.16	4149250.16	568285.16_4149250.16	0.8584	0.58591	0.89769	568285.16	4149250.16	568285.16_4149250.16	0.96541	0.65307	3.14226
568305.16	4149250.16	568305.16_4149250.16	0.85441	0.56086	0.89303	568305.16	4149250.16	568305.16_4149250.16	0.96065	0.62788	3.13396
568425.16	4149250.16	568425.16_4149250.16	0.77393	0.47645	0.79902	568425.16	4149250.16	568425.16_4149250.16	0.86232	0.53352	2.85103
568445.16	4149250.16	568445.16_4149250.16	0.75425	0.47061	0.77533	568445.16	4149250.16	568445.16_4149250.16	0.83853	0.5253	2.76893
568465.16	4149250.16	568465.16_4149250.16	0.73472	0.46644	0.75202	568465.16	4149250.16	568465.16_4149250.16	0.81448	0.51839	2.68987
568485.16	4149250.16	568485.16_4149250.16	0.71484	0.46301	0.7303	568485.16	4149250.16	568485.16_4149250.16	0.79054	0.51269	2.61579
568505.16	4149250.16	568505.16_4149250.16	0.69533	0.46024	0.71025	568505.16	4149250.16	568505.16_4149250.16	0.7671	0.5079	2.54494
568525.16	4149250.16	568525.16_4149250.16	0.67744	0.45859	0.69134	568525.16	4149250.16	568525.16_4149250.16	0.74427	0.50356	2.47506
568545.16	4149250.16	568545.16_4149250.16	0.65947	0.4838	0.67119	568545.16	4149250.16	568545.16_4149250.16	0.72229	0.49978	2.4046
568565.16	4149250.16	568565.16_4149250.16	0.64211	0.4812	0.65086	568565.16	4149250.16	568565.16_4149250.16	0.70107	0.49626	2.33311
568585.16	4149250.16	568585.16_4149250.16	0.62444	0.47853	0.63043	568585.16	4149250.16	568585.16_4149250.16	0.68078	0.49308	2.26047
568605.16	4149250.16	568605.16_4149250.16	0.60781	0.47597	0.61165	568605.16	4149250.16	568605.16_4149250.16	0.66126	0.48984	2.18653
568625.16	4149250.16	568625.16_4149250.16	0.59027	0.473	0.59297	568625.16	4149250.16	568625.16_4149250.16	0.64268	0.4869	2.11176
567325.16	4149270.16	567325.16_4149270.16	0.06777	0.17504	0.06447	567325.16	4149270.16	567325.16_4149270.16	0.07326	0.20064	0.1539
567345.16	4149270.16	567345.16_4149270.16	0.07096	0.18815	0.06852	567345.16	4149270.16	567345.16_4149270.16	0.07675	0.21638	0.16272
567365.16	4149270.16	567365.16_4149270.16	0.07456	0.20345	0.07306	567365.16	4149270.16	567365.16_4149270.16	0.08057	0.23406	0.17251
567385.16	4149270.16	567385.16_4149270.16	0.07861	0.22133	0.0781	567385.16	4149270.16	567385.16_4149270.16	0.08479	0.25391	0.18337
567405.16	4149270.16	567405.16_4149270.16	0.08295	0.24116	0.08346	567405.16	4149270.16	567405.16_4149270.16	0.08933	0.27587	0.19528
567425.16	4149270.16	567425.16_4149270.16	0.0875	0.26272	0.08907	567425.16	4149270.16	567425.16_4149270.16	0.09419	0.30004	0.20832
567445.16	4149270.16	567445.16_4149270.16	0.09241	0.28671	0.09501	567445.16	4149270.16	567445.16_4149270.16	0.09947	0.32674	0.22265
567485.16	4149270.16	567485.16_4149270.16	0.10307	0.34073	0.10754	567485.16	4149270.16	567485.16_4149270.16	0.11137	0.38781	0.25522
567505.16	4149270.16	567505.16_4149270.16	0.10909	0.37185	0.11418	567505.16	4149270.16	567505.16_4149270.16	0.11817	0.42258	0.27375
567525.16	4149270.16	567525.16_4149270.16	0.11583	0.407	0.12121	567525.16	4149270.16	567525.16_4149270.16	0.1257	0.46049	0.29416
567545.16	4149270.16	567545.16_4149270.16	0.12329	0.44515	0.12855	567545.16	4149270.16	567545.16_4149270.16	0.13406	0.5012	0.31648
567565.16	4149270.16	567565.16_4149270.16	0.13144	0.48569	0.13626	567565.16	4149270.16	567565.16_4149270.16	0.14322	0.54442	0.34101
567585.16	4149270.16	567585.16_4149270.16	0.14035	0.52769	0.14444	567585.16	4149270.16	567585.16_4149270.16	0.1533	0.58968	0.36796

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567605.16	4149270.16	567605.16_4149270.16	0.15018	0.57074	0.15332	567605.16	4149270.16	567605.16_4149270.16	0.16442	0.63655	0.39795
567685.16	4149270.16	567685.16_4149270.16	0.20003	0.73502	0.20036	567685.16	4149270.16	567685.16_4149270.16	0.22064	0.82655	0.56022
567705.16	4149270.16	567705.16_4149270.16	0.21596	0.77251	0.21666	567705.16	4149270.16	567705.16_4149270.16	0.23816	0.87153	0.61446
567725.16	4149270.16	567725.16_4149270.16	0.23155	0.79971	0.23329	567725.16	4149270.16	567725.16_4149270.16	0.25666	0.91269	0.6737
567745.16	4149270.16	567745.16_4149270.16	0.25055	0.83276	0.25371	567745.16	4149270.16	567745.16_4149270.16	0.27734	0.95274	0.74037
567765.16	4149270.16	567765.16_4149270.16	0.27035	0.86019	0.27508	567765.16	4149270.16	567765.16_4149270.16	0.2994	0.98909	0.8129
567785.16	4149270.16	567785.16_4149270.16	0.29184	0.8862	0.29797	567785.16	4149270.16	567785.16_4149270.16	0.32307	1.02224	0.89175
567805.16	4149270.16	567805.16_4149270.16	0.31513	0.9115	0.32237	567805.16	4149270.16	567805.16_4149270.16	0.34847	1.05142	0.97677
567825.16	4149270.16	567825.16_4149270.16	0.34016	0.93557	0.34838	567825.16	4149270.16	567825.16_4149270.16	0.37512	1.07599	1.0674
567845.16	4149270.16	567845.16_4149270.16	0.36314	0.94524	0.37253	567845.16	4149270.16	567845.16_4149270.16	0.40248	1.09732	1.16174
567865.16	4149270.16	567865.16_4149270.16	0.38837	0.9564	0.3994	567865.16	4149270.16	567865.16_4149270.16	0.4315	1.11368	1.26215
567885.16	4149270.16	567885.16_4149270.16	0.4152	0.96613	0.42868	567885.16	4149270.16	567885.16_4149270.16	0.46198	1.12511	1.36872
567905.16	4149270.16	567905.16_4149270.16	0.44324	0.97323	0.46027	567905.16	4149270.16	567905.16_4149270.16	0.49365	1.13119	1.48115
567925.16	4149270.16	567925.16_4149270.16	0.47088	0.97417	0.49251	567925.16	4149270.16	567925.16_4149270.16	0.52594	1.13173	1.59729
567945.16	4149270.16	567945.16_4149270.16	0.4989	0.97218	0.52535	567945.16	4149270.16	567945.16_4149270.16	0.55843	1.12689	1.71472
567985.16	4149270.16	567985.16_4149270.16	0.55822	0.96733	0.59051	567985.16	4149270.16	567985.16_4149270.16	0.62499	1.10207	1.94274
568005.16	4149270.16	568005.16_4149270.16	0.58469	0.9553	0.61656	568005.16	4149270.16	568005.16_4149270.16	0.65666	1.08256	2.04859
568025.16	4149270.16	568025.16_4149270.16	0.61009	0.93919	0.63982	568025.16	4149270.16	568025.16_4149270.16	0.68723	1.05827	2.15175
568045.16	4149270.16	568045.16_4149270.16	0.63603	0.92088	0.66381	568045.16	4149270.16	568045.16_4149270.16	0.71683	1.02864	2.25474
568065.16	4149270.16	568065.16_4149270.16	0.65862	0.89495	0.6864	568065.16	4149270.16	568065.16_4149270.16	0.74451	0.9966	2.35481
568085.16	4149270.16	568085.16_4149270.16	0.68101	0.86646	0.71102	568085.16	4149270.16	568085.16_4149270.16	0.77074	0.96106	2.45037
568105.16	4149270.16	568105.16_4149270.16	0.69908	0.83212	0.73228	568105.16	4149270.16	568105.16_4149270.16	0.79447	0.9246	2.53593
568125.16	4149270.16	568125.16_4149270.16	0.7239	0.80422	0.75987	568125.16	4149270.16	568125.16_4149270.16	0.81769	0.88372	2.61556
568145.16	4149270.16	568145.16_4149270.16	0.73977	0.7687	0.77715	568145.16	4149270.16	568145.16_4149270.16	0.8371	0.84527	2.68282
568165.16	4149270.16	568165.16_4149270.16	0.75166	0.73181	0.78855	568165.16	4149270.16	568165.16_4149270.16	0.85334	0.80763	2.74151
568185.16	4149270.16	568185.16_4149270.16	0.76711	0.69982	0.80246	568185.16	4149270.16	568185.16_4149270.16	0.86765	0.76922	2.79521
568205.16	4149270.16	568205.16_4149270.16	0.78088	0.66877	0.81506	568205.16	4149270.16	568205.16_4149270.16	0.87869	0.73212	2.83929
568225.16	4149270.16	568225.16_4149270.16	0.78764	0.63574	0.82141	568225.16	4149270.16	568225.16_4149270.16	0.886	0.69805	2.87045
568245.16	4149270.16	568245.16_4149270.16	0.79054	0.60347	0.82416	568245.16	4149270.16	568245.16_4149270.16	0.8901	0.66629	2.89058
568265.16	4149270.16	568265.16_4149270.16	0.79326	0.5745	0.8265	568265.16	4149270.16	568265.16_4149270.16	0.8916	0.63631	2.90292
568285.16	4149270.16	568285.16_4149270.16	0.79642	0.54941	0.82934	568285.16	4149270.16	568285.16_4149270.16	0.89074	0.6083	2.90729
568305.16	4149270.16	568305.16_4149270.16	0.79116	0.52364	0.82408	568305.16	4149270.16	568305.16_4149270.16	0.88646	0.58404	2.90008
568325.16	4149270.16	568325.16_4149270.16	0.78762	0.50329	0.81882	568325.16	4149270.16	568325.16_4149270.16	0.87988	0.56163	2.88495
568345.16	4149270.16	568345.16_4149270.16	0.78118	0.48579	0.80864	568345.16	4149270.16	568345.16_4149270.16	0.87019	0.5419	2.86141
568365.16	4149270.16	568365.16_4149270.16	0.77131	0.47058	0.79555	568365.16	4149270.16	568365.16_4149270.16	0.85738	0.52493	2.8297
568405.16	4149270.16	568405.16_4149270.16	0.74407	0.44696	0.76862	568405.16	4149270.16	568405.16_4149270.16	0.82366	0.49837	2.73517
568425.16	4149270.16	568425.16_4149270.16	0.72537	0.43717	0.74973	568425.16	4149270.16	568425.16_4149270.16	0.80364	0.4886	2.66858
568445.16	4149270.16	568445.16_4149270.16	0.70907	0.43125	0.73056	568445.16	4149270.16	568445.16_4149270.16	0.78267	0.47994	2.59513
568465.16	4149270.16	568465.16_4149270.16	0.69189	0.42682	0.70934	568465.16	4149270.16	568465.16_4149270.16	0.76104	0.47276	2.52104

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	X	Υ	Lookup	ARLN1	PAREA1	ARLN3
568485.16	4149270.16	568485.16_4149270.16	0.67179	0.42211	0.68615	568485.16	4149270.16	568485.16_4149270.16	0.73913	0.46729	2.45043
568505.16	4149270.16	568505.16_4149270.16	0.65058	0.41754	0.66367	568505.16	4149270.16	568505.16_4149270.16	0.71732	0.46304	2.38381
568525.16	4149270.16	568525.16_4149270.16	0.63206	0.41487	0.64469	568525.16	4149270.16	568525.16_4149270.16	0.69613	0.4592	2.31996
568545.16	4149270.16	568545.16_4149270.16	0.61652	0.4141	0.62808	568545.16	4149270.16	568545.16_4149270.16	0.67566	0.45554	2.25698
568565.16	4149270.16	568565.16_4149270.16	0.59931	0.41245	0.60915	568565.16	4149270.16	568565.16_4149270.16	0.65574	0.45266	2.1931
568585.16	4149270.16	568585.16_4149270.16	0.58371	0.41172	0.59111	568585.16	4149270.16	568585.16_4149270.16	0.63654	0.44983	2.12822
568605.16	4149270.16	568605.16_4149270.16	0.56834	0.41098	0.57335	568605.16	4149270.16	568605.16_4149270.16	0.61795	0.44718	2.06205
568625.16	4149270.16	568625.16_4149270.16	0.54996	0.4081	0.55345	568625.16	4149270.16	568625.16_4149270.16	0.60015	0.4453	1.99431
568645.16	4149270.16	568645.16_4149270.16	0.53625	0.40769	0.53831	568645.16	4149270.16	568645.16_4149270.16	0.58309	0.4426	1.9262
568665.16	4149270.16	568665.16_4149270.16	0.52018	0.40536	0.52151	568665.16	4149270.16	568665.16_4149270.16	0.56666	0.4404	1.85764
568685.16	4149270.16	568685.16_4149270.16	0.5079	0.40484	0.5081	568685.16	4149270.16	568685.16_4149270.16	0.55117	0.43747	1.79068
568705.16	4149270.16	568705.16_4149270.16	0.49678	0.42326	0.49574	568705.16	4149270.16	568705.16_4149270.16	0.5363	0.43426	1.7264
568725.16	4149270.16	568725.16_4149270.16	0.4819	0.40096	0.48058	568725.16	4149270.16	568725.16_4149270.16	0.52253	0.43187	1.66592
567325.16	4149290.16	567325.16_4149290.16	0.06964	0.18041	0.06884	567325.16	4149290.16	567325.16_4149290.16	0.07494	0.20662	0.16108
567345.16	4149290.16	567345.16_4149290.16	0.07318	0.19502	0.07329	567345.16	4149290.16	567345.16_4149290.16	0.07864	0.22304	0.17063
567365.16	4149290.16	567365.16_4149290.16	0.07685	0.21069	0.07791	567365.16	4149290.16	567365.16_4149290.16	0.08258	0.24102	0.18098
567385.16	4149290.16	567385.16_4149290.16	0.08089	0.22857	0.08288	567385.16	4149290.16	567385.16_4149290.16	0.08684	0.26101	0.19236
567405.16	4149290.16	567405.16_4149290.16	0.08529	0.2488	0.08814	567405.16	4149290.16	567405.16_4149290.16	0.09149	0.28315	0.20485
567425.16	4149290.16	567425.16_4149290.16	0.09001	0.27105	0.09362	567425.16	4149290.16	567425.16_4149290.16	0.09654	0.30744	0.21843
567485.16	4149290.16	567485.16_4149290.16	0.10558	0.34781	0.11075	567485.16	4149290.16	567485.16_4149290.16	0.11413	0.3934	0.26622
567505.16	4149290.16	567505.16_4149290.16	0.11179	0.37878	0.11689	567505.16	4149290.16	567505.16_4149290.16	0.1212	0.427	0.28509
567525.16	4149290.16	567525.16_4149290.16	0.11874	0.41303	0.12341	567525.16	4149290.16	567525.16_4149290.16	0.129	0.46312	0.30589
567545.16	4149290.16	567545.16_4149290.16	0.12618	0.44851	0.13016	567545.16	4149290.16	567545.16_4149290.16	0.13752	0.50114	0.32852
567565.16	4149290.16	567565.16_4149290.16	0.13439	0.48556	0.13741	567565.16	4149290.16	567565.16_4149290.16	0.1469	0.54092	0.35357
567585.16	4149290.16	567585.16_4149290.16	0.14359	0.52411	0.14548	567585.16	4149290.16	567585.16_4149290.16	0.15722	0.58216	0.38157
567605.16	4149290.16	567605.16_4149290.16	0.15368	0.56272	0.15448	567605.16	4149290.16	567605.16_4149290.16	0.16854	0.62416	0.41302
567665.16	4149290.16	567665.16_4149290.16	0.18992	0.67041	0.18908	567665.16	4149290.16	567665.16_4149290.16	0.20914	0.74854	0.53333
567685.16	4149290.16	567685.16_4149290.16	0.20439	0.70266	0.20413	567685.16	4149290.16	567685.16_4149290.16	0.22515	0.78769	0.58384
567705.16	4149290.16	567705.16_4149290.16	0.21876	0.72685	0.21968	567705.16	4149290.16	567705.16_4149290.16	0.24204	0.82372	0.63892
567725.16	4149290.16	567725.16_4149290.16	0.2354	0.75257	0.23792	567725.16	4149290.16	567725.16_4149290.16	0.26063	0.85822	0.70008
567745.16	4149290.16	567745.16_4149290.16	0.25235	0.77225	0.25672	567745.16	4149290.16	567745.16_4149290.16	0.28027	0.88939	0.76608
567765.16	4149290.16	567765.16_4149290.16	0.27334	0.80068	0.27917	567765.16	4149290.16	567765.16_4149290.16	0.30223	0.91999	0.83921
567785.16	4149290.16	567785.16_4149290.16	0.29553	0.82682	0.3025	567785.16	4149290.16	567785.16_4149290.16	0.32545	0.94731	0.91719
567805.16	4149290.16	567805.16_4149290.16	0.31846	0.84923	0.32639	567805.16	4149290.16	567805.16_4149290.16	0.34955	0.97052	0.99936
567825.16	4149290.16	567825.16_4149290.16	0.33981	0.86046	0.34884	567825.16	4149290.16	567825.16_4149290.16	0.37424	0.99053	1.08464
567845.16	4149290.16	567845.16_4149290.16	0.36375	0.87506	0.37418	567845.16	4149290.16	567845.16_4149290.16	0.40049	1.00729	1.1754
567865.16	4149290.16	567865.16_4149290.16	0.38782	0.8849	0.40032	567865.16	4149290.16	567865.16_4149290.16	0.42768	1.02034	1.27075
567885.16	4149290.16	567885.16_4149290.16	0.41167	0.8895	0.42709	567885.16	4149290.16	567885.16_4149290.16	0.45558	1.02928	1.37038
567905.16	4149290.16	567905.16_4149290.16	0.43827	0.89741	0.45749	567905.16	4149290.16	567905.16_4149290.16	0.48471	1.03387	1.4749

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567925.16	4149290.16	567925.16_4149290.16	0.46443	0.90039	0.4878	567925.16	4149290.16	567925.16_4149290.16	0.51413	1.03388	1.58021
567945.16	4149290.16	567945.16_4149290.16	0.48906	0.89746	0.51613	567945.16	4149290.16	567945.16_4149290.16	0.54328	1.02943	1.68285
567985.16	4149290.16	567985.16_4149290.16	0.53964	0.89049	0.56889	567985.16	4149290.16	567985.16_4149290.16	0.60102	1.00796	1.87739
568005.16	4149290.16	568005.16_4149290.16	0.56272	0.88086	0.59036	568005.16	4149290.16	568005.16_4149290.16	0.62847	0.99135	1.96937
568025.16	4149290.16	568025.16_4149290.16	0.58543	0.86858	0.61108	568025.16	4149290.16	568025.16_4149290.16	0.65496	0.97054	2.06086
568045.16	4149290.16	568045.16_4149290.16	0.60779	0.85301	0.63278	568045.16	4149290.16	568045.16_4149290.16	0.68038	0.94587	2.15215
568065.16	4149290.16	568065.16_4149290.16	0.62627	0.8298	0.65273	568065.16	4149290.16	568065.16_4149290.16	0.70392	0.91955	2.23969
568085.16	4149290.16	568085.16_4149290.16	0.64466	0.80469	0.67404	568085.16	4149290.16	568085.16_4149290.16	0.72615	0.88983	2.32198
568105.16	4149290.16	568105.16_4149290.16	0.66571	0.78109	0.69797	568105.16	4149290.16	568105.16_4149290.16	0.74743	0.85635	2.39738
568125.16	4149290.16	568125.16_4149290.16	0.68201	0.75222	0.71606	568125.16	4149290.16	568125.16_4149290.16	0.76603	0.82281	2.46174
568145.16	4149290.16	568145.16_4149290.16	0.69713	0.7228	0.73131	568145.16	4149290.16	568145.16_4149290.16	0.78242	0.7883	2.5179
568165.16	4149290.16	568165.16_4149290.16	0.70655	0.68987	0.73935	568165.16	4149290.16	568165.16_4149290.16	0.79566	0.75487	2.56567
568185.16	4149290.16	568185.16_4149290.16	0.71943	0.66103	0.75005	568185.16	4149290.16	568185.16_4149290.16	0.80715	0.72018	2.6089
568205.16	4149290.16	568205.16_4149290.16	0.72988	0.63194	0.75884	568205.16	4149290.16	568205.16_4149290.16	0.81576	0.68655	2.64378
568225.16	4149290.16	568225.16_4149290.16	0.73588	0.60183	0.76407	568225.16	4149290.16	568225.16_4149290.16	0.82148	0.65484	2.66867
568245.16	4149290.16	568245.16_4149290.16	0.73888	0.57215	0.76671	568245.16	4149290.16	568245.16_4149290.16	0.82464	0.62492	2.68524
568265.16	4149290.16	568265.16_4149290.16	0.74108	0.54457	0.76855	568265.16	4149290.16	568265.16_4149290.16	0.82566	0.59654	2.69558
568285.16	4149290.16	568285.16_4149290.16	0.74146	0.51883	0.76891	568285.16	4149290.16	568285.16_4149290.16	0.82456	0.57023	2.69904
568305.16	4149290.16	568305.16_4149290.16	0.73999	0.49536	0.76792	568305.16	4149290.16	568305.16_4149290.16	0.82128	0.54612	2.69447
568325.16	4149290.16	568325.16_4149290.16	0.73632	0.47444	0.76389	568325.16	4149290.16	568325.16_4149290.16	0.81573	0.52434	2.6818
568345.16	4149290.16	568345.16_4149290.16	0.73772	0.48615	0.76258	568345.16	4149290.16	568345.16_4149290.16	0.8075	0.50345	2.66287
568365.16	4149290.16	568365.16_4149290.16	0.72662	0.44284	0.74868	568365.16	4149290.16	568365.16_4149290.16	0.79698	0.48701	2.636
568405.16	4149290.16	568405.16_4149290.16	0.69763	0.41482	0.71975	568405.16	4149290.16	568405.16_4149290.16	0.7683	0.46089	2.55812
568425.16	4149290.16	568425.16_4149290.16	0.68221	0.40483	0.70503	568425.16	4149290.16	568425.16_4149290.16	0.75099	0.45056	2.50303
568445.16	4149290.16	568445.16_4149290.16	0.6678	0.39804	0.6891	568445.16	4149290.16	568445.16_4149290.16	0.7325	0.44156	2.43881
568465.16	4149290.16	568465.16_4149290.16	0.65279	0.39314	0.67058	568465.16	4149290.16	568465.16_4149290.16	0.71305	0.43398	2.37064
568485.16	4149290.16	568485.16_4149290.16	0.63343	0.38746	0.64763	568485.16	4149290.16	568485.16_4149290.16	0.6932	0.42837	2.30363
568505.16	4149290.16	568505.16_4149290.16	0.61326	0.38237	0.62495	568505.16	4149290.16	568505.16_4149290.16	0.67316	0.42397	2.24038
568525.16	4149290.16	568525.16_4149290.16	0.59609	0.3796	0.60669	568525.16	4149290.16	568525.16_4149290.16	0.65348	0.42001	2.18105
568545.16	4149290.16	568545.16_4149290.16	0.58147	0.37868	0.59157	568545.16	4149290.16	568545.16_4149290.16	0.63436	0.4164	2.1237
568565.16	4149290.16	568565.16_4149290.16	0.56488	0.37684	0.57453	568565.16	4149290.16	568565.16_4149290.16	0.61561	0.41374	2.0661
568585.16	4149290.16	568585.16_4149290.16	0.54975	0.37594	0.55798	568585.16	4149290.16	568585.16_4149290.16	0.59745	0.41127	2.00775
568605.16	4149290.16	568605.16_4149290.16	0.53585	0.37581	0.54197	568605.16	4149290.16	568605.16_4149290.16	0.57983	0.40888	1.94821
568625.16	4149290.16	568625.16_4149290.16	0.51867	0.37352	0.52307	568625.16	4149290.16	568625.16_4149290.16	0.56295	0.40739	1.8872
568645.16	4149290.16	568645.16_4149290.16	0.5047	0.37298	0.50722	568645.16	4149290.16	568645.16_4149290.16	0.54667	0.40543	1.82528
568665.16	4149290.16	568665.16_4149290.16	0.4908	0.37214	0.49187	568665.16	4149290.16	568665.16_4149290.16	0.53102	0.40356	1.76282
568685.16	4149290.16	568685.16_4149290.16	0.47858	0.37197	0.47846	568685.16	4149290.16	568685.16_4149290.16	0.51606	0.40141	1.70103
568725.16	4149290.16	568725.16_4149290.16	0.45346	0.3695	0.45224	568725.16	4149290.16	568725.16_4149290.16	0.48865	0.39738	1.58466
567325.16	4149310.16	567325.16_4149310.16	0.0717	0.18651	0.07319	567325.16	4149310.16	567325.16_4149310.16	0.07673	0.21266	0.16857

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567345.16	4149310.16	567345.16_4149310.16	0.07522	0.20119	0.07753	567345.16	4149310.16	567345.16_4149310.16	0.08049	0.22926	0.17851
567365.16	4149310.16	567365.16_4149310.16	0.07901	0.21753	0.08208	567365.16	4149310.16	567365.16_4149310.16	0.08453	0.24756	0.18933
567385.16	4149310.16	567385.16_4149310.16	0.08295	0.23499	0.08672	567385.16	4149310.16	567385.16_4149310.16	0.08886	0.26748	0.20097
567405.16	4149310.16	567405.16_4149310.16	0.08755	0.25614	0.09179	567405.16	4149310.16	567405.16_4149310.16	0.0937	0.28979	0.21394
567465.16	4149310.16	567465.16_4149310.16	0.10236	0.32687	0.10718	567465.16	4149310.16	567465.16_4149310.16	0.11042	0.36754	0.25879
567485.16	4149310.16	567485.16_4149310.16	0.1082	0.35499	0.11266	567485.16	4149310.16	567485.16_4149310.16	0.11706	0.39764	0.27646
567505.16	4149310.16	567505.16_4149310.16	0.11443	0.38451	0.11827	567505.16	4149310.16	567505.16_4149310.16	0.12429	0.42953	0.29562
567525.16	4149310.16	567525.16_4149310.16	0.12159	0.41737	0.12449	567525.16	4149310.16	567525.16_4149310.16	0.13236	0.46355	0.31701
567545.16	4149310.16	567545.16_4149310.16	0.12904	0.44953	0.13088	567545.16	4149310.16	567545.16_4149310.16	0.141	0.49856	0.34022
567565.16	4149310.16	567565.16_4149310.16	0.13734	0.48285	0.13806	567565.16	4149310.16	567565.16_4149310.16	0.15053	0.53475	0.36636
567585.16	4149310.16	567585.16_4149310.16	0.14704	0.51864	0.14663	567585.16	4149310.16	567585.16_4149310.16	0.16117	0.57211	0.3961
567625.16	4149310.16	567625.16_4149310.16	0.16901	0.58635	0.16727	567625.16	4149310.16	567625.16_4149310.16	0.18531	0.64632	0.46717
567645.16	4149310.16	567645.16_4149310.16	0.18093	0.61561	0.1793	567645.16	4149310.16	567645.16_4149310.16	0.19874	0.68185	0.50927
567685.16	4149310.16	567685.16_4149310.16	0.20885	0.67058	0.20918	567685.16	4149310.16	567685.16_4149310.16	0.22937	0.749	0.60862
567705.16	4149310.16	567705.16_4149310.16	0.2238	0.69196	0.22589	567705.16	4149310.16	567705.16_4149310.16	0.24623	0.77917	0.66524
567725.16	4149310.16	567725.16_4149310.16	0.23911	0.70827	0.24311	567725.16	4149310.16	567725.16_4149310.16	0.26407	0.80658	0.726
567745.16	4149310.16	567745.16_4149310.16	0.25654	0.72673	0.26221	567745.16	4149310.16	567745.16_4149310.16	0.28348	0.83252	0.79188
567765.16	4149310.16	567765.16_4149310.16	0.27453	0.74191	0.28154	567765.16	4149310.16	567765.16_4149310.16	0.30393	0.85586	0.86164
567785.16	4149310.16	567785.16_4149310.16	0.29619	0.76509	0.30407	567785.16	4149310.16	567785.16_4149310.16	0.32627	0.87863	0.93711
567805.16	4149310.16	567805.16_4149310.16	0.31951	0.78854	0.32825	567805.16	4149310.16	567805.16_4149310.16	0.34934	0.8981	1.01635
567825.16	4149310.16	567825.16_4149310.16	0.34046	0.79975	0.35044	567825.16	4149310.16	567825.16_4149310.16	0.37279	0.91439	1.09781
567845.16	4149310.16	567845.16_4149310.16	0.36128	0.80682	0.37299	567845.16	4149310.16	567845.16_4149310.16	0.39695	0.92795	1.183
567865.16	4149310.16	567865.16_4149310.16	0.38354	0.81464	0.39764	567865.16	4149310.16	567865.16_4149310.16	0.42269	0.93848	1.27272
567885.16	4149310.16	567885.16_4149310.16	0.4082	0.82541	0.42538	567885.16	4149310.16	567885.16_4149310.16	0.44834	0.94566	1.36662
567905.16	4149310.16	567905.16_4149310.16	0.42886	0.8231	0.44962	567905.16	4149310.16	567905.16_4149310.16	0.47402	0.94899	1.45934
567925.16	4149310.16	567925.16_4149310.16	0.45586	0.83386	0.47988	567925.16	4149310.16	567925.16_4149310.16	0.50114	0.94792	1.55413
567945.16	4149310.16	567945.16_4149310.16	0.47792	0.83163	0.50423	567945.16	4149310.16	567945.16_4149310.16	0.52706	0.94442	1.64298
567985.16	4149310.16	567985.16_4149310.16	0.52102	0.82331	0.54675	567985.16	4149310.16	567985.16_4149310.16	0.57733	0.92569	1.81086
568005.16	4149310.16	568005.16_4149310.16	0.54031	0.81393	0.56427	568005.16	4149310.16	568005.16_4149310.16	0.60096	0.912	1.89209
568025.16	4149310.16	568025.16_4149310.16	0.56067	0.80454	0.58357	568025.16	4149310.16	568025.16_4149310.16	0.624	0.89404	1.97414
568045.16	4149310.16	568045.16_4149310.16	0.58064	0.79207	0.60421	568045.16	4149310.16	568045.16_4149310.16	0.64603	0.87298	2.05544
568065.16	4149310.16	568065.16_4149310.16	0.59743	0.77332	0.62336	568065.16	4149310.16	568065.16_4149310.16	0.66644	0.8504	2.1325
568085.16	4149310.16	568085.16_4149310.16	0.61287	0.75152	0.64171	568085.16	4149310.16	568085.16_4149310.16	0.68539	0.82537	2.20306
568105.16	4149310.16	568105.16_4149310.16	0.62999	0.7305	0.66095	568105.16	4149310.16	568105.16_4149310.16	0.70328	0.79702	2.2663
568125.16	4149310.16	568125.16_4149310.16	0.64483	0.70669	0.67648	568125.16	4149310.16	568125.16_4149310.16	0.71905	0.76749	2.32016
568145.16	4149310.16	568145.16_4149310.16	0.65719	0.68078	0.68792	568145.16	4149310.16	568145.16_4149310.16	0.73253	0.73733	2.36612
568165.16	4149310.16	568165.16_4149310.16	0.66665	0.6531	0.69526	568165.16	4149310.16	568165.16_4149310.16	0.74363	0.7071	2.40558
568185.16	4149310.16	568185.16_4149310.16	0.6752	0.62562	0.70137	568185.16	4149310.16	568185.16_4149310.16	0.7525	0.67659	2.43962
568205.16	4149310.16	568205.16_4149310.16	0.68222	0.59809	0.70651	568205.16	4149310.16	568205.16_4149310.16	0.75914	0.64647	2.46705

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568225.16	4149310.16	568225.16_4149310.16	0.68741	0.57067	0.71066	568225.16	4149310.16	568225.16_4149310.16	0.7636	0.61718	2.48713
568245.16	4149310.16	568245.16_4149310.16	0.6897	0.54306	0.71258	568245.16	4149310.16	568245.16_4149310.16	0.76595	0.58931	2.50075
568265.16	4149310.16	568265.16_4149310.16	0.69503	0.5191	0.71744	568265.16	4149310.16	568265.16_4149310.16	0.76678	0.56175	2.51057
568285.16	4149310.16	568285.16_4149310.16	0.69304	0.49306	0.71583	568285.16	4149310.16	568285.16_4149310.16	0.76569	0.53727	2.51378
568305.16	4149310.16	568305.16_4149310.16	0.69174	0.47012	0.71556	568305.16	4149310.16	568305.16_4149310.16	0.76295	0.5141	2.51058
568325.16	4149310.16	568325.16_4149310.16	0.68681	0.4483	0.71145	568325.16	4149310.16	568325.16_4149310.16	0.75821	0.49325	2.4998
568345.16	4149310.16	568345.16_4149310.16	0.68439	0.43126	0.70781	568345.16	4149310.16	568345.16_4149310.16	0.75172	0.47364	2.48345
568365.16	4149310.16	568365.16_4149310.16	0.67682	0.41483	0.69782	568365.16	4149310.16	568365.16_4149310.16	0.74281	0.45673	2.46069
568405.16	4149310.16	568405.16_4149310.16	0.65535	0.38794	0.67523	568405.16	4149310.16	568405.16_4149310.16	0.71841	0.42931	2.39655
568425.16	4149310.16	568425.16_4149310.16	0.64268	0.37772	0.66352	568425.16	4149310.16	568425.16_4149310.16	0.70344	0.41844	2.35134
568445.16	4149310.16	568445.16_4149310.16	0.63082	0.37057	0.65109	568445.16	4149310.16	568445.16_4149310.16	0.68717	0.4089	2.2966
568465.16	4149310.16	568465.16_4149310.16	0.61641	0.36432	0.63431	568465.16	4149310.16	568465.16_4149310.16	0.66978	0.40111	2.23526
568485.16	4149310.16	568485.16_4149310.16	0.59941	0.35844	0.61381	568485.16	4149310.16	568485.16_4149310.16	0.65182	0.39499	2.17263
568505.16	4149310.16	568505.16_4149310.16	0.5818	0.35355	0.59287	568505.16	4149310.16	568505.16_4149310.16	0.63359	0.39006	2.11261
568525.16	4149310.16	568525.16_4149310.16	0.5664	0.3508	0.57534	568525.16	4149310.16	568525.16_4149310.16	0.61545	0.38573	2.05657
568545.16	4149310.16	568545.16_4149310.16	0.55148	0.34889	0.55976	568545.16	4149310.16	568545.16_4149310.16	0.59744	0.38216	2.00315
568565.16	4149310.16	568565.16_4149310.16	0.53449	0.34611	0.54305	568565.16	4149310.16	568565.16_4149310.16	0.57995	0.37967	1.95044
568585.16	4149310.16	568585.16_4149310.16	0.51941	0.34463	0.52774	568585.16	4149310.16	568585.16_4149310.16	0.56284	0.3774	1.89759
568605.16	4149310.16	568605.16_4149310.16	0.50572	0.34412	0.51284	568605.16	4149310.16	568605.16_4149310.16	0.54619	0.37531	1.84377
568625.16	4149310.16	568625.16_4149310.16	0.49058	0.34272	0.49613	568625.16	4149310.16	568625.16_4149310.16	0.53016	0.3738	1.78861
568645.16	4149310.16	568645.16_4149310.16	0.47761	0.3426	0.48101	568645.16	4149310.16	568645.16_4149310.16	0.51463	0.3721	1.73246
568665.16	4149310.16	568665.16_4149310.16	0.4639	0.3418	0.46545	568665.16	4149310.16	568665.16_4149310.16	0.49972	0.37072	1.67542
568685.16	4149310.16	568685.16_4149310.16	0.45202	0.3419	0.45197	568685.16	4149310.16	568685.16_4149310.16	0.48537	0.36908	1.61878
568705.16	4149310.16	568705.16_4149310.16	0.44059	0.35861	0.43951	568705.16	4149310.16	568705.16_4149310.16	0.47173	0.36742	1.56364
567345.16	4149330.16	567345.16_4149330.16	0.07737	0.20821	0.08108	567345.16	4149330.16	567345.16_4149330.16	0.08241	0.23543	0.18621
567365.16	4149330.16	567365.16_4149330.16	0.08106	0.22416	0.08525	567365.16	4149330.16	567365.16_4149330.16	0.0865	0.25364	0.1972
567385.16	4149330.16	567385.16_4149330.16	0.08539	0.2436	0.08981	567385.16	4149330.16	567385.16_4149330.16	0.0911	0.27398	0.2094
567445.16	4149330.16	567445.16_4149330.16	0.09929	0.30803	0.1035	567445.16	4149330.16	567445.16_4149330.16	0.1069	0.34434	0.25148
567465.16	4149330.16	567465.16_4149330.16	0.10485	0.33395	0.10846	567465.16	4149330.16	567465.16_4149330.16	0.11323	0.3715	0.26814
567485.16	4149330.16	567485.16_4149330.16	0.11057	0.36006	0.11342	567485.16	4149330.16	567485.16_4149330.16	0.11996	0.39995	0.28603
567505.16	4149330.16	567505.16_4149330.16	0.11722	0.3893	0.119	567505.16	4149330.16	567505.16_4149330.16	0.12748	0.43025	0.30602
567525.16	4149330.16	567525.16_4149330.16	0.1247	0.42044	0.12534	567525.16	4149330.16	567525.16_4149330.16	0.13579	0.46194	0.32841
567545.16	4149330.16	567545.16_4149330.16	0.13233	0.44981	0.13185	567545.16	4149330.16	567545.16_4149330.16	0.14463	0.49399	0.35288
567605.16	4149330.16	567605.16_4149330.16	0.16117	0.53989	0.15874	567605.16	4149330.16	567605.16_4149330.16	0.17666	0.59234	0.44759
567625.16	4149330.16	567625.16_4149330.16	0.17279	0.56795	0.17056	567625.16	4149330.16	567625.16_4149330.16	0.18928	0.62419	0.48746
567645.16	4149330.16	567645.16_4149330.16	0.18528	0.59377	0.18387	567645.16	4149330.16	567645.16_4149330.16	0.20286	0.65477	0.53173
567665.16	4149330.16	567665.16_4149330.16	0.19916	0.61889	0.19912	567665.16	4149330.16	567665.16_4149330.16	0.21762	0.68407	0.58076
567705.16	4149330.16	567705.16_4149330.16	0.22861	0.65813	0.23226	567705.16	4149330.16	567705.16_4149330.16	0.24992	0.73633	0.69078
567725.16	4149330.16	567725.16_4149330.16	0.24468	0.6745	0.25003	567725.16	4149330.16	567725.16_4149330.16	0.26764	0.75946	0.75143

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
567745.16	4149330.16	567745.16_4149330.16	0.26142	0.68863	0.26814	567745.16	4149330.16	567745.16_4149330.16	0.2863	0.78054	0.81543
567765.16	4149330.16	567765.16_4149330.16	0.27996	0.70467	0.28764	567765.16	4149330.16	567765.16_4149330.16	0.30624	0.80026	0.88331
567785.16	4149330.16	567785.16_4149330.16	0.29976	0.72096	0.3083	567785.16	4149330.16	567785.16_4149330.16	0.32677	0.8178	0.95446
567805.16	4149330.16	567805.16_4149330.16	0.31947	0.73332	0.32908	567805.16	4149330.16	567805.16_4149330.16	0.34813	0.83325	1.02855
567825.16	4149330.16	567825.16_4149330.16	0.33949	0.74353	0.35055	567825.16	4149330.16	567825.16_4149330.16	0.37018	0.84667	1.10603
567845.16	4149330.16	567845.16_4149330.16	0.35953	0.751	0.37253	567845.16	4149330.16	567845.16_4149330.16	0.39281	0.85784	1.18669
567865.16	4149330.16	567865.16_4149330.16	0.3775	0.75067	0.39302	567865.16	4149330.16	567865.16_4149330.16	0.4158	0.86601	1.26872
567885.16	4149330.16	567885.16_4149330.16	0.39741	0.75362	0.41587	567885.16	4149330.16	567885.16_4149330.16	0.43879	0.87134	1.3526
567905.16	4149330.16	567905.16_4149330.16	0.41873	0.7584	0.44023	567905.16	4149330.16	567905.16_4149330.16	0.46215	0.87416	1.43631
567925.16	4149330.16	567925.16_4149330.16	0.44141	0.76477	0.46518	567925.16	4149330.16	567925.16_4149330.16	0.48583	0.87406	1.51832
567945.16	4149330.16	567945.16_4149330.16	0.46451	0.77065	0.48909	567945.16	4149330.16	567945.16_4149330.16	0.5101	0.87011	1.59726
567985.16	4149330.16	567985.16_4149330.16	0.50301	0.76477	0.52554	567985.16	4149330.16	567985.16_4149330.16	0.55422	0.85307	1.74585
568005.16	4149330.16	568005.16_4149330.16	0.52146	0.75903	0.54281	568005.16	4149330.16	568005.16_4149330.16	0.57507	0.84034	1.8196
568025.16	4149330.16	568025.16_4149330.16	0.53856	0.74968	0.55993	568025.16	4149330.16	568025.16_4149330.16	0.59491	0.82554	1.89267
568045.16	4149330.16	568045.16_4149330.16	0.55578	0.73867	0.57873	568045.16	4149330.16	568045.16_4149330.16	0.6139	0.8078	1.96437
568065.16	4149330.16	568065.16_4149330.16	0.57254	0.72519	0.59802	568065.16	4149330.16	568065.16_4149330.16	0.63179	0.78754	2.03217
568085.16	4149330.16	568085.16_4149330.16	0.58619	0.70684	0.61405	568085.16	4149330.16	568085.16_4149330.16	0.64811	0.76618	2.09264
568105.16	4149330.16	568105.16_4149330.16	0.59953	0.68744	0.6286	568105.16	4149330.16	568105.16_4149330.16	0.66297	0.74239	2.14506
568125.16	4149330.16	568125.16_4149330.16	0.60991	0.66493	0.63874	568125.16	4149330.16	568125.16_4149330.16	0.67586	0.71768	2.18879
568145.16	4149330.16	568145.16_4149330.16	0.61948	0.64183	0.64667	568145.16	4149330.16	568145.16_4149330.16	0.68691	0.6915	2.22603
568165.16	4149330.16	568165.16_4149330.16	0.62832	0.61831	0.65293	568165.16	4149330.16	568165.16_4149330.16	0.69602	0.66436	2.25835
568185.16	4149330.16	568185.16_4149330.16	0.63446	0.59315	0.65649	568185.16	4149330.16	568185.16_4149330.16	0.70304	0.63733	2.28556
568205.16	4149330.16	568205.16_4149330.16	0.63923	0.56764	0.65928	568205.16	4149330.16	568205.16_4149330.16	0.70817	0.61034	2.30742
568225.16	4149330.16	568225.16_4149330.16	0.64366	0.5427	0.66261	568225.16	4149330.16	568225.16_4149330.16	0.71164	0.58346	2.32391
568245.16	4149330.16	568245.16_4149330.16	0.6463	0.51766	0.66488	568245.16	4149330.16	568245.16_4149330.16	0.71347	0.55745	2.33565
568265.16	4149330.16	568265.16_4149330.16	0.65165	0.51384	0.66992	568265.16	4149330.16	568265.16_4149330.16	0.71378	0.53148	2.34431
568285.16	4149330.16	568285.16_4149330.16	0.6449	0.46793	0.66419	568285.16	4149330.16	568285.16_4149330.16	0.7127	0.50943	2.34688
568305.16	4149330.16	568305.16_4149330.16	0.64414	0.44597	0.66486	568305.16	4149330.16	568305.16_4149330.16	0.71044	0.48716	2.34499
568325.16	4149330.16	568325.16_4149330.16	0.64137	0.42544	0.66364	568325.16	4149330.16	568325.16_4149330.16	0.70659	0.46667	2.33646
568345.16	4149330.16	568345.16_4149330.16	0.63886	0.40796	0.66099	568345.16	4149330.16	568345.16_4149330.16	0.70125	0.44763	2.32245
568365.16	4149330.16	568365.16_4149330.16	0.63433	0.39241	0.65456	568365.16	4149330.16	568365.16_4149330.16	0.69396	0.43052	2.30311
568405.16	4149330.16	568405.16_4149330.16	0.61626	0.36509	0.63432	568405.16	4149330.16	568405.16_4149330.16	0.67323	0.40266	2.24883
568425.16	4149330.16	568425.16_4149330.16	0.60598	0.35472	0.62475	568425.16	4149330.16	568425.16_4149330.16	0.66029	0.39131	2.21171
568445.16	4149330.16	568445.16_4149330.16	0.59605	0.34705	0.61483	568445.16	4149330.16	568445.16_4149330.16	0.64596	0.38131	2.16583
568465.16	4149330.16	568465.16_4149330.16	0.58337	0.34016	0.60073	568465.16	4149330.16	568465.16_4149330.16	0.63043	0.37308	2.11204
568485.16	4149330.16	568485.16_4149330.16	0.56845	0.33395	0.58298	568485.16	4149330.16	568485.16_4149330.16	0.61425	0.36643	2.05462
568505.16	4149330.16	568505.16_4149330.16	0.55202	0.32839	0.56322	568505.16	4149330.16	568505.16_4149330.16	0.5977	0.36113	1.99788
568525.16	4149330.16	568525.16_4149330.16	0.53799	0.32532	0.54634	568525.16	4149330.16	568525.16_4149330.16	0.58091	0.3564	1.94442
568545.16	4149330.16	568545.16_4149330.16	0.52301	0.32243	0.53008	568545.16	4149330.16	568545.16_4149330.16	0.56427	0.35273	1.89389

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568565.16	4149330.16	568565.16_4149330.16	0.50602	0.31881	0.51336	568565.16	4149330.16	568565.16_4149330.16	0.54788	0.3502	1.84495
568585.16	4149330.16	568585.16_4149330.16	0.49216	0.31734	0.4998	568585.16	4149330.16	568585.16_4149330.16	0.53186	0.34775	1.7966
568605.16	4149330.16	568605.16_4149330.16	0.4795	0.31684	0.4868	568605.16	4149330.16	568605.16_4149330.16	0.5162	0.34558	1.74782
568625.16	4149330.16	568625.16_4149330.16	0.46535	0.31552	0.47173	568625.16	4149330.16	568625.16_4149330.16	0.50095	0.34409	1.69775
568645.16	4149330.16	568645.16_4149330.16	0.45179	0.3146	0.45651	568645.16	4149330.16	568645.16_4149330.16	0.48624	0.34279	1.64649
568665.16	4149330.16	568665.16_4149330.16	0.44137	0.33252	0.44368	568665.16	4149330.16	568665.16_4149330.16	0.4719	0.34107	1.59468
568685.16	4149330.16	568685.16_4149330.16	0.43025	0.33195	0.43053	568685.16	4149330.16	568685.16_4149330.16	0.45811	0.33963	1.54264
568705.16	4149330.16	568705.16_4149330.16	0.41663	0.33066	0.41583	568705.16	4149330.16	568705.16_4149330.16	0.44532	0.33894	1.49202
568725.16	4149330.16	568725.16_4149330.16	0.40635	0.33004	0.40481	568725.16	4149330.16	568725.16_4149330.16	0.43291	0.3376	1.44345
567365.16	4149350.16	567365.16_4149350.16	0.08311	0.23133	0.08745	567365.16	4149350.16	567365.16_4149350.16	0.08858	0.25937	0.20462
567425.16	4149350.16	567425.16_4149350.16	0.09628	0.29069	0.09974	567425.16	4149350.16	567425.16_4149350.16	0.10359	0.3234	0.2443
567445.16	4149350.16	567445.16_4149350.16	0.10142	0.31384	0.10415	567445.16	4149350.16	567445.16_4149350.16	0.10948	0.34782	0.2599
567465.16	4149350.16	567465.16_4149350.16	0.1071	0.33883	0.10887	567465.16	4149350.16	567465.16_4149350.16	0.11597	0.37372	0.27704
567485.16	4149350.16	567485.16_4149350.16	0.11266	0.36244	0.11347	567485.16	4149350.16	567485.16_4149350.16	0.12277	0.40024	0.2954
567505.16	4149350.16	567505.16_4149350.16	0.12001	0.39186	0.1196	567505.16	4149350.16	567505.16_4149350.16	0.13068	0.42894	0.31684
567525.16	4149350.16	567525.16_4149350.16	0.12758	0.42001	0.12614	567525.16	4149350.16	567525.16_4149350.16	0.13911	0.45795	0.34043
567565.16	4149350.16	567565.16_4149350.16	0.14469	0.47472	0.14189	567565.16	4149350.16	567565.16_4149350.16	0.15816	0.51658	0.39652
567585.16	4149350.16	567585.16_4149350.16	0.15447	0.50076	0.15151	567585.16	4149350.16	567585.16_4149350.16	0.16891	0.54556	0.42999
567605.16	4149350.16	567605.16_4149350.16	0.1655	0.52669	0.16292	567605.16	4149350.16	567605.16_4149350.16	0.18064	0.57408	0.46769
567625.16	4149350.16	567625.16_4149350.16	0.17654	0.54797	0.1749	567625.16	4149350.16	567625.16_4149350.16	0.19301	0.60095	0.50896
567645.16	4149350.16	567645.16_4149350.16	0.19136	0.57695	0.19108	567645.16	4149350.16	567645.16_4149350.16	0.20722	0.62809	0.55594
567665.16	4149350.16	567665.16_4149350.16	0.20526	0.59801	0.20673	567665.16	4149350.16	567665.16_4149350.16	0.22207	0.65236	0.60579
567685.16	4149350.16	567685.16_4149350.16	0.21751	0.60854	0.22093	567685.16	4149350.16	567685.16_4149350.16	0.23658	0.67434	0.65762
567725.16	4149350.16	567725.16_4149350.16	0.24825	0.63758	0.25476	567725.16	4149350.16	567725.16_4149350.16	0.27005	0.71436	0.77272
567745.16	4149350.16	567745.16_4149350.16	0.26451	0.64933	0.27203	567745.16	4149350.16	567745.16_4149350.16	0.288	0.73176	0.8343
567765.16	4149350.16	567765.16_4149350.16	0.28241	0.66322	0.29077	567765.16	4149350.16	567765.16_4149350.16	0.30702	0.74783	0.89905
567785.16	4149350.16	567785.16_4149350.16	0.30068	0.67529	0.30998	567785.16	4149350.16	567785.16_4149350.16	0.32611	0.76222	0.9665
567805.16	4149350.16	567805.16_4149350.16	0.31877	0.6843	0.32928	567805.16	4149350.16	567805.16_4149350.16	0.34605	0.77506	1.03658
567825.16	4149350.16	567825.16_4149350.16	0.33805	0.69448	0.35012	567825.16	4149350.16	567825.16_4149350.16	0.36676	0.78627	1.11
567845.16	4149350.16	567845.16_4149350.16	0.35703	0.70175	0.37107	567845.16	4149350.16	567845.16_4149350.16	0.38776	0.79558	1.18543
567865.16	4149350.16	567865.16_4149350.16	0.37529	0.70557	0.39173	567865.16	4149350.16	567865.16_4149350.16	0.40885	0.80267	1.26143
567885.16	4149350.16	567885.16_4149350.16	0.39233	0.70538	0.41139	567885.16	4149350.16	567885.16_4149350.16	0.4297	0.80714	1.33589
567905.16	4149350.16	567905.16_4149350.16	0.40975	0.70546	0.43111	567905.16	4149350.16	567905.16_4149350.16	0.45017	0.80865	1.40824
567925.16	4149350.16	567925.16_4149350.16	0.43324	0.71785	0.45567	567925.16	4149350.16	567925.16_4149350.16	0.47271	0.80797	1.48164
567945.16	4149350.16	567945.16_4149350.16	0.45093	0.71717	0.47324	567945.16	4149350.16	567945.16_4149350.16	0.49302	0.80436	1.5495
567985.16	4149350.16	567985.16_4149350.16	0.48373	0.71018	0.50382	567985.16	4149350.16	567985.16_4149350.16	0.53143	0.78995	1.68244
568005.16	4149350.16	568005.16_4149350.16	0.49913	0.70409	0.51888	568005.16	4149350.16	568005.16_4149350.16	0.54947	0.77935	1.74854
568025.16	4149350.16	568025.16_4149350.16	0.51393	0.69601	0.5346	568025.16	4149350.16	568025.16_4149350.16	0.56668	0.76663	1.81355
568045.16	4149350.16	568045.16_4149350.16	0.52981	0.68787	0.55247	568045.16	4149350.16	568045.16_4149350.16	0.58331	0.75095	1.87682

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568065.16	4149350.16	568065.16_4149350.16	0.54287	0.67494	0.56788	568065.16	4149350.16	568065.16_4149350.16	0.59853	0.73427	1.93475
568085.16	4149350.16	568085.16_4149350.16	0.55629	0.66142	0.58289	568085.16	4149350.16	568085.16_4149350.16	0.61271	0.71502	1.98664
568105.16	4149350.16	568105.16_4149350.16	0.56796	0.64534	0.59481	568105.16	4149350.16	568105.16_4149350.16	0.6253	0.69429	2.03051
568125.16	4149350.16	568125.16_4149350.16	0.57672	0.62616	0.60254	568125.16	4149350.16	568125.16_4149350.16	0.63606	0.67275	2.06652
568145.16	4149350.16	568145.16_4149350.16	0.58571	0.607	0.6093	568145.16	4149350.16	568145.16_4149350.16	0.64526	0.64941	2.09719
568165.16	4149350.16	568165.16_4149350.16	0.59228	0.58576	0.61315	568165.16	4149350.16	568165.16_4149350.16	0.65258	0.62568	2.12321
568185.16	4149350.16	568185.16_4149350.16	0.59746	0.56353	0.6157	568185.16	4149350.16	568185.16_4149350.16	0.65823	0.6015	2.14538
568205.16	4149350.16	568205.16_4149350.16	0.60117	0.54048	0.61745	568205.16	4149350.16	568205.16_4149350.16	0.66225	0.57721	2.16324
568225.16	4149350.16	568225.16_4149350.16	0.60411	0.51728	0.61936	568225.16	4149350.16	568225.16_4149350.16	0.66486	0.55292	2.17679
568245.16	4149350.16	568245.16_4149350.16	0.6058	0.4939	0.62086	568245.16	4149350.16	568245.16_4149350.16	0.66618	0.52909	2.18682
568265.16	4149350.16	568265.16_4149350.16	0.6068	0.47096	0.62212	568265.16	4149350.16	568265.16_4149350.16	0.66642	0.50589	2.1942
568285.16	4149350.16	568285.16_4149350.16	0.6062	0.44826	0.62239	568285.16	4149350.16	568285.16_4149350.16	0.66554	0.4838	2.19802
568305.16	4149350.16	568305.16_4149350.16	0.60523	0.42694	0.62318	568305.16	4149350.16	568305.16_4149350.16	0.66364	0.46274	2.19699
568325.16	4149350.16	568325.16_4149350.16	0.60232	0.40662	0.62244	568325.16	4149350.16	568325.16_4149350.16	0.66043	0.44318	2.19
568345.16	4149350.16	568345.16_4149350.16	0.60087	0.38959	0.6217	568345.16	4149350.16	568345.16_4149350.16	0.65605	0.4246	2.17812
568365.16	4149350.16	568365.16_4149350.16	0.59854	0.37474	0.61802	568365.16	4149350.16	568365.16_4149350.16	0.64998	0.4075	2.16137
568405.16	4149350.16	568405.16_4149350.16	0.58319	0.34717	0.59967	568405.16	4149350.16	568405.16_4149350.16	0.63235	0.3795	2.11431
568425.16	4149350.16	568425.16_4149350.16	0.57492	0.33676	0.59147	568425.16	4149350.16	568425.16_4149350.16	0.62102	0.36775	2.08338
568445.16	4149350.16	568445.16_4149350.16	0.56443	0.32746	0.58137	568445.16	4149350.16	568445.16_4149350.16	0.60833	0.35774	2.04486
568465.16	4149350.16	568465.16_4149350.16	0.55282	0.33898	0.56911	568465.16	4149350.16	568465.16_4149350.16	0.59453	0.34918	1.99868
568485.16	4149350.16	568485.16_4149350.16	0.53961	0.33215	0.55393	568485.16	4149350.16	568485.16_4149350.16	0.57997	0.34207	1.94721
568505.16	4149350.16	568505.16_4149350.16	0.52383	0.30645	0.53541	568505.16	4149350.16	568505.16_4149350.16	0.56502	0.33648	1.8943
568525.16	4149350.16	568525.16_4149350.16	0.50995	0.30228	0.51854	568525.16	4149350.16	568525.16_4149350.16	0.54965	0.33153	1.84327
568545.16	4149350.16	568545.16_4149350.16	0.49623	0.2991	0.50287	568545.16	4149350.16	568545.16_4149350.16	0.53425	0.32745	1.79504
568565.16	4149350.16	568565.16_4149350.16	0.48213	0.29631	0.48823	568565.16	4149350.16	568565.16_4149350.16	0.51899	0.32425	1.74904
568585.16	4149350.16	568585.16_4149350.16	0.46962	0.29492	0.4759	568585.16	4149350.16	568585.16_4149350.16	0.50387	0.32146	1.70427
568605.16	4149350.16	568605.16_4149350.16	0.45756	0.31094	0.46398	568605.16	4149350.16	568605.16_4149350.16	0.48903	0.31915	1.65944
568625.16	4149350.16	568625.16_4149350.16	0.45535	0.31088	0.4552	568625.16	4149350.16	568625.16_4149350.16	0.4732	0.31579	1.61209
568645.16	4149350.16	568645.16_4149350.16	0.44259	0.30977	0.44155	568645.16	4149350.16	568645.16_4149350.16	0.45914	0.3143	1.56525
568665.16	4149350.16	568665.16_4149350.16	0.42796	0.30852	0.42684	568665.16	4149350.16	568665.16_4149350.16	0.44612	0.31357	1.51847
568685.16	4149350.16	568685.16_4149350.16	0.40843	0.30664	0.40978	568685.16	4149350.16	568685.16_4149350.16	0.43414	0.31384	1.47211
568705.16	4149350.16	568705.16_4149350.16	0.39135	0.28736	0.39174	568705.16	4149350.16	568705.16_4149350.16	0.42164	0.31406	1.42485
568725.16	4149350.16	568725.16_4149350.16	0.38164	0.2879	0.38089	568725.16	4149350.16	568725.16_4149350.16	0.40996	0.31303	1.38038
567325.16	4149370.16	567325.16_4149370.16	0.07719	0.20417	0.08136	567325.16	4149370.16	567325.16_4149370.16	0.08206	0.22905	0.18903
567405.16	4149370.16	567405.16_4149370.16	0.09333	0.27462	0.09598	567405.16	4149370.16	567405.16_4149370.16	0.10039	0.30438	0.23726
567425.16	4149370.16	567425.16_4149370.16	0.09815	0.29563	0.09996	567425.16	4149370.16	567425.16_4149370.16	0.10599	0.32649	0.25201
567445.16	4149370.16	567445.16_4149370.16	0.10327	0.31748	0.10415	567445.16	4149370.16	567445.16_4149370.16	0.11199	0.34968	0.26812
567465.16	4149370.16	567465.16_4149370.16	0.10945	0.34256	0.10919	567465.16	4149370.16	567465.16_4149370.16	0.11877	0.37445	0.28634
567485.16	4149370.16	567485.16_4149370.16	0.11587	0.36724	0.11455	567485.16	4149370.16	567485.16_4149370.16	0.126	0.39979	0.30637

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567505.16	4149370.16	567505.16_4149370.16	0.12304	0.39286	0.12079	567505.16	4149370.16	567505.16_4149370.16	0.13392	0.42587	0.32878
567545.16	4149370.16	567545.16_4149370.16	0.13856	0.44054	0.13527	567545.16	4149370.16	567545.16_4149370.16	0.15153	0.47805	0.38184
567565.16	4149370.16	567565.16_4149370.16	0.1482	0.46574	0.14493	567565.16	4149370.16	567565.16_4149370.16	0.16169	0.50436	0.41384
567585.16	4149370.16	567585.16_4149370.16	0.15836	0.48873	0.15559	567585.16	4149370.16	567585.16_4149370.16	0.17253	0.52983	0.44934
567605.16	4149370.16	567605.16_4149370.16	0.16871	0.50815	0.16695	567605.16	4149370.16	567605.16_4149370.16	0.18404	0.55394	0.48826
567625.16	4149370.16	567625.16_4149370.16	0.18088	0.52919	0.18061	567625.16	4149370.16	567625.16_4149370.16	0.19669	0.57754	0.53142
567645.16	4149370.16	567645.16_4149370.16	0.19449	0.55026	0.19589	567645.16	4149370.16	567645.16_4149370.16	0.21037	0.60004	0.57831
567665.16	4149370.16	567665.16_4149370.16	0.20823	0.5677	0.21144	567665.16	4149370.16	567665.16_4149370.16	0.22469	0.62046	0.6279
567685.16	4149370.16	567685.16_4149370.16	0.22053	0.57635	0.22556	567685.16	4149370.16	567685.16_4149370.16	0.23919	0.63863	0.6788
567705.16	4149370.16	567705.16_4149370.16	0.23548	0.59009	0.24182	567705.16	4149370.16	567705.16_4149370.16	0.2551	0.65616	0.73338
567745.16	4149370.16	567745.16_4149370.16	0.2661	0.61065	0.27431	567745.16	4149370.16	567745.16_4149370.16	0.28872	0.68646	0.84864
567765.16	4149370.16	567765.16_4149370.16	0.28306	0.62226	0.29209	567765.16	4149370.16	567765.16_4149370.16	0.30667	0.69985	0.91024
567785.16	4149370.16	567785.16_4149370.16	0.29953	0.6304	0.30959	567785.16	4149370.16	567785.16_4149370.16	0.32492	0.71189	0.97393
567805.16	4149370.16	567805.16_4149370.16	0.31735	0.64053	0.32866	567805.16	4149370.16	567805.16_4149370.16	0.34318	0.72276	1.04057
567825.16	4149370.16	567825.16_4149370.16	0.33572	0.65044	0.34857	567825.16	4149370.16	567825.16_4149370.16	0.36247	0.73196	1.10934
567845.16	4149370.16	567845.16_4149370.16	0.35311	0.65651	0.36787	567845.16	4149370.16	567845.16_4149370.16	0.38176	0.73993	1.17855
567865.16	4149370.16	567865.16_4149370.16	0.37098	0.6627	0.38789	567865.16	4149370.16	567865.16_4149370.16	0.40124	0.7455	1.24752
567885.16	4149370.16	567885.16_4149370.16	0.38858	0.66735	0.40754	567885.16	4149370.16	567885.16_4149370.16	0.4206	0.74896	1.31462
567905.16	4149370.16	567905.16_4149370.16	0.40556	0.67001	0.42593	567905.16	4149370.16	567905.16_4149370.16	0.43961	0.75024	1.379
567925.16	4149370.16	567925.16_4149370.16	0.42192	0.67097	0.44261	567925.16	4149370.16	567925.16_4149370.16	0.45815	0.74913	1.44106
567945.16	4149370.16	567945.16_4149370.16	0.43713	0.66946	0.45714	567945.16	4149370.16	567945.16_4149370.16	0.47597	0.74607	1.50165
567985.16	4149370.16	567985.16_4149370.16	0.4641	0.66005	0.4826	567985.16	4149370.16	567985.16_4149370.16	0.50923	0.73401	1.62116
568005.16	4149370.16	568005.16_4149370.16	0.47826	0.65573	0.49718	568005.16	4149370.16	568005.16_4149370.16	0.52511	0.7247	1.68071
568025.16	4149370.16	568025.16_4149370.16	0.49188	0.6497	0.51224	568025.16	4149370.16	568025.16_4149370.16	0.54021	0.71328	1.73844
568045.16	4149370.16	568045.16_4149370.16	0.5052	0.64219	0.52753	568045.16	4149370.16	568045.16_4149370.16	0.55454	0.69998	1.79323
568065.16	4149370.16	568065.16_4149370.16	0.51358	0.62807	0.53786	568065.16	4149370.16	568065.16_4149370.16	0.56702	0.68634	1.84142
568085.16	4149370.16	568085.16_4149370.16	0.52431	0.61621	0.54945	568085.16	4149370.16	568085.16_4149370.16	0.57903	0.67019	1.885
568105.16	4149370.16	568105.16_4149370.16	0.53673	0.60535	0.56119	568105.16	4149370.16	568105.16_4149370.16	0.59021	0.65134	1.9227
568125.16	4149370.16	568125.16_4149370.16	0.54625	0.591	0.56892	568125.16	4149370.16	568125.16_4149370.16	0.59944	0.63166	1.95306
568145.16	4149370.16	568145.16_4149370.16	0.55156	0.57263	0.57181	568145.16	4149370.16	568145.16_4149370.16	0.60677	0.61201	1.97746
568165.16	4149370.16	568165.16_4149370.16	0.55663	0.55388	0.57413	568165.16	4149370.16	568165.16_4149370.16	0.61271	0.59111	1.9987
568185.16	4149370.16	568185.16_4149370.16	0.56139	0.53465	0.57635	568185.16	4149370.16	568185.16_4149370.16	0.61729	0.56935	2.01715
568205.16	4149370.16	568205.16_4149370.16	0.56584	0.51497	0.57885	568205.16	4149370.16	568205.16_4149370.16	0.62056	0.54705	2.03241
568225.16	4149370.16	568225.16_4149370.16	0.56684	0.49304	0.57906	568225.16	4149370.16	568225.16_4149370.16	0.6225	0.52539	2.04361
568245.16	4149370.16	568245.16_4149370.16	0.56441	0.4693	0.5769	568245.16	4149370.16	568245.16_4149370.16	0.62308	0.50439	2.05136
568265.16	4149370.16	568265.16_4149370.16	0.56718	0.44919	0.58009	568265.16	4149370.16	568265.16_4149370.16	0.62347	0.48244	2.0587
568285.16	4149370.16	568285.16_4149370.16	0.5703	0.42999	0.58405	568285.16	4149370.16	568285.16_4149370.16	0.62301	0.46096	2.06337
568305.16	4149370.16	568305.16_4149370.16	0.56897	0.40938	0.58472	568305.16	4149370.16	568305.16_4149370.16	0.6214	0.44119	2.06301
568325.16	4149370.16	568325.16_4149370.16	0.56728	0.3902	0.58549	568325.16	4149370.16	568325.16_4149370.16	0.61882	0.42237	2.05766

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568345.16	4149370.16	568345.16_4149370.16	0.56604	0.37337	0.58562	568345.16	4149370.16	568345.16_4149370.16	0.61515	0.40448	2.04748
568365.16	4149370.16	568365.16_4149370.16	0.56375	0.35832	0.58267	568365.16	4149370.16	568365.16_4149370.16	0.61006	0.38789	2.03262
568405.16	4149370.16	568405.16_4149370.16	0.55148	0.33118	0.56687	568405.16	4149370.16	568405.16_4149370.16	0.595	0.35982	1.99113
568425.16	4149370.16	568425.16_4149370.16	0.54356	0.32006	0.55846	568425.16	4149370.16	568425.16_4149370.16	0.58514	0.34803	1.96469
568445.16	4149370.16	568445.16_4149370.16	0.53463	0.32809	0.5497	568445.16	4149370.16	568445.16_4149370.16	0.57394	0.33769	1.93256
568465.16	4149370.16	568465.16_4149370.16	0.52387	0.31958	0.53881	568465.16	4149370.16	568465.16_4149370.16	0.56172	0.32888	1.89351
568485.16	4149370.16	568485.16_4149370.16	0.51216	0.31234	0.52593	568485.16	4149370.16	568485.16_4149370.16	0.54865	0.32134	1.84842
568505.16	4149370.16	568505.16_4149370.16	0.49672	0.28709	0.50864	568505.16	4149370.16	568505.16_4149370.16	0.53503	0.3155	1.79988
568525.16	4149370.16	568525.16_4149370.16	0.48381	0.28228	0.49305	568525.16	4149370.16	568525.16_4149370.16	0.52099	0.31017	1.7517
568545.16	4149370.16	568545.16_4149370.16	0.47167	0.27897	0.47852	568545.16	4149370.16	568545.16_4149370.16	0.50684	0.30562	1.70554
568565.16	4149370.16	568565.16_4149370.16	0.45974	0.27656	0.46523	568565.16	4149370.16	568565.16_4149370.16	0.49263	0.30184	1.66171
568585.16	4149370.16	568585.16_4149370.16	0.4458	0.27344	0.45128	568585.16	4149370.16	568585.16_4149370.16	0.47861	0.29915	1.61937
568605.16	4149370.16	568605.16_4149370.16	0.43323	0.27154	0.4392	568605.16	4149370.16	568605.16_4149370.16	0.46474	0.29684	1.57781
568625.16	4149370.16	568625.16_4149370.16	0.43159	0.28832	0.43295	568625.16	4149370.16	568625.16_4149370.16	0.45001	0.29324	1.53494
568645.16	4149370.16	568645.16_4149370.16	0.41422	0.28632	0.41854	568645.16	4149370.16	568645.16_4149370.16	0.43755	0.29257	1.49332
568665.16	4149370.16	568665.16_4149370.16	0.39878	0.26925	0.40319	568665.16	4149370.16	568665.16_4149370.16	0.42515	0.29209	1.45003
568685.16	4149370.16	568685.16_4149370.16	0.38101	0.26439	0.38467	568685.16	4149370.16	568685.16_4149370.16	0.41123	0.29183	1.40478
568705.16	4149370.16	568705.16_4149370.16	0.37183	0.2652	0.37341	568705.16	4149370.16	568705.16_4149370.16	0.40044	0.29101	1.36258
568725.16	4149370.16	568725.16_4149370.16	0.36281	0.26595	0.36282	568725.16	4149370.16	568725.16_4149370.16	0.38937	0.29018	1.32171
567325.16	4149390.16	567325.16_4149390.16	0.07895	0.21066	0.08246	567325.16	4149390.16	567325.16_4149390.16	0.08394	0.23391	0.19511
567405.16	4149390.16	567405.16_4149390.16	0.09518	0.27968	0.0961	567405.16	4149390.16	567405.16_4149390.16	0.10271	0.30734	0.2447
567425.16	4149390.16	567425.16_4149390.16	0.09987	0.29896	0.09984	567425.16	4149390.16	567425.16_4149390.16	0.10835	0.32822	0.25987
567445.16	4149390.16	567445.16_4149390.16	0.10544	0.32083	0.10438	567445.16	4149390.16	567445.16_4149390.16	0.11464	0.35042	0.27716
567465.16	4149390.16	567465.16_4149390.16	0.11184	0.34454	0.10979	567465.16	4149390.16	567465.16_4149390.16	0.12157	0.37361	0.29651
567485.16	4149390.16	567485.16_4149390.16	0.11836	0.367	0.11552	567485.16	4149390.16	567485.16_4149390.16	0.12893	0.39695	0.3178
567525.16	4149390.16	567525.16_4149390.16	0.13355	0.41224	0.12994	567525.16	4149390.16	567525.16_4149390.16	0.1456	0.44437	0.36872
567545.16	4149390.16	567545.16_4149390.16	0.14213	0.43364	0.13869	567545.16	4149390.16	567545.16_4149390.16	0.1549	0.46774	0.39886
567565.16	4149390.16	567565.16_4149390.16	0.15205	0.45582	0.1492	567565.16	4149390.16	567565.16_4149390.16	0.16515	0.49093	0.43263
567585.16	4149390.16	567585.16_4149390.16	0.16167	0.47342	0.15991	567585.16	4149390.16	567585.16_4149390.16	0.17583	0.51265	0.46933
567605.16	4149390.16	567605.16_4149390.16	0.17263	0.49115	0.17233	567605.16	4149390.16	567605.16_4149390.16	0.18741	0.53366	0.50956
567625.16	4149390.16	567625.16_4149390.16	0.18479	0.50885	0.18623	567625.16	4149390.16	567625.16_4149390.16	0.19995	0.55375	0.55315
567645.16	4149390.16	567645.16_4149390.16	0.19717	0.52337	0.20041	567645.16	4149390.16	567645.16_4149390.16	0.21305	0.57221	0.59905
567665.16	4149390.16	567665.16_4149390.16	0.2099	0.53549	0.21479	567665.16	4149390.16	567665.16_4149390.16	0.22685	0.58916	0.64703
567685.16	4149390.16	567685.16_4149390.16	0.22398	0.54862	0.23015	567685.16	4149390.16	567685.16_4149390.16	0.24155	0.60516	0.69754
567705.16	4149390.16	567705.16_4149390.16	0.238	0.5587	0.24519	567705.16	4149390.16	567705.16_4149390.16	0.25671	0.61956	0.74955
567725.16	4149390.16	567725.16_4149390.16	0.25279	0.56875	0.26075	567725.16	4149390.16	567725.16_4149390.16	0.27253	0.63279	0.80363
567765.16	4149390.16	567765.16_4149390.16	0.28291	0.58481	0.29253	567765.16	4149390.16	567765.16_4149390.16	0.30553	0.65612	0.91771
567785.16	4149390.16	567785.16_4149390.16	0.29905	0.59358	0.30968	567785.16	4149390.16	567785.16_4149390.16	0.3221	0.66638	0.97822
567805.16	4149390.16	567805.16_4149390.16	0.3151	0.60097	0.32697	567805.16	4149390.16	567805.16_4149390.16	0.33951	0.67561	1.04033

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567825.16	4149390.16	567825.16_4149390.16	0.33173	0.60884	0.3451	567825.16	4149390.16	567825.16_4149390.16	0.35721	0.68365	1.10353
567845.16	4149390.16	567845.16_4149390.16	0.34812	0.61538	0.36326	567845.16	4149390.16	567845.16_4149390.16	0.37496	0.69006	1.16636
567865.16	4149390.16	567865.16_4149390.16	0.36435	0.62088	0.38132	567865.16	4149390.16	567865.16_4149390.16	0.39263	0.69467	1.22778
567885.16	4149390.16	567885.16_4149390.16	0.38007	0.62476	0.39852	567885.16	4149390.16	567885.16_4149390.16	0.41	0.69751	1.28697
567905.16	4149390.16	567905.16_4149390.16	0.39515	0.62695	0.41425	567905.16	4149390.16	567905.16_4149390.16	0.42694	0.69841	1.34398
567925.16	4149390.16	567925.16_4149390.16	0.40955	0.62753	0.42839	567925.16	4149390.16	567925.16_4149390.16	0.44332	0.69727	1.39962
567945.16	4149390.16	567945.16_4149390.16	0.42288	0.62592	0.44094	567945.16	4149390.16	567945.16_4149390.16	0.459	0.69444	1.45465
567985.16	4149390.16	567985.16_4149390.16	0.44712	0.6181	0.46475	567985.16	4149390.16	567985.16_4149390.16	0.48828	0.68362	1.56311
568005.16	4149390.16	568005.16_4149390.16	0.45855	0.61275	0.47713	568005.16	4149390.16	568005.16_4149390.16	0.50193	0.67542	1.61549
568025.16	4149390.16	568025.16_4149390.16	0.47117	0.60846	0.49125	568025.16	4149390.16	568025.16_4149390.16	0.51523	0.66529	1.66633
568045.16	4149390.16	568045.16_4149390.16	0.48166	0.60077	0.50342	568045.16	4149390.16	568045.16_4149390.16	0.52741	0.6542	1.71314
568065.16	4149390.16	568065.16_4149390.16	0.48969	0.58981	0.51271	568065.16	4149390.16	568065.16_4149390.16	0.5383	0.64196	1.75457
568085.16	4149390.16	568085.16_4149390.16	0.49849	0.57942	0.5216	568085.16	4149390.16	568085.16_4149390.16	0.54844	0.62797	1.791
568105.16	4149390.16	568105.16_4149390.16	0.50814	0.5694	0.53	568105.16	4149390.16	568105.16_4149390.16	0.55772	0.61196	1.82202
568125.16	4149390.16	568125.16_4149390.16	0.51744	0.55828	0.53699	568125.16	4149390.16	568125.16_4149390.16	0.56559	0.5943	1.8475
568145.16	4149390.16	568145.16_4149390.16	0.5218	0.5424	0.5388	568145.16	4149390.16	568145.16_4149390.16	0.57163	0.57706	1.86763
568165.16	4149390.16	568165.16_4149390.16	0.5257	0.52579	0.54007	568165.16	4149390.16	568165.16_4149390.16	0.57645	0.5587	1.88517
568185.16	4149390.16	568185.16_4149390.16	0.52908	0.50838	0.54111	568185.16	4149390.16	568185.16_4149390.16	0.58007	0.53951	1.90053
568205.16	4149390.16	568205.16_4149390.16	0.53305	0.49093	0.54336	568205.16	4149390.16	568205.16_4149390.16	0.58269	0.51943	1.91352
568225.16	4149390.16	568225.16_4149390.16	0.53383	0.47114	0.54356	568225.16	4149390.16	568225.16_4149390.16	0.5842	0.49981	1.92319
568245.16	4149390.16	568245.16_4149390.16	0.52726	0.44682	0.53772	568245.16	4149390.16	568245.16_4149390.16	0.58385	0.48115	1.92838
568265.16	4149390.16	568265.16_4149390.16	0.53052	0.42875	0.54167	568265.16	4149390.16	568265.16_4149390.16	0.58438	0.46108	1.93549
568285.16	4149390.16	568285.16_4149390.16	0.53259	0.41032	0.54485	568285.16	4149390.16	568285.16_4149390.16	0.58408	0.44127	1.94
568305.16	4149390.16	568305.16_4149390.16	0.53382	0.39218	0.54796	568305.16	4149390.16	568305.16_4149390.16	0.583	0.42218	1.94089
568325.16	4149390.16	568325.16_4149390.16	0.55581	0.39414	0.56436	568325.16	4149390.16	568325.16_4149390.16	0.57816	0.39918	1.93441
568345.16	4149390.16	568345.16_4149390.16	0.53213	0.35779	0.55063	568345.16	4149390.16	568345.16_4149390.16	0.57792	0.38702	1.92841
568365.16	4149390.16	568365.16_4149390.16	0.52883	0.34214	0.54739	568365.16	4149390.16	568365.16_4149390.16	0.57358	0.37122	1.91508
568385.16	4149390.16	568385.16_4149390.16	0.52539	0.3286	0.54222	568385.16	4149390.16	568385.16_4149390.16	0.56796	0.35647	1.89823
568405.16	4149390.16	568405.16_4149390.16	0.52053	0.31641	0.5353	568405.16	4149390.16	568405.16_4149390.16	0.56088	0.34308	1.87828
568425.16	4149390.16	568425.16_4149390.16	0.51375	0.30521	0.52738	568425.16	4149390.16	568425.16_4149390.16	0.55232	0.33119	1.85525
568445.16	4149390.16	568445.16_4149390.16	0.50605	0.29544	0.51946	568445.16	4149390.16	568445.16_4149390.16	0.54249	0.32063	1.82817
568465.16	4149390.16	568465.16_4149390.16	0.49651	0.28653	0.50997	568465.16	4149390.16	568465.16_4149390.16	0.53161	0.31154	1.79544
568485.16	4149390.16	568485.16_4149390.16	0.48592	0.27881	0.49888	568485.16	4149390.16	568485.16_4149390.16	0.51991	0.30369	1.75667
568505.16	4149390.16	568505.16_4149390.16	0.47416	0.27205	0.4858	568505.16	4149390.16	568505.16_4149390.16	0.50756	0.29705	1.71346
568525.16	4149390.16	568525.16_4149390.16	0.46274	0.26694	0.47226	568525.16	4149390.16	568525.16_4149390.16	0.49475	0.29127	1.66867
568545.16	4149390.16	568545.16_4149390.16	0.45044	0.26247	0.45774	568545.16	4149390.16	568545.16_4149390.16	0.4817	0.28653	1.6245
568565.16	4149390.16	568565.16_4149390.16	0.43752	0.2585	0.44318	568565.16	4149390.16	568565.16_4149390.16	0.46855	0.2827	1.58216
568585.16	4149390.16	568585.16_4149390.16	0.4248	0.25528	0.42975	568585.16	4149390.16	568585.16_4149390.16	0.45539	0.27957	1.54171
568605.16	4149390.16	568605.16_4149390.16	0.4133	0.25327	0.41832	568605.16	4149390.16	568605.16_4149390.16	0.44246	0.27691	1.5027

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
568625.16	4149390.16	568625.16_4149390.16	0.40435	0.26768	0.40939	568625.16	4149390.16	568625.16_4149390.16	0.4296	0.27433	1.46413
568645.16	4149390.16	568645.16_4149390.16	0.38893	0.24928	0.39481	568645.16	4149390.16	568645.16_4149390.16	0.41709	0.2734	1.42444
568665.16	4149390.16	568665.16_4149390.16	0.37759	0.24811	0.38299	568665.16	4149390.16	568665.16_4149390.16	0.40486	0.27213	1.38458
568685.16	4149390.16	568685.16_4149390.16	0.36934	0.24916	0.37303	568685.16	4149390.16	568685.16_4149390.16	0.39331	0.27068	1.34508
568705.16	4149390.16	568705.16_4149390.16	0.35537	0.24625	0.35808	568705.16	4149390.16	568705.16_4149390.16	0.38156	0.27032	1.3048
568725.16	4149390.16	568725.16_4149390.16	0.34532	0.24596	0.34654	568725.16	4149390.16	568725.16_4149390.16	0.37072	0.26963	1.26666
567365.16	4149410.16	567365.16_4149410.16	0.0879	0.24691	0.08888	567365.16	4149410.16	567365.16_4149410.16	0.09456	0.27148	0.22418
567425.16	4149410.16	567425.16_4149410.16	0.10221	0.30311	0.10042	567425.16	4149410.16	567425.16_4149410.16	0.11094	0.32921	0.26899
567445.16	4149410.16	567445.16_4149410.16	0.10807	0.32405	0.10543	567445.16	4149410.16	567445.16_4149410.16	0.11742	0.35008	0.28739
567465.16	4149410.16	567465.16_4149410.16	0.11421	0.34439	0.11091	567465.16	4149410.16	567465.16_4149410.16	0.12432	0.37119	0.30786
567505.16	4149410.16	567505.16_4149410.16	0.1286	0.38591	0.12483	567505.16	4149410.16	567505.16_4149410.16	0.13996	0.41415	0.35652
567525.16	4149410.16	567525.16_4149410.16	0.1365	0.40499	0.13301	567525.16	4149410.16	567525.16_4149410.16	0.14864	0.43519	0.38504
567545.16	4149410.16	567545.16_4149410.16	0.14601	0.42582	0.14323	567545.16	4149410.16	567545.16_4149410.16	0.15826	0.4563	0.41718
567565.16	4149410.16	567565.16_4149410.16	0.15506	0.44199	0.15339	567565.16	4149410.16	567565.16_4149410.16	0.16819	0.47597	0.45179
567585.16	4149410.16	567585.16_4149410.16	0.16554	0.45898	0.16531	567585.16	4149410.16	567585.16_4149410.16	0.17907	0.49516	0.48976
567605.16	4149410.16	567605.16_4149410.16	0.17633	0.47344	0.17779	567605.16	4149410.16	567605.16_4149410.16	0.19048	0.51305	0.53015
567625.16	4149410.16	567625.16_4149410.16	0.18809	0.48741	0.19126	567625.16	4149410.16	567625.16_4149410.16	0.20273	0.52996	0.57313
567645.16	4149410.16	567645.16_4149410.16	0.20043	0.49999	0.20516	567645.16	4149410.16	567645.16_4149410.16	0.21563	0.54563	0.61801
567665.16	4149410.16	567665.16_4149410.16	0.2131	0.51069	0.21912	567665.16	4149410.16	567665.16_4149410.16	0.22909	0.55998	0.66448
567685.16	4149410.16	567685.16_4149410.16	0.22589	0.51929	0.23294	567685.16	4149410.16	567685.16_4149410.16	0.243	0.57303	0.71231
567705.16	4149410.16	567705.16_4149410.16	0.23969	0.52875	0.24746	567705.16	4149410.16	567705.16_4149410.16	0.25761	0.58522	0.7621
567725.16	4149410.16	567725.16_4149410.16	0.25377	0.53727	0.26223	567725.16	4149410.16	567725.16_4149410.16	0.27266	0.59639	0.81358
567745.16	4149410.16	567745.16_4149410.16	0.26805	0.5449	0.27723	567745.16	4149410.16	567745.16_4149410.16	0.2875	0.60672	0.86683
567785.16	4149410.16	567785.16_4149410.16	0.29733	0.55897	0.30835	567785.16	4149410.16	567785.16_4149410.16	0.31904	0.62506	0.97849
567805.16	4149410.16	567805.16_4149410.16	0.31309	0.56766	0.3253	567805.16	4149410.16	567805.16_4149410.16	0.33532	0.63265	1.0363
567825.16	4149410.16	567825.16_4149410.16	0.32757	0.57272	0.34121	567825.16	4149410.16	567825.16_4149410.16	0.35142	0.63979	1.09342
567845.16	4149410.16	567845.16_4149410.16	0.34262	0.57879	0.35785	567845.16	4149410.16	567845.16_4149410.16	0.36759	0.645	1.14979
567865.16	4149410.16	567865.16_4149410.16	0.35756	0.58431	0.37423	567865.16	4149410.16	567865.16_4149410.16	0.38358	0.64856	1.20449
567885.16	4149410.16	567885.16_4149410.16	0.37142	0.58722	0.38897	567885.16	4149410.16	567885.16_4149410.16	0.3991	0.65103	1.25706
567905.16	4149410.16	567905.16_4149410.16	0.38462	0.58862	0.40228	567905.16	4149410.16	567905.16_4149410.16	0.41411	0.65179	1.30827
567925.16	4149410.16	567925.16_4149410.16	0.3977	0.58957	0.41485	567925.16	4149410.16	567925.16_4149410.16	0.42865	0.65035	1.35907
567945.16	4149410.16	567945.16_4149410.16	0.40918	0.58738	0.42581	567945.16	4149410.16	567945.16_4149410.16	0.44243	0.64795	1.40918
567985.16	4149410.16	567985.16_4149410.16	0.43131	0.58121	0.44848	567985.16	4149410.16	567985.16_4149410.16	0.46827	0.63779	1.50704
568005.16	4149410.16	568005.16_4149410.16	0.44158	0.57666	0.45985	568005.16	4149410.16	568005.16_4149410.16	0.48025	0.63062	1.55324
568025.16	4149410.16	568025.16_4149410.16	0.45177	0.57172	0.47134	568025.16	4149410.16	568025.16_4149410.16	0.49164	0.62192	1.59698
568045.16	4149410.16	568045.16_4149410.16	0.46043	0.56461	0.48119	568045.16	4149410.16	568045.16_4149410.16	0.50209	0.61235	1.63697
568065.16	4149410.16	568065.16_4149410.16	0.46718	0.55517	0.48856	568065.16	4149410.16	568065.16_4149410.16	0.5114	0.60181	1.67208
568085.16	4149410.16	568085.16_4149410.16	0.47423	0.54593	0.4951	568085.16	4149410.16	568085.16_4149410.16	0.51993	0.58963	1.70245
568105.16	4149410.16	568105.16_4149410.16	0.48149	0.53655	0.50066	568105.16	4149410.16	568105.16_4149410.16	0.52757	0.57597	1.72795

Х	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568125.16	4149410.16	568125.16_4149410.16	0.49059	0.52813	0.50717	568125.16	4149410.16	568125.16_4149410.16	0.53433	0.56009	1.74957
568145.16	4149410.16	568145.16_4149410.16	0.49361	0.51391	0.50764	568145.16	4149410.16	568145.16_4149410.16	0.53927	0.54515	1.76619
568165.16	4149410.16	568165.16_4149410.16	0.49729	0.49975	0.50885	568165.16	4149410.16	568165.16_4149410.16	0.54322	0.52878	1.78115
568185.16	4149410.16	568185.16_4149410.16	0.50045	0.4846	0.50992	568185.16	4149410.16	568185.16_4149410.16	0.54619	0.51162	1.79431
568205.16	4149410.16	568205.16_4149410.16	0.50367	0.46888	0.51174	568205.16	4149410.16	568205.16_4149410.16	0.54821	0.49368	1.80538
568225.16	4149410.16	568225.16_4149410.16	0.50407	0.45092	0.51184	568225.16	4149410.16	568225.16_4149410.16	0.54944	0.47603	1.81379
568245.16	4149410.16	568245.16_4149410.16	0.50174	0.43103	0.5102	568245.16	4149410.16	568245.16_4149410.16	0.54973	0.45863	1.81978
568265.16	4149410.16	568265.16_4149410.16	0.50036	0.41169	0.50995	568265.16	4149410.16	568265.16_4149410.16	0.54943	0.44076	1.82454
568285.16	4149410.16	568285.16_4149410.16	0.4999	0.39309	0.51091	568285.16	4149410.16	568285.16_4149410.16	0.54879	0.4227	1.82794
568305.16	4149410.16	568305.16_4149410.16	0.50068	0.37575	0.5136	568305.16	4149410.16	568305.16_4149410.16	0.54788	0.40495	1.82914
568325.16	4149410.16	568325.16_4149410.16	0.52529	0.37867	0.53289	568325.16	4149410.16	568325.16_4149410.16	0.54324	0.38193	1.82321
568345.16	4149410.16	568345.16_4149410.16	0.50052	0.34339	0.51801	568345.16	4149410.16	568345.16_4149410.16	0.54386	0.37144	1.81955
568365.16	4149410.16	568365.16_4149410.16	0.49674	0.3276	0.5149	568365.16	4149410.16	568365.16_4149410.16	0.54	0.35626	1.80745
568385.16	4149410.16	568385.16_4149410.16	0.49329	0.31396	0.51009	568385.16	4149410.16	568385.16_4149410.16	0.53522	0.34205	1.79215
568405.16	4149410.16	568405.16_4149410.16	0.49146	0.30313	0.50586	568405.16	4149410.16	568405.16_4149410.16	0.52952	0.32852	1.77487
568425.16	4149410.16	568425.16_4149410.16	0.48532	0.29178	0.49803	568425.16	4149410.16	568425.16_4149410.16	0.52208	0.31669	1.7543
568445.16	4149410.16	568445.16_4149410.16	0.47807	0.28158	0.49015	568445.16	4149410.16	568445.16_4149410.16	0.51346	0.30612	1.73102
568465.16	4149410.16	568465.16_4149410.16	0.47012	0.27267	0.48216	568465.16	4149410.16	568465.16_4149410.16	0.50382	0.29673	1.70364
568485.16	4149410.16	568485.16_4149410.16	0.46139	0.26502	0.4733	568485.16	4149410.16	568485.16_4149410.16	0.49333	0.28848	1.67086
568505.16	4149410.16	568505.16_4149410.16	0.45141	0.2582	0.46263	568505.16	4149410.16	568505.16_4149410.16	0.48216	0.28141	1.63306
568525.16	4149410.16	568525.16_4149410.16	0.43918	0.25147	0.44923	568525.16	4149410.16	568525.16_4149410.16	0.4704	0.27559	1.59183
568545.16	4149410.16	568545.16_4149410.16	0.42884	0.24713	0.43692	568545.16	4149410.16	568545.16_4149410.16	0.45847	0.27033	1.5503
568565.16	4149410.16	568565.16_4149410.16	0.41798	0.24345	0.42413	568565.16	4149410.16	568565.16_4149410.16	0.44636	0.26594	1.50976
568585.16	4149410.16	568585.16_4149410.16	0.40668	0.24027	0.4115	568585.16	4149410.16	568585.16_4149410.16	0.43418	0.26235	1.47093
568605.16	4149410.16	568605.16_4149410.16	0.39511	0.23745	0.3995	568605.16	4149410.16	568605.16_4149410.16	0.42203	0.25949	1.43365
568625.16	4149410.16	568625.16_4149410.16	0.38285	0.23459	0.38758	568625.16	4149410.16	568625.16_4149410.16	0.40994	0.25731	1.39702
568645.16	4149410.16	568645.16_4149410.16	0.36512	0.22862	0.37129	568645.16	4149410.16	568645.16_4149410.16	0.39596	0.25516	1.35788
568665.16	4149410.16	568665.16_4149410.16	0.3565	0.22844	0.36248	568665.16	4149410.16	568665.16_4149410.16	0.38489	0.25379	1.32218
568685.16	4149410.16	568685.16_4149410.16	0.35029	0.23008	0.355	568685.16	4149410.16	568685.16_4149410.16	0.37524	0.25283	1.28703
568705.16	4149410.16	568705.16_4149410.16	0.34082	0.22977	0.34437	568705.16	4149410.16	568705.16_4149410.16	0.36452	0.25188	1.25089
568725.16	4149410.16	568725.16_4149410.16	0.33089	0.22911	0.3332	568725.16	4149410.16	568725.16_4149410.16	0.3541	0.25113	1.21556
567345.16	4149430.16	567345.16_4149430.16	0.08512	0.23375	0.08537	567345.16	4149430.16	567345.16_4149430.16	0.09177	0.2569	0.21791
567365.16	4149430.16	567365.16_4149430.16	0.08932	0.25027	0.08867	567365.16	4149430.16	567365.16_4149430.16	0.09655	0.27377	0.2309
567385.16	4149430.16	567385.16_4149430.16	0.09414	0.26859	0.09259	567385.16	4149430.16	567385.16_4149430.16	0.10185	0.29163	0.24552
567405.16	4149430.16	567405.16_4149430.16	0.09923	0.28705	0.09681	567405.16	4149430.16	567405.16_4149430.16	0.10749	0.31004	0.26139
567425.16	4149430.16	567425.16_4149430.16	0.10434	0.30477	0.10124	567425.16	4149430.16	567425.16_4149430.16	0.11345	0.3287	0.27888
567465.16	4149430.16	567465.16_4149430.16	0.11731	0.3445	0.11344	567465.16	4149430.16	567465.16_4149430.16	0.12724	0.36785	0.32085
567485.16	4149430.16	567485.16_4149430.16	0.12459	0.36379	0.12076	567485.16	4149430.16	567485.16_4149430.16	0.1349	0.38744	0.34549
567505.16	4149430.16	567505.16_4149430.16	0.13199	0.38125	0.12856	567505.16	4149430.16	567505.16_4149430.16	0.14301	0.40654	0.37265

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567525.16	4149430.16	567525.16_4149430.16	0.1404	0.39879	0.13773	567525.16	4149430.16	567525.16_4149430.16	0.15184	0.42539	0.40283
567545.16	4149430.16	567545.16_4149430.16	0.14888	0.41371	0.14734	567545.16	4149430.16	567545.16_4149430.16	0.16113	0.44328	0.43552
567565.16	4149430.16	567565.16_4149430.16	0.15893	0.42995	0.15879	567565.16	4149430.16	567565.16_4149430.16	0.17131	0.46087	0.47137
567585.16	4149430.16	567585.16_4149430.16	0.16887	0.44281	0.17037	567585.16	4149430.16	567585.16_4149430.16	0.1819	0.47708	0.50913
567605.16	4149430.16	567605.16_4149430.16	0.17929	0.454	0.18246	567605.16	4149430.16	567605.16_4149430.16	0.19311	0.49219	0.54883
567625.16	4149430.16	567625.16_4149430.16	0.19147	0.46753	0.19605	567625.16	4149430.16	567625.16_4149430.16	0.20527	0.50686	0.59106
567645.16	4149430.16	567645.16_4149430.16	0.20347	0.47793	0.20927	567645.16	4149430.16	567645.16_4149430.16	0.21777	0.52002	0.63427
567665.16	4149430.16	567665.16_4149430.16	0.21556	0.48641	0.22237	567665.16	4149430.16	567665.16_4149430.16	0.23069	0.532	0.67858
567685.16	4149430.16	567685.16_4149430.16	0.22798	0.49391	0.23553	567685.16	4149430.16	567685.16_4149430.16	0.24408	0.54304	0.72423
567705.16	4149430.16	567705.16_4149430.16	0.24095	0.50143	0.24912	567705.16	4149430.16	567705.16_4149430.16	0.25794	0.55327	0.7715
567725.16	4149430.16	567725.16_4149430.16	0.254	0.50796	0.26281	567725.16	4149430.16	567725.16_4149430.16	0.27207	0.56277	0.82028
567745.16	4149430.16	567745.16_4149430.16	0.26735	0.51433	0.27683	567745.16	4149430.16	567745.16_4149430.16	0.28588	0.57163	0.87065
567765.16	4149430.16	567765.16_4149430.16	0.28112	0.52115	0.29139	567765.16	4149430.16	567765.16_4149430.16	0.30052	0.57989	0.92245
567825.16	4149430.16	567825.16_4149430.16	0.32347	0.54171	0.33721	567825.16	4149430.16	567825.16_4149430.16	0.34516	0.59929	1.07965
567845.16	4149430.16	567845.16_4149430.16	0.33715	0.54717	0.35222	567845.16	4149430.16	567845.16_4149430.16	0.3598	0.60368	1.13007
567865.16	4149430.16	567865.16_4149430.16	0.34987	0.55045	0.36596	567865.16	4149430.16	567865.16_4149430.16	0.37405	0.6073	1.17869
567885.16	4149430.16	567885.16_4149430.16	0.36151	0.55147	0.37802	567885.16	4149430.16	567885.16_4149430.16	0.38776	0.60993	1.2258
567905.16	4149430.16	567905.16_4149430.16	0.37348	0.55313	0.38978	567905.16	4149430.16	567905.16_4149430.16	0.40114	0.6102	1.27261
567925.16	4149430.16	567925.16_4149430.16	0.3854	0.55438	0.40123	567925.16	4149430.16	567925.16_4149430.16	0.41405	0.60853	1.31925
567945.16	4149430.16	567945.16_4149430.16	0.39582	0.55272	0.4115	567945.16	4149430.16	567945.16_4149430.16	0.42625	0.60607	1.36491
567985.16	4149430.16	567985.16_4149430.16	0.41613	0.54804	0.43295	567985.16	4149430.16	567985.16_4149430.16	0.44907	0.59641	1.45235
568005.16	4149430.16	568005.16_4149430.16	0.42521	0.54396	0.44301	568005.16	4149430.16	568005.16_4149430.16	0.45955	0.58999	1.49266
568025.16	4149430.16	568025.16_4149430.16	0.43308	0.53829	0.45186	568025.16	4149430.16	568025.16_4149430.16	0.46927	0.58277	1.53003
568045.16	4149430.16	568045.16_4149430.16	0.44121	0.53293	0.46059	568045.16	4149430.16	568045.16_4149430.16	0.4784	0.57401	1.56452
568065.16	4149430.16	568065.16_4149430.16	0.45143	0.52954	0.47044	568065.16	4149430.16	568065.16_4149430.16	0.48685	0.56277	1.5957
568085.16	4149430.16	568085.16_4149430.16	0.45676	0.52058	0.4748	568085.16	4149430.16	568085.16_4149430.16	0.49408	0.5526	1.62112
568105.16	4149430.16	568105.16_4149430.16	0.4593	0.5089	0.47563	568105.16	4149430.16	568105.16_4149430.16	0.50006	0.54208	1.64122
568125.16	4149430.16	568125.16_4149430.16	0.46528	0.50003	0.47905	568125.16	4149430.16	568125.16_4149430.16	0.5054	0.52881	1.65875
568145.16	4149430.16	568145.16_4149430.16	0.46776	0.48771	0.47911	568145.16	4149430.16	568145.16_4149430.16	0.50948	0.51566	1.67287
568165.16	4149430.16	568165.16_4149430.16	0.47068	0.47519	0.47984	568165.16	4149430.16	568165.16_4149430.16	0.51272	0.50126	1.68566
568185.16	4149430.16	568185.16_4149430.16	0.47377	0.4621	0.48114	568185.16	4149430.16	568185.16_4149430.16	0.51516	0.48587	1.69715
568205.16	4149430.16	568205.16_4149430.16	0.47628	0.4479	0.48258	568205.16	4149430.16	568205.16_4149430.16	0.51677	0.46991	1.70669
568225.16	4149430.16	568225.16_4149430.16	0.47581	0.43127	0.48213	568225.16	4149430.16	568225.16_4149430.16	0.51772	0.45421	1.71385
568245.16	4149430.16	568245.16_4149430.16	0.47453	0.41375	0.48167	568245.16	4149430.16	568245.16_4149430.16	0.51801	0.43818	1.71927
568265.16	4149430.16	568265.16_4149430.16	0.47476	0.39686	0.48301	568265.16	4149430.16	568265.16_4149430.16	0.51797	0.42154	1.72401
568285.16	4149430.16	568285.16_4149430.16	0.47101	0.37758	0.48097	568285.16	4149430.16	568285.16_4149430.16	0.51657	0.40518	1.72597
568305.16	4149430.16	568305.16_4149430.16	0.47039	0.36048	0.48232	568305.16	4149430.16	568305.16_4149430.16	0.5158	0.38861	1.72691
568325.16	4149430.16	568325.16_4149430.16	0.4817	0.36154	0.49491	568325.16	4149430.16	568325.16_4149430.16	0.51557	0.37092	1.7281
568345.16	4149430.16	568345.16_4149430.16	0.48443	0.3474	0.49932	568345.16	4149430.16	568345.16_4149430.16	0.5128	0.35459	1.72179

### Summary of AERMOD Outputs for All Source and Offsite Receptors 7.5 m receptor height

### Summary of AERMOD Outputs for All Source and Offsite Receptors 1.5 m receptor height

X	Υ	Lookup	ARLN1	PAREA1	ARLN3	Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568365.16	4149430.16	568365.16_4149430.16	0.47519	0.31891	0.4921	568365.16	4149430.16	568365.16_4149430.16	0.51042	0.34168	1.71153
568385.16	4149430.16	568385.16_4149430.16	0.46964	0.30407	0.48589	568385.16	4149430.16	568385.16_4149430.16	0.50605	0.32831	1.69697
568405.16	4149430.16	568405.16_4149430.16	0.46579	0.29197	0.47988	568405.16	4149430.16	568405.16_4149430.16	0.50079	0.31544	1.68032
568425.16	4149430.16	568425.16_4149430.16	0.45972	0.28033	0.47174	568425.16	4149430.16	568425.16_4149430.16	0.49423	0.30383	1.66147
568445.16	4149430.16	568445.16_4149430.16	0.4526	0.2697	0.46351	568445.16	4149430.16	568445.16_4149430.16	0.48655	0.29334	1.64086
568465.16	4149430.16	568465.16_4149430.16	0.44556	0.26063	0.45622	568465.16	4149430.16	568465.16_4149430.16	0.478	0.28383	1.61767
568485.16	4149430.16	568485.16_4149430.16	0.43741	0.25244	0.44825	568485.16	4149430.16	568485.16_4149430.16	0.46858	0.27546	1.59008
568505.16	4149430.16	568505.16_4149430.16	0.42855	0.24532	0.4393	568505.16	4149430.16	568505.16_4149430.16	0.45849	0.26811	1.5575
568525.16	4149430.16	568525.16_4149430.16	0.41872	0.239	0.4288	568525.16	4149430.16	568525.16_4149430.16	0.44788	0.26178	1.52073
568545.16	4149430.16	568545.16_4149430.16	0.40914	0.23411	0.41781	568545.16	4149430.16	568545.16_4149430.16	0.43697	0.25623	1.48214
568565.16	4149430.16	568565.16_4149430.16	0.39923	0.23008	0.40611	568565.16	4149430.16	568565.16_4149430.16	0.42584	0.25149	1.44352
568585.16	4149430.16	568585.16_4149430.16	0.38903	0.22672	0.39424	568585.16	4149430.16	568585.16_4149430.16	0.41454	0.24752	1.40613
568605.16	4149430.16	568605.16_4149430.16	0.37902	0.22413	0.38313	568605.16	4149430.16	568605.16_4149430.16	0.40324	0.24417	1.37033
568625.16	4149430.16	568625.16_4149430.16	0.36708	0.22077	0.37103	568625.16	4149430.16	568625.16_4149430.16	0.3919	0.24174	1.33546
568645.16	4149430.16	568645.16_4149430.16	0.35685	0.21885	0.36098	568645.16	4149430.16	568645.16_4149430.16	0.38079	0.23958	1.30144
568665.16	4149430.16	568665.16_4149430.16	0.34782	0.21799	0.35204	568665.16	4149430.16	568665.16_4149430.16	0.37	0.23771	1.26775
568685.16	4149430.16	568685.16_4149430.16	0.33769	0.21657	0.34192	568685.16	4149430.16	568685.16_4149430.16	0.35937	0.2364	1.23388
568705.16	4149430.16	568705.16_4149430.16	0.32901	0.21628	0.33261	568705.16	4149430.16	568705.16_4149430.16	0.34917	0.23519	1.20073
568725.16	4149430.16	568725.16_4149430.16	0.31845	0.21469	0.32153	568725.16	4149430.16	568725.16_4149430.16	0.33913	0.23457	1.16788
567325.16	4149450.16	567325.16_4149450.16	0.08279	0.22282	0.08233	567325.16	4149450.16	567325.16_4149450.16	0.08924	0.24383	0.21229
567345.16	4149450.16	567345.16_4149450.16	0.08679	0.23804	0.08551	567345.16	4149450.16	567345.16_4149450.16	0.0938	0.25931	0.22487
567365.16	4149450.16	567365.16_4149450.16	0.0907	0.25259	0.08862	567365.16	4149450.16	567365.16_4149450.16	0.09857	0.27513	0.23833
567385.16	4149450.16	567385.16_4149450.16	0.09575	0.27032	0.09291	567385.16	4149450.16	567385.16_4149450.16	0.10399	0.29215	0.25396
567405.16	4149450.16	567405.16_4149450.16	0.10124	0.2885	0.09779	567405.16	4149450.16	567405.16_4149450.16	0.10981	0.30963	0.27119
567445.16	4149450.16	567445.16_4149450.16	0.11319	0.32392	0.10925	567445.16	4149450.16	567445.16_4149450.16	0.12274	0.3451	0.31132
567465.16	4149450.16	567465.16_4149450.16	0.12022	0.34203	0.11642	567465.16	4149450.16	567465.16_4149450.16	0.12997	0.36305	0.33492
567485.16	4149450.16	567485.16_4149450.16	0.12754	0.35899	0.12424	567485.16	4149450.16	567485.16_4149450.16	0.1377	0.38065	0.36101
567505.16	4149450.16	567505.16_4149450.16	0.13549	0.37528	0.13301	567505.16	4149450.16	567505.16_4149450.16	0.14599	0.39788	0.38963
567525.16	4149450.16	567525.16_4149450.16	0.14335	0.38874	0.142	567525.16	4149450.16	567525.16_4149450.16	0.1546	0.41413	0.42048
567545.16	4149450.16	567545.16_4149450.16	0.15242	0.40275	0.15244	567545.16	4149450.16	567545.16_4149450.16	0.16401	0.43	0.45403
567565.16	4149450.16	567565.16_4149450.16	0.16225	0.4161	0.16378	567565.16	4149450.16	567565.16_4149450.16	0.17406	0.44512	0.48976
567585.16	4149450.16	567585.16_4149450.16	0.17247	0.42781	0.1755	567585.16	4149450.16	567585.16_4149450.16	0.18463	0.45919	0.52721
567605.16	4149450.16	567605.16_4149450.16	0.18274	0.43709	0.18723	567605.16	4149450.16	567605.16_4149450.16	0.19559	0.47206	0.5658
567625.16	4149450.16	567625.16_4149450.16	0.19411	0.44718	0.19976	567625.16	4149450.16	567625.16_4149450.16	0.20725	0.48427	0.60607
567645.16	4149450.16	567645.16_4149450.16	0.20549	0.45529	0.21207	567645.16	4149450.16	567645.16_4149450.16	0.21927	0.49529	0.64716
567665.16	4149450.16	567665.16_4149450.16	0.21712	0.46237	0.22441	567665.16	4149450.16	567665.16_4149450.16	0.23169	0.50542	0.68937
567685.16	4149450.16	567685.16_4149450.16	0.22932	0.46967	0.23718	567685.16	4149450.16	567685.16_4149450.16	0.24413	0.51483	0.73301
567705.16	4149450.16	567705.16_4149450.16	0.24145	0.47565	0.24985	567705.16	4149450.16	567705.16_4149450.16	0.25708	0.52357	0.77787
567725.16	4149450.16	567725.16_4149450.16	0.25413	0.48227	0.26308	567725.16	4149450.16	567725.16_4149450.16	0.27037	0.53175	0.82425

### Summary of AERMOD Outputs for All Source and Offsite Receptors 7.5 m receptor height

### Summary of AERMOD Outputs for All Source and Offsite Receptors 1.5 m receptor height

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3	Х	Υ	Lookup	ARLN1	PAREA1	ARLN3
567745.16	4149450.16	567745.16_4149450.16	0.26651	0.4876	0.27611	567745.16	4149450.16	567745.16_4149450.16	0.28377	0.53944	0.87156
567765.16	4149450.16	567765.16_4149450.16	0.27902	0.49293	0.28939	567765.16	4149450.16	567765.16_4149450.16	0.29731	0.54663	0.91957
567785.16	4149450.16	567785.16_4149450.16	0.29273	0.50096	0.30405	567785.16	4149450.16	567785.16_4149450.16	0.31116	0.55262	0.96823
567845.16	4149450.16	567845.16_4149450.16	0.33025	0.51648	0.34496	567845.16	4149450.16	567845.16_4149450.16	0.35143	0.56704	1.10772
567865.16	4149450.16	567865.16_4149450.16	0.34091	0.51784	0.35625	567865.16	4149450.16	567865.16_4149450.16	0.36408	0.57074	1.15143
567885.16	4149450.16	567885.16_4149450.16	0.35218	0.52053	0.36758	567885.16	4149450.16	567885.16_4149450.16	0.37646	0.57214	1.19484
567905.16	4149450.16	567905.16_4149450.16	0.36293	0.52205	0.37805	567905.16	4149450.16	567905.16_4149450.16	0.38834	0.57216	1.2378
567925.16	4149450.16	567925.16_4149450.16	0.37292	0.52191	0.38784	567925.16	4149450.16	567925.16_4149450.16	0.39966	0.57099	1.28015
567985.16	4149450.16	567985.16_4149450.16	0.40054	0.51665	0.41697	567985.16	4149450.16	567985.16_4149450.16	0.43049	0.55951	1.3985
568005.16	4149450.16	568005.16_4149450.16	0.40906	0.51378	0.42616	568005.16	4149450.16	568005.16_4149450.16	0.43969	0.55335	1.43361
568025.16	4149450.16	568025.16_4149450.16	0.41576	0.50861	0.43341	568025.16	4149450.16	568025.16_4149450.16	0.44813	0.54699	1.46573
568045.16	4149450.16	568045.16_4149450.16	0.42603	0.52046	0.44344	568045.16	4149450.16	568045.16_4149450.16	0.45597	0.5373	1.49578
568065.16	4149450.16	568065.16_4149450.16	0.43522	0.51399	0.45086	568065.16	4149450.16	568065.16_4149450.16	0.46259	0.52738	1.52139
568085.16	4149450.16	568085.16_4149450.16	0.44002	0.5053	0.45435	568085.16	4149450.16	568085.16_4149450.16	0.46875	0.51846	1.54299
568105.16	4149450.16	568105.16_4149450.16	0.44424	0.49586	0.45658	568105.16	4149450.16	568105.16_4149450.16	0.47395	0.50849	1.56064
568125.16	4149450.16	568125.16_4149450.16	0.44227	0.47449	0.45344	568125.16	4149450.16	568125.16_4149450.16	0.47867	0.49982	1.57479
568145.16	4149450.16	568145.16_4149450.16	0.44447	0.46385	0.45342	568145.16	4149450.16	568145.16_4149450.16	0.48209	0.48821	1.5871
568165.16	4149450.16	568165.16_4149450.16	0.44771	0.45339	0.45475	568165.16	4149450.16	568165.16_4149450.16	0.48477	0.47522	1.59837
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568205.16	4149450.16	568205.16_4149450.16	0.45044	0.42777	0.45549	568205.16	4149450.16	568205.16_4149450.16	0.48804	0.44798	1.61625
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568245.16	4149450.16	568245.16_4149450.16	0.45015	0.39776	0.45628	568245.16	4149450.16	568245.16_4149450.16	0.4891	0.41897	1.62739
568265.16	4149450.16	568265.16_4149450.16	0.44913	0.38156	0.4565	568265.16	4149450.16	568265.16_4149450.16	0.48894	0.40402	1.63128
568285.16	4149450.16	568285.16_4149450.16	0.44537	0.36353	0.45443	568285.16	4149450.16	568285.16_4149450.16	0.48757	0.38887	1.63301
568305.16	4149450.16	568305.16_4149450.16	0.44039	0.34484	0.45167	568305.16	4149450.16	568305.16_4149450.16	0.48593	0.37302	1.63198
568325.16	4149450.16	568325.16_4149450.16	0.44341	0.33148	0.45673	568325.16	4149450.16	568325.16_4149450.16	0.4857	0.35817	1.63224
568345.16	4149450.16	568345.16_4149450.16	0.45344	0.32306	0.46801	568345.16	4149450.16	568345.16_4149450.16	0.4854	0.34281	1.63115
568365.16	4149450.16	568365.16_4149450.16	0.45625	0.32105	0.47154	568365.16	4149450.16	568365.16_4149450.16	0.48223	0.32775	1.62232
568385.16	4149450.16	568385.16_4149450.16	0.46185	0.3094	0.4717	568385.16	4149450.16	568385.16_4149450.16	0.47689	0.31276	1.60695
568405.16	4149450.16	568405.16_4149450.16	0.45545	0.29674	0.46415	568405.16	4149450.16	568405.16_4149450.16	0.47328	0.30152	1.59314
568425.16	4149450.16	568425.16_4149450.16	0.44399	0.28504	0.45468	568425.16	4149450.16	568425.16_4149450.16	0.46826	0.29092	1.57664
568445.16	4149450.16	568445.16_4149450.16	0.43001	0.25978	0.43993	568445.16	4149450.16	568445.16_4149450.16	0.46173	0.28192	1.55749
568465.16	4149450.16	568465.16_4149450.16	0.4229	0.25018	0.43234	568465.16	4149450.16	568465.16_4149450.16	0.454	0.27248	1.53728
568485.16	4149450.16	568485.16_4149450.16	0.41588	0.24196	0.42551	568485.16	4149450.16	568485.16_4149450.16	0.44559	0.26394	1.51412
568505.16	4149450.16	568505.16_4149450.16	0.40763	0.23438	0.41762	568505.16	4149450.16	568505.16_4149450.16	0.43644	0.25644	1.48626
568525.16	4149450.16	568525.16_4149450.16	0.3993	0.22806	0.40915	568525.16	4149450.16	568525.16_4149450.16	0.42687	0.24979	1.45409
568545.16	4149450.16	568545.16_4149450.16	0.39073	0.22284	0.39974	568545.16	4149450.16	568545.16_4149450.16	0.41694	0.24396	1.41889
568565.16	4149450.16	568565.16_4149450.16	0.38176	0.2185	0.38934	568565.16	4149450.16	568565.16_4149450.16	0.40672	0.23892	1.38255
568585.16	4149450.16	568585.16_4149450.16	0.37269	0.21501	0.37853	568585.16	4149450.16	568585.16_4149450.16	0.39633	0.23458	1.3467

### Summary of AERMOD Outputs for All Source and Offsite Receptors 7.5 m receptor height

# Y Lookup ARLN1 PAREA1 ARLN3 X 4140450 16 569605 16 4140450 16 0 3627 0 31167 0 36711 569605 16

#### Х 568605.16 4149450.16 568605.16\_4149450.16 0.3627 0.21167 0.36711 568625.16 4149450.16 568625.16\_4149450.16 0.20959 0.35724 0.35381 568645.16 4149450.16 568645.16\_4149450.16 0.34476 0.20785 0.34785 568665.16 4149450.16 0.20624 568665.16\_4149450.16 0.33548 0.33862 568685.16 4149450.16 568685.16\_4149450.16 0.32611 0.20479 0.32946 568705.16 4149450.16 0.31688 0.20358 0.32028 568705.16\_4149450.16 568725.16 4149450.16 568725.16\_4149450.16 0.30814 0.20279 0.31126 CONCUNIT ug /m^3 CONCUNIT ug\_/m^3 ^2 DEPUNIT g/m DEPUNIT g/m\_^2

### Summary of AERMOD Outputs for All Source and Offsite Receptors 1.5 m receptor height

Χ	Υ	Lookup	ARLN1	PAREA1	ARLN3
568605.16	4149450.16	568605.16_4149450.16	0.38578	0.23103	1.31203
568625.16	4149450.16	568625.16_4149450.16	0.37529	0.22791	1.2789
568645.16	4149450.16	568645.16_4149450.16	0.36489	0.22534	1.24669
568665.16	4149450.16	568665.16_4149450.16	0.35461	0.22332	1.21504
568685.16	4149450.16	568685.16_4149450.16	0.3446	0.22174	1.18382
568705.16	4149450.16	568705.16_4149450.16	0.33487	0.22052	1.1531
568725.16	4149450.16	568725.16_4149450.16	0.32546	0.21953	1.12317
CONCUNIT ug	/m^3	CONCUNIT ug_/m^3			
DEPUNIT g/m	^2	DEPUNIT g/m ^2			



# Appendix E Water Supply Assessment



PREPARED FOR

City of Redwood City



PREPARED BY



**Prepared for** 

### **City of Redwood City**

Project No. 712-60-22-09

Project Manager: Elizabeth Drayer, PE	Date
QA/QC Review: Jim Connell, PE	Date



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Appendix A. Water Demand Projection

Appendix B. Regional Water System Supply Reliability and UWMP 2020 (June 2021)

#### LIST OF ACRONYMS AND ABBREVIATIONS

AF Acre-Feet

AFY Acre-Feet per Year

AWSP Alternative Water Supply Planning Program

BAWSCA Bay Area Water Supply and Conservation Agency

CEQA California Environmental Quality Act

City City of Redwood City

DTPP Downtown Precise Plan

DRT Drought Response Tool

DWR State of California Department of Water Resources

FERC Federal Energy Regulatory Commission

ISGIndividual Supply GuaranteemgdMillion Gallons Per DayProposed ProjectTransit District Project

RWS San Francisco Public Utilities Commission Regional Water System

SB Senate Bill

SEIR Supplemental Environmental Impact Report
SFPUC San Francisco Public Utilities Commission
SGMA Sustainable Groundwater Management Act

SWRCB State Water Resources Control Board

SVCW Silicon Valley Clean Water

UWMP Urban Water Management Plan

WSA Water Supply Assessment

WSAP Water Shortage Allocation Plan
WSCP Water Shortage Contingency Plan
WSIP Water System Improvement Program

#### **EXECUTIVE SUMMARY**

#### **Overview**

This Water Supply Assessment (WSA) has been prepared for the City of Redwood City (City) by West Yost in accordance with California Water Code sections 10910 through 10915 in connection with the proposed Transit District Project (Proposed Project).

The Proposed Project would create a new sub-area, the Transit District, within the City's Downtown Precise Plan (DTPP) area focused on transit-oriented development consisting of new office and multi-family residential uses. The site comprises approximately 16.6 acres and includes approximately 2,200 linear feet along the Caltrain tracks, which form the eastern Transit District boundary.

Approval of the Proposed Project will require amendments to the City's General Plan and DTPP that would establish and cap the development potential for office use for the new Transit District and would provide for residential development potential in the new Transit District that would be separate from the number of residential units assumed elsewhere in the DTPP area. The proposed increases to office and residential development specific to the Transit District include the following:

- 1,630,000 square feet of office space
- 1,100 multi-family residential units

### **Projected Water Demands**

The projected water demands for the Proposed Project, which will be located within the recycled water service area, were estimated using Attachment Q of Volume III (Design Criteria) of Redwood City's 2019 Engineering Standards. The projected water demand associated with the Proposed Project is 161.4 acrefeet per year (AFY) of potable water and 312.9 AFY of recycled water. According to Redwood City's Municipal Code Section 38.52, all new commercial and multi-family residential properties located within the recycled water service area must be dual plumbed to provide for internal use of recycled water and must use recycled water for landscape irrigation. Since Attachment Q does not differentiate between potable and recycled water uses, the indoor potable/recycled water ratios for the Project were assumed to be consistent with the ratios used in the City's 2020 Urban Water Management Plan (UWMP). As further described in the City's 2020 UWMP, the indoor potable/recycled water ratios are based on actual demand data from dual plumbed projects completed since 2015. In light of this information, the potable/recycled water ratio for indoor water use is estimated to be 20/80 percent for office space uses and 70/30 percent for residential uses associated with the Proposed Project. In addition, all landscaping water demand projected for the Proposed Project is assumed to be supplied by recycled water, based upon the requirements of Municipal Code Section 38.52. The projected water demand for the Proposed Project is included in the City's 2020 UWMP water demand projections.

The Proposed Project, if approved, would require subsequent development to undertake certain improvements to utilities, including installation of new recycled water supply main(s) to serve it. It is anticipated that the new main(s) would extend generally northwestward from a currently planned extension of the City's recycled water system that, once constructed, will terminate at Maple and Lathrop Streets to serve the approved South Main Mixed-Use project.



Summaries of the availability and reliability of potable water supplies to serve the projected water demands for the Proposed Project are discussed below.

#### Water Supply Availability and Reliability

As discussed in this WSA, the City purchases all its potable water supplies from the San Francisco Regional Water System (RWS), which is operated by the San Francisco Public Utilities Commission (SFPUC). The City is a Wholesale Customer of the SFPUC. The availability and reliability of the City's water supplies, as described in this WSA, are based primarily on information contained in the City's 2020 UWMP and the SFPUC 2020 UWMP. The City's 2020 UWMP included projected water demand sufficient to accommodate the Proposed Project and is incorporated by reference into this WSA.

The reliability of the SFPUC RWS supply is highly dependent on the assumption of whether or not the 2018 Bay-Delta Plan Amendment is implemented. The Bay-Delta Plan Amendment was adopted in December 2018 by the State Water Resources Control Board (SWRCB) to establish water quality objectives to maintain the health of the Bay-Delta ecosystem. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 40 percent of the "unimpaired flow" on the three tributaries from February through June in every year type, whether wet, normal, dry, or critically dry. The implementation of the Bay-Delta Plan Amendment significantly impacts the SFPUC RWS supply reliability in dry years; however, the actual implementation of the Bay-Delta Plan Amendment is uncertain, as further explained in this WSA.

Because of the uncertainties surrounding the implementation of the Bay-Delta Plan Amendment, this WSA presents findings for two scenarios, one assuming the Bay-Delta Plan Amendment is implemented and one assuming that the Bay-Delta Plan Amendment is not implemented.

Under the scenario where it is assumed the Bay-Delta Plan Amendment is implemented, the total projected water supplies determined to be available for the Proposed Project in normal years will meet the projected water demand associated with the Proposed Project, in addition to the City's existing and planned future uses through 2045. However, with the implementation of the Bay-Delta Plan Amendment, significant supply shortfalls are projected in dry years for agencies that receive water supplies from the SFPUC RWS, as well as other agencies whose water supplies would be affected by the Amendment. For the City, total supply shortfalls (i.e., for combined potable and recycled water) are projected in single dry years (ranging from 32 to 40 percent) and in multiple dry years (ranging from 32 to 47 percent) through 2045.

If supply shortfalls do occur, the City expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its Water Shortage Contingency Plan (WSCP), which was adopted on June 14, 2021 and is included in Chapter 8 of the City's 2020 UWMP. With the implementation of the Bay-Delta Plan Amendment, the projected single dry year shortfalls would require implementation of Stage 4 or 5 of the City's WSCP, while the projected multiple dry year shortfalls would require implementation of Stage 4, 5 or 6 of the City's WSCP. The Proposed Project would be subject to the same water conservation and water use restrictions as other water users within the City's system.



Under the scenario where it is assumed the Bay-Delta Plan Amendment is not implemented, the total projected water supplies determined to be available for the Proposed Project in normal years will meet the projected water demand associated with the Proposed Project, in addition to the City's existing and planned future uses through 2045. During single dry years and multiple dry years, supply shortfalls are projected for the City, but they are significantly less than the projected supply shortfalls if the Bay-Delta Plan Amendment is implemented. Supply shortfalls for both single dry years (ranging from 1 to 2 percent) and multiple dry years (ranging from 1 to 11 percent) are projected through 2045.

If supply shortfalls do occur, the City expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its WSCP. Without the implementation of the Bay-Delta Plan Amendment, the projected single dry year shortfalls would require implementation of Stage 1 of the City's WSCP, while the projected multiple dry year shortfalls would require implementation of Stage 1 or 2 of the City's WSCP. The Proposed Project would be subject to the same water conservation and water use restrictions as other water users within the City's system.

As described in this WSA, the SFPUC is implementing an Alternative Water Supply Planning Program to investigate and plan for new water supplies to address future long-term water supply reliability challenges and vulnerabilities on the RWS.





#### 1.0 INTRODUCTION

The Transit District Project (Proposed Project) would create a new sub-area, the Transit District, within the City's DTPP area focused on transit-oriented development and consisting of new office and multi-family residential uses on approximately 16.6 acres of land located to the west of the Caltrain right-of-way.

The purpose of this Water Supply Assessment (WSA) is to support the Supplemental Environmental Impact Report (SEIR) for the Proposed Project. The following sections describe the legal requirement for the WSA and the project background.

### 1.1 Legal Requirement for a Water Supply Assessment

California Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 were companion measures which sought to promote more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large development projects. The purpose of this coordination is to ensure that prudent water supply planning has been conducted, and that planned water supplies are adequate to meet existing demands, anticipated demands from approved projects and tentative maps, and the demands of proposed projects.

SB 610 amended California Water Code sections 10910 through 10915 (inclusive) to require land use lead agencies to:

- Identify any public water purveyor that may supply water for a proposed development project<sup>1</sup>
- Request a WSA from the identified water purveyor

The purpose of the WSA is to demonstrate the sufficiency of the purveyor's water supplies to satisfy the water demands of the proposed development project, while still meeting the water purveyor's existing and planned future uses. Water Code sections 10910 through 10915 delineate the specific information that must be included in the WSA.

SB 221 amended State law (California Government Code section 66473.7) to require that approval by a city or county of certain residential subdivisions<sup>2</sup> requires an affirmative written verification of sufficient water supply. SB 221 was intended as a fail-safe mechanism to ensure that collaboration on finding the needed water supplies to serve a new large residential subdivision occurs before construction begins. Demonstration of compliance with SB 221 typically coincides with approval of the tentative map for a new development project and will be included as a condition of approval for any portions of the Proposed Project which include a residential subdivision of more than 500 dwelling units.

<sup>&</sup>lt;sup>1</sup> The definition of a "project" is provided in Water Code section 10912(a) and is discussed further in Section 3.1 of this WSA.

<sup>&</sup>lt;sup>2</sup> Per Government Code Section 66473.7(a)(1) subdivision means a proposed residential development of more than 500 dwelling units.



### 1.2 Need for and Purpose of Water Supply Assessment

The purpose of this WSA is to perform the evaluation required by SB 610 (Water Code sections 10910 through 10915) in connection with the Proposed Project, located within Redwood City's water service area.

This WSA does not reserve water, or to function as a "will serve" letter or any other form of commitment to supply water (see Water Code section 10914). The provision of water service will continue to be undertaken in a manner consistent with applicable policies and procedures, and consistent with existing law.

#### 1.3 Water Supply Assessment Preparation, Format, and Organization

The format of this WSA is intended to follow Water Code sections 10910 through 10915 to clearly delineate compliance with the specific requirements for a WSA. This WSA includes the following sections:

- Section 1: Introduction
- Section 2: Description of the Proposed Project
- Section 3: Required Determinations
- Section 4: Redwood City Water System
- Section 5: Redwood City Water Demands
- Section 6: Redwood City Water Supplies
- Section 7: Water Supply Reliability
- Section 8: Determination of Water Supply Sufficiency Based on the Requirements of SB 610
- Section 9: Water Supply Assessment Approval Process
- Section 10: References

Relevant citations of Water Code sections 10910 through 10915 are included throughout this WSA in *italics* to demonstrate compliance with the specific requirements of SB 610.



#### 2.0 DESCRIPTION OF THE PROPOSED PROJECT

The following sections describe the Proposed Project, including the Proposed Project's location, proposed land uses, and projected water demand.

#### 2.1 Proposed Project Location and Overview

The Transit District would be a new sub-area within the City's DTPP focused on transit-oriented development and would be generally located between Brewster Avenue to the north, the Caltrain tracks to the east, Jefferson Avenue to the south, and El Camino Real, California Street, and Perry Street to the west, within the City's service area. The site comprises approximately 16.6 acres and includes approximately 2,200 linear feet along the Caltrain tracks, which form the eastern Transit District boundary. The Proposed Project would include development in the following three areas:

- Perry Parcel (approximately 2.5 acres)
- Transit Center (approximately 2.1 acres)
- Sequoia Station Shopping Center (approximately 12 acres)

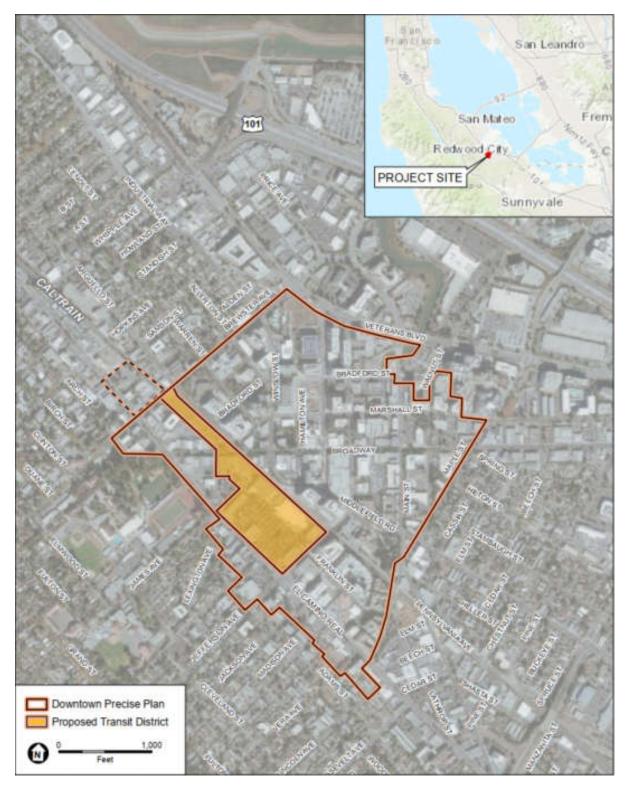
The proposed increases to office and residential development specific to the Transit District that are analyzed in this WSA include the following:

- 1,630,000 square feet of office space (with 350,000 square feet of irrigated landscape area)
- 1,100 multi-family residential units

Although it is anticipated that existing retail space would be redeveloped within the proposed Transit District, there would be no net increase in retail floor area beyond that already permitted under the DTPP.

The proposed Transit District location is shown on Figure 2-1. A map of the proposed Transit District area is shown on Figure 2-2.

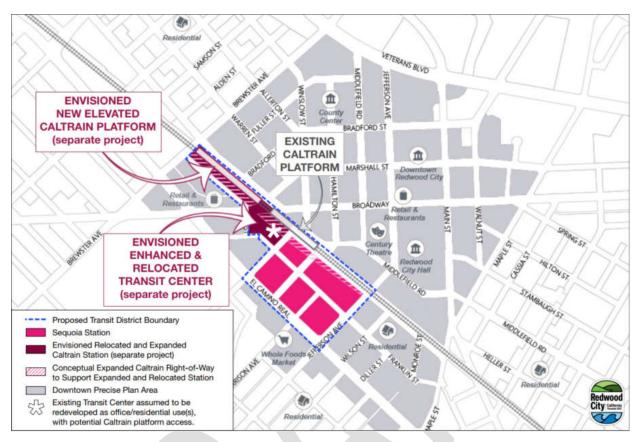




Source: Redwood City Transit District DTPP Amendments Draft SEIR, ESA, April 2022.

Figure 2-1. Proposed Project Location





Source: Redwood City Transit District DTPP Amendments Draft SEIR, ESA, April 2022.

Figure 2-2. Transit District Map





### 2.2 Projected Water Demand for the Proposed Project

As discussed above, the Proposed Project consists of increases to the cap on allowable office and residential development for the proposed Transit District portion of the City's DTPP area. The proposed increase to the office development cap within the Transit District is 1,630,000 square feet, and the proposed increase in multi-family residential development within the Transit District is 1,100 units.

Water demand projections for the Proposed Project were developed using Attachment Q of Volume III (Design Criteria) of Redwood City's 2019 Engineering Standards (included in Appendix A of this WSA). The water demand projections for the Proposed Project include both potable and recycled water uses to conform to the requirements of Redwood City's Municipal Code. According to Redwood City's Municipal Code Section 38.52, all new commercial and multi-family residential properties located within the City's recycled water service area must be dual plumbed to provide for internal use of recycled water and must also use recycled water for any landscape irrigation. The Proposed Project will be located within the City's recycled water service area and so it must conform to the recycled water requirements.

Since Attachment Q does not differentiate between potable and recycled water uses, the indoor potable/recycled water ratios for the Project were assumed to be consistent with the ratios used in the City's 2020 UWMP. As further described in the City's 2020 UWMP, the indoor potable/recycled water ratios are based on actual demand data from dual plumbed projects completed since 2015. In light of the information in the City's 2020 UWMP, the potable/recycled water ratio for indoor water use is estimated to be 20/80 percent for office space uses and 70/30 percent for residential uses associated with the Proposed Project. All landscaping water demand projected for the Proposed Project is assumed to be supplied by recycled water, to adhere to the City's Municipal Code, as discussed above. The estimated water demand associated with the Proposed Project is presented in Table 2-1 below.

Table 2-1. Projected	Water Demand for th	ne Proposed Project <sup>(a)</sup>

		Quantity	Projected Water Demand, AFY <sup>(b)</sup>			
Land Use	Quantity <sup>(c)</sup>	Units	Potable <sup>(d)</sup>	Recycled <sup>(d)</sup>	Total	
Office Space	1,630,000	sq ft	47.5	218.0	265.5	
Multi-Family Residential	1,100	DU	113.9	94.9	208.8	
		Total	161.4	312.9	474.3	

- (a) This table includes proposed increases to office and residential development specific to the proposed Transit District. Re-development within the Transit District that does not result in a net increase in water demand is not included.
- (b) Indoor and landscaping demands were estimated using Attachment Q of Volume III of Redwood City's 2019 Engineering Standards (see Appendix A).
- (c) Land Use quantities are from the Draft EIR for the Redwood City Transit District DTPP Amendments (reference Table 3-1 of the Draft EIR).
- (d) Based on discussions with City staff, the indoor potable/recycled water ratio is assumed to be 20/80 for office space and 70/30 for residential. All landscaping is assumed to be supplied by recycled water. For the office space land use category, the irrigated landscape area is estimated to be 350,000 sq ft.
  sq ft = square feet; DU = dwelling unit; AFY = acre-feet per year.

The development anticipated in the Transit District would require certain improvements to utilities, including installation of new recycled water supply main(s) to serve it. It is anticipated that the new main(s) would extend generally northwestward from a currently planned extension of the City's recycled water system that, once constructed, will terminate at Maple and Lathrop Streets to serve the approved South Main Mixed-Use project.



### 3.0 REQUIRED DETERMINATIONS

The following sections describe the required determinations for a WSA.

#### 3.1 Does SB 610 Apply to the Proposed Project?

10910 (a) Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.

10912 (a) "Project" means any of the following:

- (1) A proposed residential development of more than 500 dwelling units.
- (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- (4) A proposed hotel or motel, or both, having more than 500 rooms.
- (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- (6) A mixed-use project that includes one or more of the projects specified in this subdivision.
- (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

As shown in Table 3-1, the Proposed Project does meet the definition of a "Project" as specified in Water Code section 10912(a). The Proposed Project has not been the subject of a previously adopted WSA and has not been included in an adopted WSA for a larger project. Therefore, according to Water Code section 10910(a), a WSA is required for the Proposed Project.

Table 3-1. Does the Proposed Project Meet the SB 610 Definition of a "Project"?

SB 610 Project Definition Components	Proposed Project Quantity	Meets the SB 610 Definition of a "Project"?
Residential > 500 dwelling units	1,100	YES
Retail > 1,000 employees or > 500,000 sf	N/A	NO
Commercial Office Building > 1,000 employees or > 250,000 sf	1,630,000 sf	YES
Hotel/Motel > 500 rooms	N/A	NO
Industrial Plant/Park > 1,000 employees or > 40 acres or > 650,000 sf	N/A	NO
Mixed Use Project that includes one or more of the above	YES	YES
A Project that would demand the amount of water required by a 500-dwelling unit project	YES	YES
SB 610 Required?		YES

The City has also determined that the Proposed Project is subject to the California Environmental Quality Act (CEQA) and that an SEIR is required. The SEIR will incorporate the findings of this WSA as appropriate.



### 3.2 Does SB 221 Apply to the Proposed Project?

In 2001, SB 221 amended State law to require that approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply. Per California Government Code section 66473.7(a)(1), a subdivision means a proposed residential development of more than 500 dwelling units. Demonstration of compliance with SB 221 typically coincides with approval of the tentative map for a new development project and will be included as a condition of approval for any portions of the Proposed Project which include a residential subdivision of more than 500 dwelling units.

### 3.3 Who is the Identified Public Water System?

10910(b) The city or county, at the time that it determines whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required for any project subject to the California Environmental Quality Act pursuant to Section 21080.1 of the Public Resources Code, shall identify any water system that is, or may become as a result of supplying water to the project identified pursuant to this subdivision, a public water system, as defined by Section 10912, that may supply water for the project

10912 (c) "Public water system" means a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections...

The Proposed Project is located in the City's water service area. The City's water service area generally includes the incorporated limits of Redwood City, as well as portions of San Mateo County outside of City limits, as further described in Section 4.1 of this WSA. Therefore, the City is the identified public water system for the Proposed Project.

# 3.4 Does the Identified Public Water Supplier have an adopted UWMP and does the UWMP include the projected water demand for the Proposed Project?

10910(c)(1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).

The City's most recently adopted UWMP is the 2020 UWMP, which was adopted in June 2021. The City's 2020 UWMP is incorporated by reference into this WSA.

The City's 2020 UWMP incorporated the future population, employment, and water demand projections for buildout of the City's 2010 General Plan, as well as the water demands associated with several other proposed development projects, including those within the Transit District, whose addition would require a General Plan amendment.<sup>3</sup> As such, the water demand for the Proposed Project is included in the City's 2020 UWMP water demand projection.

Additional discussion on the City's existing and projected water demands is provided in Section 5 of this WSA.

<sup>&</sup>lt;sup>3</sup> Redwood City 2020 UWMP, Section 4.2 Projected Water Total Demand.



#### 4.0 REDWOOD CITY WATER SYSTEM

The following sections describe the City's existing water service area, including existing and projected population.

#### 4.1 Water Service Area

The City's water service area spans approximately 17 square miles and includes the incorporated limits of Redwood City, as well as areas of San Mateo County outside of those limits, including Cañada College, the Emerald Lake Hills Area, a portion of the Town of Woodside, and the City of San Carlos. The service area is approximately bounded by Whipple Avenue to the north, Marsh Road to the south, I-280 to the west, and Highway 101 and San Francisco Bay to the east.

Land uses throughout the water service area consist primarily of residential, commercial, industrial, and institutional land uses. Potable water demand within the City's water service area is tracked and reported for the following sectors: single family residential, multi-family residential, commercial, industrial, municipal, irrigation, and 'other' connections (including schools, churches, temporary meters, and miscellaneous customers).

### 4.2 Population

The City's service area is largely built-out, with future growth trends expected to be associated with multi-unit and mixed-use infill or redevelopment. This infill development is expected to largely occur within the City's Downtown area, along transit corridors, and in the waterfront neighborhoods east of Highway 101.

As shown in Table 4-1, the total population within the City's service area is projected to increase to 107,947 people by 2045, a 21 percent increase from the current 2020 population of 89,037 people. The projected population estimates represent a 0.9 percent annual growth rate compared to the 2020 population.

Table 4-1. Redwood City Service Area Existing and Projected Population								
Year	2020	2025	2030	2035	2040	2045		
Population Served	89,037	93,765	97,128	100,614	104,247	107,947		
Source: Redwood City 2020 UWMP, Table 3-1.								



#### 5.0 REDWOOD CITY WATER DEMANDS

10910(c)(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f) and (g).

The descriptions provided below for the City's water demands are based on the City's 2020 UWMP (adopted in June 2021).

### 5.1 Historical and Existing Water Demand

Table 5-1 shows the City's potable and recycled water demand (based on water production) for 2010 through 2020. According to the City's 2020 UWMP, the decrease in water demand from 2013 to 2016 can be attributed to the mandatory statewide restrictions issued by the State Water Resources Control Board (SWRCB) during the drought and water conservation efforts by the City's residents and businesses. Since 2016, water demands have increased, but remain below pre-drought levels.

Table 5-1. Redwood City Historical Water Demand							
Year	Potable Water Demand, AFY	Recycled Water Demand, AFY	Total Water Demand, AFY				
2010	10,764	380	11,144				
2011	10,246	623	10,869				
2012	10,148	685	10,833				
2013	10,897	712	11,609				
2014	10,118	742	10,860				
2015	8,876	712	9,589				
2016	8,193	647	8,841				
2017	8,694	627	9,321				
2018	9,421	737	10,157				
2019	9,136	689	9,825				
2020	9,852	856	10,708				
Source: Redwood City 2020 UWMP, Table 4-1.							

#### 5.2 Future Water Demand

Table 5-2 shows the City's projected normal year water demands through 2045, which includes the Proposed Project, as presented in the City's 2020 UWMP. These projections are based on anticipated future water demands associated with population and employment projections corresponding to buildout of the City's 2010 General Plan, as well as other planned projects, including those within the Transit District, that would require a General Plan amendment. The demand projections include active and passive water conservation through 2045. Passive conservation includes water savings from implementation of the current plumbing code for water efficient fixtures. Active conservation includes all of the water conservation programs the City is currently or plans to implement through 2045. The



projected increase in demand reflects the increase in water use following the end of the suppressed demands due to the 2015-2016 drought and an accelerated growth in employment due to planned development projects.

Table 5-2. Redwood City Projected Future Water Demand – Normal Years								
	2020 (Actual),		Projected Water Demand, AF					
Туре	AF	2025	2030	2035	2040	2045		
Potable Water	9,852	9,520	9,623	9,880	9,995	10,207		
Recycled Water	856	1,286	1,426	1,686	1,701	1,716		
Total	10,708	10,806	11,049	11,566	11,696	11,923		
Source: Redwood City 2020 UWMP, Table 4-8.								

#### 5.3 Dry Year Water Demand

As shown in Table 5-1, the City's 2015 and 2016 demands were significantly lower than the demand in previous years. This reduction in demands occurred in response to the drought and mandated statewide reductions in urban potable water usage.

Following the drought, the City updated the stages of action to be taken in response to water supply shortages. The updated stages of action are reflected in the City's Water Shortage Contingency Plan (WSCP) and are included in Chapter 8 of the City's 2020 UWMP. The City has also implemented demand management measures with mandatory prohibitions that are in force at all times, as described in Chapter 9 of the City's 2020 UWMP. The projected future water demand presented in Table 5-2 includes continued implementation of the existing demand management program and is based on future normal hydrologic years.

Under dry water year conditions, the City anticipates implementing the demand reduction measures outlined in the WSCP as appropriate to reduce water demands to match the reduction in the supply. However, to be conservative, the City's 2020 UWMP and this WSA do not assume additional water conservation will occur in single dry or multiple dry years, as compared to normal years, even though additional water conservation is likely to occur during dry years or other water supply shortages, as a result of the City implementing additional water use reduction measures. In addition to being more conservative, this evaluation of unconstrained water demands under dry year conditions also better illustrates the potential supply/demand shortage gap that could be experienced before any mitigation measures are implemented. A discussion of shortage response actions is in Section 8 of this WSA and is also detailed in the City's WSCP, included in Chapter 8 of the City's 2020 UWMP.



Table 5-3 presents the projected future single and multiple dry year water demand, as presented in the City's 2020 UWMP prior to implementation of the WSCP and its associated demand reduction measures.

Table 5-3. Redwood City Projected Future Water Demand – Dry Years
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	Assumed	Projected Water Demand, AF <sup>(a)</sup>				
Hydrologic Condition	Demand Reduction <sup>(b)</sup>	2025	2030	2035	2040	2045
Single Dry Year <sup>(c)</sup>	0%	10,806	11,049	11,566	11,696	11,923
Multiple Dry Years <sup>(d,e)</sup>	0%	10,806	11,049	11,566	11,696	11,923

- (a) Demand projection includes both potable water and recycled water (reference Table 5-2 of this WSA).
- (b) Conservatively assumes no demand reduction in dry years, as compared to normal years. Demands may be reduced in dry years as a result of the City's implementation of its Water Shortage Contingency Plan; however, such a demand reduction is not assumed or relied upon for the purposes of the Single Dry Year and Multiple Dry Year evaluations for this WSA.
- (c) Source: Redwood City 2020 UWMP, Table 7-5.
- (d) Source: Redwood City 2020 UWMP, Table 7-6.
- (e) Represents demands for each year of the 5-year multiple dry year period.





#### **6.0 REDWOOD CITY WATER SUPPLIES**

10910(c)(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f) and (g).

10910(d)(1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system...under the existing water supply entitlements, water rights, or water service contracts.

10910(e) If no water has been received in prior years by the public water system...under the existing water supply entitlements, water rights, or water service contracts, the public water system...shall also include in its water supply assessment...an identification of the other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system.

10910(f) If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment.

- (1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.
- (2) A description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most recent bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long-term overdraft condition.
- (3) A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.
- (4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.
- (5) An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project. A water assessment shall not be required to include the information required by this paragraph if the public water system determines, as part of the review required by paragraph (1), that the sufficiency of groundwater necessary to meet the initial and projected water demand associated with the project was addressed in the description and analysis required by paragraph (4) of subdivision (b) of Section 10631.



As described in Section 3.4 of this WSA, the projected water demand associated with the Proposed Project was accounted for in the City's most recently adopted Urban Water Management Plan. The descriptions provided below for the City's water supplies are based on the City's 2020 UWMP (adopted in June 2021) and the SFPUC 2020 UWMP (also adopted in June 2021).

#### **6.1 Water Supply Overview**

The City currently purchases all of its potable water supplies from the SFPUC RWS. In addition, although the City does not currently use groundwater as a supply source, it is in the early phase of evaluating groundwater for potential future emergency supply. The City also operates a water recycling program, which supplies non-potable water to a portion of the City's customers. Silicon Valley Clean Water (SVCW) operates the wastewater treatment plant that produces recycled water for the City.

### 6.2 Water Supply from the SFPUC RWS

The SFPUC RWS supplies water to both retail and wholesale customers. Retail customers include residents, businesses, and industries located within the City and County of San Francisco's boundaries. Wholesale customers include 26 cities and water supply agencies in Alameda, San Mateo, and Santa Clara counties, including Redwood City.

The City is a member agency of Bay Area Water Supply and Conservation Agency (BAWSCA) and purchases treated water from the SFPUC RWS in accordance with the November 2018 Amended and Restated Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo, and Santa Clara Counties, which was adopted in 2019. The term of the agreement is 25 years, with a beginning date of July 1, 2009 and an expiration date of June 30, 2034. Per the agreement, the City has an Individual Supply Guarantee (ISG) of 10.93 million gallons per day (mgd), or 12,243 acre-feet per year (AFY), supplied by the SFPUC RWS. Between 2016 and 2020, the City purchased between 67 percent and 80 percent of its ISG.

Additional discussion of the SFPUC RWS water supplies is provided in the City's 2020 UWMP and SFPUC's 2020 UWMP.

### **6.3 Groundwater Supply**

The City does not rely upon groundwater supplies for its potable water supply since the entirety of the City's supply is purchased from the SFPUC RWS. However, the City is currently in the early stages of evaluating groundwater as a future emergency and back-up supply. As such, this WSA evaluates groundwater basin conditions pursuant to Section 10910(f).

#### **6.3.1 Groundwater Basin Description**

The City's service area overlies the southern end of the San Mateo Plain Subbasin (DWR basin number 2-009.03; "subbasin") of the Santa Clara Valley Basin. The subbasin is not adjudicated, nor has it been found by the Department of Water Resources (DWR) to be in a condition of overdraft. As part of the implementation of the Sustainable Groundwater Management Act (SGMA), the subbasin was ranked as a "very low priority" basin under the California Statewide Groundwater Elevation Monitoring basin prioritization process. As such, the basin is not subject to the requirements of SGMA.



The subbasin is filled with alluvial fan deposits formed by tributaries to San Francisco Bay that drained across the basin and toward the center of the Bay. These alluvial fan deposits are interbedded with thick clay aquitards or confining layers and comprise the main water bearing formations within the subbasin. The major water bearing formation of the subbasin is the Quaternary alluvium, from which all larger yielding wells acquire their water. The Santa Clara Formation underlies the Quaternary alluvium and is the other water bearing formation of the subbasin. In general, the groundwater system is unconfined in the higher elevations, and confined or semiconfined at lower elevations closer to San Francisco Bay.

Groundwater flow in the subbasin is generally from west-southwest to east-northeast, from the edge of the Santa Cruz Mountains to San Francisco Bay. Both the southern and eastern edges of the subbasin are political boundaries that are roughly coincident with County lines, rather than physical hydrogeologic barriers to groundwater flow. Depending upon temporally varying streamflow, recharge, and pumping conditions, groundwater flow likely occurs in variable directions across each boundary.

A preliminary assessment of groundwater production potential for the City found that sufficient groundwater supply may be available for the City to use as a back-up supply. The portion of the subbasin underlying the City is in a state of equilibrium and water quality is expected to be sufficient for municipal and irrigation uses, though some level of treatment may be required. Additional discussion of the groundwater conditions and groundwater management is provided in the City's 2020 UWMP.

#### 6.4 Recycled Water Supply

The City owns, operates, and maintains a wastewater collection system that serves residential and commercial customers throughout Redwood City. The collected wastewater is treated at a wastewater treatment plant that is operated by SVCW. The resulting recycled water is delivered into City-owned and operated storage tanks for use in the City's recycled water system.

The Redwood City recycled water project has a current theoretical supply capacity of 2,857 AFY, with potential expansion, when demand warrants, to its design capacity of up to 3,238 AFY of average annual demand and includes the option to export recycled water to neighboring communities. The "supply" of recycled water identified in the UWMP is limited by the demand, as the recycled water project does not produce recycled water for which no demand exists. Additionally, because recycled water cannot substitute for potable water in certain instances, the full potential supply of recycled water is not considered in the UWMP so as not to artificially "inflate" the City's overall water supply.

The recycled water project has been implemented in two phases. Phase I of the project included the design and construction of facilities to serve customers east of Highway 101 in Redwood Shores and the Greater Bayfront Area. Phase II of the project is underway and will expand the recycled water service area west of Highway 101 to downtown Redwood City.

Additional discussion of recycled water use is provided in the City's 2020 UWMP.



### **6.5 Summary of Existing and Additional Planned Future Water Supplies**

Table 6-1 provides a summary of the City's current and projected future normal year supplies as presented in the City's 2020 UWMP. The availability and reliability of the City's water supplies in dry years is discussed in Section 7 of this WSA.

Table 6-1. Redwood City Current and Projected Future Water Supplies - Normal Years

	Water Supply, AF					
Water Source	2020 Actual <sup>(a)</sup>	2025 <sup>(b)</sup>	2030 <sup>(b)</sup>	2035 <sup>(b)</sup>	2040 <sup>(b)</sup>	2045 <sup>(b)</sup>
Potable Water - Purchased from SFPUC RWS	9,852	12,243	12,243	12,243	12,243	12,243
Recycled Water <sup>(c)</sup>	856	1,286	1,426	1,686	1,701	1,716
Total	10,708	13,529	13,669	13,929	13,944	13,959

- (a) Source: Redwood City 2020 UWMP, Table 6-9.
- (b) Source: Redwood City 2020 UWMP, Table 6-10.
- (c) The current theoretical supply capacity of recycled water is 2,857 AFY, with future capacity, when demand warrants, to 3,238 AFY.



#### 7.0 WATER SUPPLY RELIABILITY

10910(c)(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.

10911(a) If, as a result of its assessment, the public water system concludes that its water supplies are, or will be, insufficient, the public water system shall provide to the city or county its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies. If the city or county, if either is required to comply with this part pursuant to subdivision (b), concludes as a result of its assessment, that water supplies are, or will be, insufficient, the city or county shall include in its water supply assessment its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies. Those plans may include, but are not limited to, information concerning all of the following:

- (1) The estimated total costs, and the proposed method of financing the costs, associated with acquiring the additional water supplies.
- (2) All federal, state, and local permits, approvals, or entitlements that are anticipated to be required in order to acquire and develop the additional water supplies.
- (3) Based on the consideration set forth in paragraphs (1) and (2), the estimated timeframes within which the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), expects to able to acquire additional water supplies.

The current reliability of the City's water supply is largely dependent upon its water supply contract with SFPUC and SFPUC's water supply reliability. The reliability discussion provided below is based on the City's 2020 UWMP (adopted in June 2021) and the SFPUC 2020 UWMP (also adopted in June 2021).

### 7.1 SFPUC RWS Reliability

Information regarding the reliability of the SFPUC RWS was provided to the City by BAWSCA, in coordination with SFPUC, during the preparation of the City's 2020 UWMP. The following sections describe the potential impacts of the 2018 Bay-Delta Plan Amendment on SFPUC RWS reliability, allocation of RWS supplies during supply shortages, as well as SFPUC's Alternative Water Supply Planning Program designed to investigate and plan for new water supplies to address future long-term water supply reliability challenges and vulnerabilities on the RWS.

#### 7.1.1 Potential Impacts of the 2018 Bay-Delta Plan Amendment on SFPUC RWS Reliability

In December 2018, the SWRCB adopted amendments to the Water Quality Control Plan for the San Francisco Bay Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives to maintain the health of the Bay-Delta ecosystem. The SWRCB is required by law to regularly review this plan. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 40 percent of the "unimpaired flow" on the three tributaries from February through June in every year type, whether wet, normal, dry, or critically dry.



The SWRCB has stated that it intends to implement the Bay-Delta Plan Amendment on the Tuolumne River by the year 2022, assuming all required approvals are obtained by that time. But implementation of the Plan Amendment has not occurred to date and is uncertain for several reasons:

- Since adoption of the Bay-Delta Plan Amendment, over a dozen lawsuits have been filed in both state and federal court, challenging the SWRCB's adoption of the Bay-Delta Plan Amendment, including two legal challenges filed by the federal government, at the request of the U.S. Department of Interior, Bureau of Reclamation in state and federal courts.
   These cases are in the early stage and there have been no dispositive court rulings to date.
- The Bay-Delta Plan Amendment is not self-implementing and does not allocate responsibility for meeting its new flow requirements to the SFPUC or any other water rights holders. Rather, the Plan Amendment merely provides a regulatory framework for flow allocation, which must be accomplished by other regulatory and/or adjudicatory proceedings, such as a comprehensive water rights adjudication or, in the case of the Tuolumne River, the 401 certification process in the Federal Energy Regulatory Commission's (FERC) relicensing proceeding for Don Pedro Dam. The license amendment process is currently expected to be completed in the 2022-23 timeframe. This process and the other regulatory and/or adjudicatory proceedings would likely face legal challenges and have lengthy timelines, and quite possibly could result in a different assignment of flow responsibility (and therefore a different water supply impact on the SFPUC).
- In recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, SWRCB Resolution No. 2018-0059 adopting the Bay-Delta Plan Amendment directed staff to help complete a "Delta watershed-wide agreement, including potential flow measures for the Tuolumne River" by March 1, 2019, and to incorporate such agreements as an "alternative" for a future amendment to the Bay-Delta Plan to be presented to the SWRCB "as early as possible after December 1, 2019." In accordance with the SWRCB's instruction, on March 1, 2019, SFPUC, in partnership with other key stakeholders, submitted a proposed project description for the Tuolumne River that could be the basis for a voluntary substitute agreement with the SWRCB ("March 1st Proposed Voluntary Agreement"). On March 26, 2019, the Commission adopted Resolution No. 19-0057 to support SFPUC's participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and California Environmental Protection Agency and the leadership of the Newsom administration. The negotiations for a voluntary agreement have made significant progress since an initial framework was presented to the SWRCB on December 12, 2018. The package submitted on March 1, 2019 is the product of renewed discussions since Governor Newsom took office. While significant work remains, the package represents an important step forward in bringing together diverse California water interests.4

Because of the uncertainties surrounding the implementation of the Bay-Delta Plan Amendment, the SFPUC 2020 UWMP analyzed two supply scenarios, one with the Bay-Delta Plan Amendment assuming

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<sup>&</sup>lt;sup>4</sup> In late October 2021, State regulators announced that these negotiations stopped before an agreement was reached. It is unclear whether or when negotiations might be reinitiated.



implementation starting in 2023, and one without the Bay-Delta Plan Amendment. Results of these analyses are summarized as follows:<sup>5</sup>

- If the Bay-Delta Plan Amendment is implemented, SFPUC will be able to meet its contractual obligations to its wholesale customers as presented in the SFPUC 2020 UWMP in normal years but would experience significant supply shortages in dry years. In single dry years, supply shortages for SFPUC's wholesale customers collectively, would range from 36 to 46 percent. In multiple dry years for SFPUC's wholesale customers collectively, supply shortages would range from 36 to 54 percent. Implementation of the Bay-Delta Plan Amendment will require rationing in all single dry and multiple dry years through 2045.
- If the Bay-Delta Plan Amendment is not implemented, SFPUC would be able to meet 100 percent of the projected purchases of its wholesale customers during all year types through 2045 except during the fourth and fifth consecutive dry years for base year 2045 when 15 percent wholesale supply shortages are projected.

In June 2021, in response to various comments from wholesale customers regarding the reliability of the RWS as described in SFPUC's 2020 UWMP, the SFPUC provided a memorandum describing SFPUC's efforts to remedy the potential effects of the Bay-Delta Plan Amendment. As described in the memorandum (included in Appendix B of this WSA), SFPUC's efforts include the following:

- Pursuing a Tuolumne River Voluntary Agreement
- Evaluating the drought planning scenario in light of climate change
- Pursuing alternative water supplies
- In litigation with the State over the Bay-Delta Plan Amendment
- In litigation with the State over the proposed Don Pedro FERC Water Quality Certification

#### 7.1.2 Allocation of RWS Supplies During Supply Shortages

The wholesale customers and SFPUC adopted the November 2018 Amended and Restated Water Supply Agreement in 2019, which included a Water Shortage Allocation Plan (WSAP) to allocate water from the RWS to retail and wholesale customers during system-wide shortages of 20 percent or less, including such shortages occurring as a result of implementation of the Bay-Delta Plan Amendment. The WSAP has two tiers which are described below.

• The Tier One Plan allocates water between SFPUC and the wholesale customers collectively based on the level of the shortage (up to 20 percent). This plan applies only when SFPUC determines that a system-wide water shortage exists and issues a declaration of a water shortage emergency under California Water Code Section 350. The SFPUC may also opt to request voluntary cutbacks from San Francisco and the wholesale customers to achieve necessary water use reductions during drought periods. The allocations outlined in the Tier One Plan are provided in Table 7-1.

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<sup>&</sup>lt;sup>5</sup> BAWSCA Drought Allocation Tables by Agency (Table E: Percent Cutback to the Wholesale Customers With Bay-Delta Plan and Table N: Percent Cutback to the Wholesale Customers Without Bay-Delta Plan), dated April 1, 2021.



Table 7-1. Tier One Plan Water Shortage Allocations						
System-Wide Reduction	Share of Available Water, percent					
Required, percent	SFPUC	Wholesale Customers				
≤ 5	35.5	64.5				
6 to 10	36.0	64.0				
11 to 15	37.0	63.0				
16 to 20	37.5	62.5				

 The Tier Two Plan allocates the collective wholesale customer share among the wholesale customers based on a formula that accounts for each wholesale customer's ISG, seasonal use of all available water supplies, and residential per capita use. BAWSCA calculates each wholesale customer's Allocation Factors annually in preparation for a potential water shortage emergency.

BAWSCA recognizes that the Tier Two Plan was not designed for RWS shortages greater than 20 percent, and in a memorandum dated March 1, 2021, BAWSCA provided a refined methodology to allocate RWS supplies during projected future single dry and multiple dry years in the instance where supply shortfalls are greater than 20 percent for the purposes of the BAWSCA member agencies' 2020 UWMPs. The revised methodology developed by BAWSCA allocates the wholesale supplies as follows:

- When the average Wholesale Customers' RWS shortages are 10 percent or less, an equal percent reduction will be applied across all agencies. This is consistent with the existing Tier Two requirements in a Tier Two application scenario.
- When average Wholesale Customers' shortages are between 10 and 20 percent, the Tier Two Plan will be applied.
- When the average Wholesale Customers' RWS shortages are greater than 20 percent, an equal percent reduction will be applied across all agencies.

In another memorandum dated February 18, 2021, BAWSCA explains that in actual RWS shortages greater than 20 percent, BAWSCA Member Agencies would have the opportunity to negotiate and agree upon a more nuanced and equitable approach. This would likely consider basic health and safety needs, the water needs to support critical institutions, and minimizing economic impacts on individual communities and the region. As such, the allocation method described in the City's 2020 UWMP is only intended to serve as the preliminary basis for the 2020 UWMP supply reliability analysis. The analysis provided in the SFPUC 2020 UWMP and the City's 2020 UWMP does not in any way imply an agreement by BAWSCA member agencies as to the exact allocation methodology. BAWSCA member agencies are in discussions about jointly developing an allocation method that would consider additional equity factors in the event that SFPUC is not able to deliver its contractual supply volume, and its cutbacks to the RWS supply exceed 20 percent.

#### 7.1.3 Alternative Water Supply Program

In early 2020, the SFPUC began implementation of the Alternative Water Supply Planning Program (AWSP), a program designed to investigate and plan for new water supplies to address future long-term



water supply reliability challenges and vulnerabilities of the RWS particularly in light of the possible implementation of the Bay-Delta Plan Amendment.

Included in the AWSP is a suite of diverse, non-traditional supply projects that, to a great degree, leverage regional partnerships and are designed to meet the water supply needs of the SFPUC Retail and Wholesale Customers through 2045. As of the most recent Alternative Water Supply Planning Quarterly Update, SFPUC has budgeted \$264 million over the next ten years to fund water supply projects. The drivers for the program include: (1) the adoption of the Bay-Delta Plan Amendment and the resulting potential limitations to RWS supply during dry years; (2) the net supply shortfall following the implementation of SFPUC's Water System Improvement Plan (WSIP)<sup>6</sup>; (3) San Francisco's perpetual obligation to supply 184 mgd to the Wholesale Customers; (4) adopted Level of Service Goals to limit rationing to no more than 20 percent system-wide during droughts; and (5) the potential need to identify water supplies that would be required to offer permanent status to interruptible customers.

The SFPUC is considering several water supply options and opportunities to meet all foreseeable water supply needs, including surface water storage expansion, recycled water expansion, water transfers, desalination, and potable reuse. These efforts and their expected benefit to supply reliability are listed below, and described in further detail in the City's 2020 UWMP and SFPUC 2020 UWMP:

- Daly City Recycled Water Expansion (Regional; Normal and Dry-Year Supply)
- Alameda County Water District Union Sanitary District Purified Water Partnership (Regional; Normal and Dry-Year Supply)
- Crystal Springs Purified Water (Regional; Normal and Dry-Year Supply)
- Los Vaqueros Reservoir Expansion (Regional; Dry Year Supply)
- Bay Area Brackish Water Desalination (Regional; Normal and Dry-Year Supply)
- Calaveras Reservoir Expansion (Regional; Dry Year Supply)
- Groundwater Banking (Dry Year Supply)
- Inter-Basin Collaborations

Capital projects under consideration would be costly and are still in the early feasibility and conceptual planning stages. The exact yields from these projects are not quantified at this time, as these supply projects would take 10 to 30 years to implement and the exact amount of water that can be reasonably developed is currently unknown.

As with traditional infrastructure projects, there is a need to progress systematically from planning to environmental review, and then on to detailed design, permitting and construction of these alternative water supply projects. Given the complexity and inherent challenges, these projects will require a long

<sup>&</sup>lt;sup>6</sup> The Water System Improvement Program (WSIP) is a \$4.8 billion-dollar, multi-year capital program to upgrade the SFPUC's regional and local water systems. The program repairs, replaces, and seismically upgrades crucial portions of the Hetch Hetchy Regional Water System. The program consists of 87 projects (35 local projects located within San Francisco and 52 regional projects) spread over seven counties from the Sierra foothills to San Francisco. The San Francisco portion of the program is 100 percent complete as of October 2020. The Regional portion is approximately 99 percent complete. The current forecasted date to complete the overall WSIP is May 2023. Additional information on the WSIP is provided in Chapter 7 of the City's 2020 UWMP.



City of Redwood City



lead time to develop and implement. SFPUC staff have developed an approach and timeline to substantially complete planning and initiate environmental review by July 2023 for a majority of the alternative water supply projects under consideration.

Additional information on the AWSP is provided in Chapter 7 of the City's 2020 UWMP.

### 7.2 Redwood City Water Supply Reliability

In the City's 2020 UWMP, projected normal year supplies are shown to be adequate to satisfy the City's projected normal year demands. However, in the City's 2020 UWMP, and this WSA, the City's purchased supplies from the SFPUC RWS assume dry year supply reductions as a result of the implementation of the Bay-Delta Plan Amendment, which significantly reduces dry year allocations for SFPUC wholesale customers. Recycled water is estimated to be available during all hydrologic years at a volume that meets the City's projected recycled water demands.

Table 7-2 shows the City's projected supplies during normal, single dry and multiple dry years through 2045 based on the assumptions in the City's 2020 UWMP which assumes implementation of the Bay-Delta Plan Amendment.

Table 7-2. Redwood City Projected Water Supplies with Bay-Delta Plan Amendment

	Projected Water Supply, AF <sup>(a)</sup>					
Hydrologic Condition	2025	2030	2035	2040	2045	
Normal Year <sup>(b)</sup>	13,529	13,669	13,929	13,944	13,959	
Single Dry Year <sup>(c)</sup>	7,335	7,486	7,836	7,917	7,149	
Multiple Dry Years – Year 1 <sup>(d)</sup>	7,335	7,486	7,836	7,917	7,149	
Multiple Dry Years – Year 2 <sup>(d)</sup>	6,472	6,624	6,951	7,033	7,149	
Multiple Dry Years – Year 3 <sup>(d)</sup>	6,472	6,624	6,951	7,033	7,149	
Multiple Dry Years – Year 4 <sup>(d)</sup>	6,472	6,624	6,951	6,405	6,331	
Multiple Dry Years – Year 5 <sup>(d)</sup>	6,472	6,624	6,514	6,405	6,331	

<sup>(</sup>a) Includes projected potable water supply from the SFPUC RWS and projected recycled water supply (see Table 6-1).

<sup>(</sup>b) Source: Redwood City 2020 UWMP, Table 7-4.

<sup>(</sup>c) Source: Redwood City 2020 UWMP, Table 7-5.

<sup>(</sup>d) Source: Redwood City 2020 UWMP, Table 7-6.



The water supply estimates provided in Table 7-2 use the best available data at the time the City's 2020 UWMP was prepared, but do not account for the following factors:

- Potential changes to the implementation of the Bay-Delta Plan Amendment as discussed in Section 7.1.1 of this WSA
- Climate change impacts on the SFPUC RWS
- Potential delays in completion of the WSIP<sup>7</sup>

For comparison purposes, the SFPUC 2020 UWMP also evaluated a scenario without implementation of the Bay-Delta Plan Amendment. Table 7-3 shows the City's projected supplies during normal, single dry and multiple dry years for 2025 through 2045 assuming that the Bay-Delta Plan Amendment is not implemented. SFPUC's analysis indicated that it would be able to meet 100 percent of the wholesale projected purchases during all year types through 2045 except during the fourth and fifth consecutive dry years for base year 2045 when a 11.1 percent supply shortfall is projected for the City<sup>8</sup>.

Table 7-3. Redwood City Projected Water Supplies without Bay-Delta Plan Amendment

	Projected Water Supply, AF <sup>(a)</sup>					
Hydrologic Condition	2025	2030	2035	2040	2045	
Normal Year <sup>(b)</sup>	13,529	13,669	12,929	13,944	13,959	
Single Dry Year <sup>(c)</sup>	10,762	10,936	11,364	11,491	11,685	
Multiple Dry Years – Year 1 <sup>(c)</sup>	10,762	10,936	11,364	11,491	11,685	
Multiple Dry Years – Year 2 <sup>(c)</sup>	10,762	10,936	11,364	11,491	11,685	
Multiple Dry Years – Year 3 <sup>(c)</sup>	10,762	10,936	11,364	11,491	11,685	
Multiple Dry Years – Year 4 <sup>(c,d)</sup>	10,762	10,936	11,364	11,491	10,588	
Multiple Dry Years – Year 5 <sup>(c,d)</sup>	10,762	10,936	11,364	11,491	10,588	

<sup>(</sup>a) Includes projected potable water supply from the SFPUC RWS (based on projected purchases) and projected recycled water supply (see Table 6-1).

As required under SB 610, in light of these identified water supply shortages, Section 8 of this WSA describes the City's proposals for reducing water demands and developing additional water supplies, including measures that are being undertaken to acquire and develop those water supplies.

<sup>&</sup>lt;sup>8</sup> The projected purchases for Redwood City that are used in SFPUC's analysis for the scenario without implementation of the Bay-Delta Plan Amendment vary slightly from the demands projected in Redwood City's 2020 UWMP. Therefore, although SFPUC projects it can meet 100 percent of Redwood City's purchases, except for the fourth and fifth consecutive dry years for base year 2045, slight supply shortfalls (1 to 2 percent) are projected for the City in dry years prior to 2045, as further discussed in Section 8.



<sup>(</sup>b) Source: Redwood City 2020 UWMP, Table 7-4.

<sup>(</sup>c) Source: BAWSCA Drought Allocation Tables by Agency (Table A: Wholesale RWS Actual Purchases in 2020 and Projected Purchases for 2025, 2030, 2035, 2040 and 2045), dated April 1, 2021.

<sup>(</sup>d) An 11.1 percent reduction in supply from the SFPUC RWS is projected for the City in the fourth and fifth years of a multiple dry year drought, but not until 2045 (BAWSCA Drought Allocation Tables by Agency (Table O2: Individual Agency Drought Allocations, Base Year 2045, Without Bay-Delta Plan), dated April 1, 2021.)

<sup>&</sup>lt;sup>7</sup> The San Francisco portion of the WSIP is 100 percent complete as of October 2020. The Regional portion of the WSIP is approximately 99 percent complete. The current forecasted date to complete the overall WSIP is May 2023.



# 8.0 DETERMINATION OF WATER SUPPLY SUFFICIENCY BASED ON THE REQUIREMENTS OF SB 610

10910(c)(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.

10911 (a) If, as a result of its assessment, the public water system concludes that its water supplies are, or will be, insufficient, the public water system shall provide to the city or county its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies.

Because of the uncertainties surrounding the implementation of the Bay-Delta Plan Amendment, this WSA presents findings for two scenarios, one assuming the Bay-Delta Plan Amendment is implemented and one assuming that the Bay-Delta Plan Amendment is not implemented.

Table 8-1 summarizes the scenario where it is assumed the Bay-Delta Plan Amendment is implemented. Under this scenario, significant supply shortfalls are projected in dry years for all agencies that receive water supplies from the SFPUC RWS. For the City, supply shortfalls are projected in single dry years (ranging from 32 to 40 percent) and in multiple dry years (ranging from 32 to 47 percent) through 2045.





Table 8-1. Summary of Water Demand Versus Supply with Bay-Delta Plan Amendment During Hydrologic Normal, Single Dry, and Multiple Dry Years<sup>(a)</sup>

		Supply and Demand Comparison, AF					
Hy	drologic Condition	2025	2030	2035	2040	2045	
Normal Year							
Available W	ater Supply <sup>(b)</sup>	13,529	13,669	13,929	13,944	13,959	
Total Water	Demand <sup>(c)</sup>	10,806	11,049	11,566	11,696	11,923	
	Potential Surplus (Deficit)	2,723	2,620	2,363	2,248	2,036	
	Percent Shortfall of Demand	-	-	-		-	
Single Dry Yea	r						
Available W	ater Supply <sup>(d)</sup>	7,335	7,486	7,836	7,917	7,149	
Total Water	Demand <sup>(e)</sup>	10,806	11,049	11,566	11,696	11,923	
	Potential Surplus (Deficit)	(3,471)	(3,563)	(3,730)	(3,779)	(4,774)	
	Percent Shortfall of Demand	32	32	32	32	40	
Multiple Dry Y	'ears						
	Available Water Supply <sup>(d)</sup>	7,335	7,486	7,836	7,917	7,149	
Multiple-Dry	Total Water Demand <sup>(e)</sup>	10,806	11,049	11,566	11,696	11,923	
Year 1	Potential Surplus (Deficit)	(3,471)	(3,563)	(3,730)	(3,779)	(4,774)	
	Percent Shortfall of Demand	32	32	32	32	40	
	Available Water Supply <sup>(d)</sup>	6,472	6,624	6,951	7,033	7,149	
Multiple-Dry	Total Water Demand <sup>(e)</sup>	10,806	11,049	11,566	11,696	11,923	
Year 2	Potential Surplus (Deficit)	(4,334)	(4,425)	(4,615)	(4,663)	(4,774)	
	Percent Shortfall of Demand	40	40	40	40	40	
	Available Water Supply <sup>(d)</sup>	6,472	6,624	6,951	7,033	7,149	
Multiple-Dry	Total Water Demand <sup>(e)</sup>	10,806	11,049	11,566	11,696	11,923	
Year 3	Potential Surplus (Deficit)	(4,334)	(4,425)	(4,615)	(4,663)	(4,774)	
	Percent Shortfall of Demand	40	40	40	40	40	
Multiple-Dry Year 4	Available Water Supply <sup>(d)</sup>	6,472	6,624	6,951	6,405	6,331	
	Total Water Demand <sup>(e)</sup>	10,806	11,049	11,566	11,696	11,923	
	Potential Surplus (Deficit)	(4,334)	(4,425)	(4,615)	(5,291)	(5,592)	
	Percent Shortfall of Demand	40	40	40	45	47	
	Available Water Supply <sup>(d)</sup>	6,472	6,624	6,514	6,405	6,331	
Multiple-Dry	Total Water Demand <sup>(e)</sup>	10,806	11,049	11,566	11,696	11,923	
Year 5	Potential Surplus (Deficit)	(4,334)	(4,425)	(5,052)	(5,291)	(5,592)	
	Percent Shortfall of Demand	40	40	44	45	47	

<sup>(</sup>a) Numbers from this table may not exactly match numbers in Table 7-6 of the Redwood City 2020 UWMP due to rounding.

<sup>(</sup>b) From Table 6-1 of this WSA.

<sup>(</sup>c) From Table 5-2 of this WSA.

<sup>(</sup>d) From Table 7-2 of this WSA.

<sup>(</sup>e) From Table 5-3 of this WSA.



If supply shortfalls do occur (from any cause, such as droughts, impacted distribution system infrastructure, regulatory-imposed shortage restrictions, etc.), the City expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its WSCP. Consistent with California Water Code (CWC) §10632, the WSCP includes six levels to address shortage conditions ranging from up to 5 percent to greater than 55 percent shortage, identifies a suite of demand mitigation measures for the City to implement at each level, and identifies procedures for the City to annually assess whether or not a water shortage is likely to occur in the coming year, among other things.

With implementation of the Bay-Delta Plan Amendment, the projected single dry year shortfalls (of 32 to 40 percent) would require implementation of Stage 4 or 5 of the City's WSCP, which, according to Chapter 8 of the UWMP, will reduce the shortage gap by 35 and 45 percent, respectively. The projected multiple dry year shortfalls (of 32 and 47 percent) would require implementation of Stage 4, 5 or 6 of the City's WSCP, which will reduce the shortage gap by up to 55 percent. Each stage of the City's WSCP requires declaration by the City Council once a governing body, such as SFPUC, has required a voluntary or mandatory reduction in water use due to water supply shortages or an emergency. Each stage includes implementation of a mandatory water allocation program, voluntary restrictions on end uses, as well as various agency actions. The water saving impacts associated with each stage of action of the WSCP (Stages 1 through 6) are quantitatively estimated using the Drought Response Tool (DRT), as presented in Attachment 2 of the City's WSCP, provided in Chapter 8 of the City's 2020 UWMP. The DRT quantitative assessment considers each consumption reduction method independently to quantify water savings for Stages 1 through 6 of the City's WSCP.

As described in Section 7.1.3 of this WSA, the SFPUC is implementing an Alternative Water Supply Planning Program to investigate and plan for new water supplies to address future long-term water supply reliability challenges and vulnerabilities on the RWS. Also, as described in Section 6.3 of this WSA, the City is currently in the early stage of evaluating groundwater as a potential back-up supply. However, because these potential additional supplies are still being developed, they are not included in Table 8-1.

Table 8-2 summarizes the scenario where it is assumed the Bay-Delta Plan Amendment is not implemented. Under this scenario, the total projected water supplies determined to be available in single dry years and multiple dry years are only slightly lower than the projected water demand associated with the City's existing and planned future uses, including the Proposed Project, through 2045. These projected supply shortfalls are significantly less than the projected supply shortfalls if the Bay-Delta Plan Amendment is implemented. This includes both single dry years (shortfalls ranging from 1 to 2 percent) and multiple dry years (shortfalls ranging from 1 to 11 percent). As described in Section 7.2, based on SFPUC's analysis, a 11.1 percent supply shortfall is projected during the fourth and fifth consecutive dry years for base year 2045.

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<sup>&</sup>lt;sup>9</sup> A main focus of the City's planned demand reduction measures is to increase public outreach and keep customers informed of the water shortage emergency and actions they can take to reduce consumption. Other actions that the City will take include coordination with other agencies, implementing water rate incentives and penalties, increasing water waste patrols, etc. Additional information on the City's WSCP is provided in Chapter 8 of the City's 2020 UWMP.

<sup>&</sup>lt;sup>10</sup> Although Table 8-2 shows shortfalls under all dry year scenarios, SFPUC's analysis only projects supply shortfalls for Redwood City during the fourth and fifth consecutive dry years for base year 2045 for the scenario without implementation of the Bay-Delta Plan Amendment. This difference is due to variations between the projected purchases (demands) for Redwood City that are used in SFPUC's analysis, and the demands projected in Redwood City's 2020 UWMP. The analysis in this WSA is consistent with the demands projected in Redwood City's 2020 UWMP.



Table 8-2. Summary of Water Demand Versus Supply <u>without</u> Bay-Delta Plan Amendment During Hydrologic Normal, Single Dry, and Multiple Dry Years

		Supply and Demand Comparison, AF					
Н	ydrologic Condition	2025	2030	2035	2040	2045	
Normal Year							
Available W	ater Supply <sup>(a)</sup>	13,529	13,669	13,929	13,944	13,959	
Total Water	Demand <sup>(b)</sup>	10,806	11,049	11,566	11,696	11,923	
	Potential Surplus (Deficit)	2,723	2,620	2,363	2,248	2,036	
	Percent Shortfall of Demand						
Single Dry Yea	r						
Available W	ater Supply <sup>(c)</sup>	10,762	10,936	11,364	11,491	11,685	
Total Water	Demand <sup>(d)</sup>	10,806	11,049	11,566	11,696	11,923	
	Potential Surplus (Deficit)	(44)	(113)	(202)	(205)	(238)	
	Percent Shortfall of Demand	0	1	2	2	2	
Multiple Dry Y	ears		•				
	Available Water Supply <sup>(c)</sup>	10,762	10,936	11,364	11,491	11,685	
Multiple-Dry	Total Water Demand <sup>(d)</sup>	10,806	11,049	11,566	11,696	11,923	
Year 1	Potential Surplus (Deficit)	(44)	(113)	(202)	(205)	(238)	
	Percent Shortfall of Demand	0	1	2	2	2	
	Available Water Supply <sup>(c)</sup>	10,762	10,936	11,364	11,491	11,685	
Multiple-Dry	Total Water Demand <sup>(d)</sup>	10,806	11,049	11,566	11,696	11,923	
Year 2	Potential Surplus (Deficit)	(44)	(113)	(202)	(205)	(238)	
	Percent Shortfall of Demand	0	1	2	2	2	
	Available Water Supply <sup>(c)</sup>	10,762	10,936	11,364	11,491	11,685	
Multiple-Dry	Total Water Demand <sup>(d)</sup>	10,806	11,049	11,566	11,696	11,923	
Year 3	Potential Surplus (Deficit)	(44)	(113)	(202)	(205)	(238)	
	Percent Shortfall of Demand	0	1	2	2	2	
Multiple-Dry Year 4	Available Water Supply <sup>(c)</sup>	10,762	10,936	11,364	11,491	10,588	
	Total Water Demand <sup>(d)</sup>	10,806	11,049	11,566	11,696	11,923	
	Potential Surplus (Deficit)	(44)	(113)	(202)	(205)	(1,335)	
	Percent Shortfall of Demand	0	1	2	2	11	
Multiple-Dry Year 5	Available Water Supply <sup>(c)</sup>	10,762	10,936	11,364	11,491	10,588	
	Total Water Demand <sup>(d)</sup>	10,806	11,049	11,566	11,696	11,923	
	Potential Surplus (Deficit)	(44)	(113)	(202)	(205)	(1,335)	
	Percent Shortfall of Demand	0	1	2	2	11	

<sup>(</sup>a) From Table 6-1 of this WSA.

<sup>(</sup>b) From Table 5-2 of this WSA.

<sup>(</sup>c) From Table 7-3 of this WSA.

<sup>(</sup>d) From Table 5-3 of this WSA.



If supply shortfalls do occur, the City expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its WSCP.<sup>11</sup> Without implementation of the Bay-Delta Plan Amendment, the projected single dry year shortfalls (of 1 to 2 percent) would require implementation of Stage 1 of the City's WSCP, which will reduce the gap by 5 percent. The projected multiple dry year shortfalls (of 1 to 11 percent) would require implementation of Stage 1 or 2 of the City's WSCP, which will reduce the gap by 5 or 15 percent, respectively. As previously discussed, each stage of the City's WSCP requires declaration by City Council, as well as various agency actions and restrictions on end users. The water saving impacts associated with these actions were quantitatively estimated through a DRT quantitative assessment, which is presented in Attachment 2 of the City's WSCP, provided in Chapter 8 of the City's 2020 UWMP.

In addition, as previously mentioned, discussion of SFPUC's Alternative Water Supply Planning Program is included in Section 7.1.3, and discussion of groundwater as a potential back-up supply is included in Section 6.3 of this WSA. Because these potential additional supplies are still being developed, they are not included in Table 8-2.

The water demand associated with the Proposed Project is included in the City's water demand projections shown in its 2020 UWMP. The Proposed Project would be subject to the same water conservation and water use restrictions as other water users within the City's system.

<sup>&</sup>lt;sup>11</sup> A main focus of the City's planned demand reduction measures is to increase public outreach and keep customers informed of the water shortage emergency and actions they can take to reduce consumption. Other actions that the City will take include coordination with other agencies, implementing water rate incentives and penalties, increasing water waste patrols, etc. Additional information on the City's WSCP is provided in Chapter 8 of the City's 2020 UWMP.



### 9.0 WATER SUPPLY ASSESSMENT APPROVAL PROCESS

10910 (g)(1) Subject to paragraph (2), the governing body of each public water system shall submit the assessment to the city or county not later than 90 days from the date on which the request was received. The governing body of each public water system, or the city or county if either is required to comply with this act pursuant to subdivision (b), shall approve the assessment prepared pursuant to this section at a regular or special meeting.

The City Council of Redwood City must approve this WSA at a regular or special meeting. This WSA will be included in the Draft SEIR being prepared for the Proposed Project.

In addition, SB 221 applies to residential subdivisions of over 500 dwelling units and requires that the water supplier provide a written verification that the water supply for the project is sufficient, prior to issuance of the final permits. Because the Proposed Project includes 1,100 multi-family residential units, it may be subject to the requirements of SB 221 (Government Code section 66473.7) and a verification of sufficient water supply (SB 221) report may be required prior to final approvals.



**WEST YOST** 



### **10.0 REFERENCES**

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## Appendix A

## **Water Demand Projection**



#### Water Demand Projections Using Attachment Q

Land Use	Quanity	<u>Units</u>
Office Space	1,630,000	sqft
Multi-family Residential	1,100	units

#### Indoor Water Demand Projection

A. Residential

1. Multi-Family

1,100 Units x 2.2 Persons = 2,420 Persons 2,420 Persons x 60 GPD = 145,200 GPD Projected

B. Office/Commercial
1,630,000 sqft x 0.13 gpd/sqft = 211,900 GPD Projected

Landscaping Water Demand Projection

A. Residential

B. Commercial

17 gpd x 2,420 Persons = 41,140 GPD Projected

350,000 sqft x 3.5 cuft of water/ = 1,225,000 CUFT/YR

1,225,000 CUFT/YR x 7.48 gal/cuft / 365 days/yr = 25,104 GPD Projected

Total Water Demand Projection

Land Use		Indoor				Landscaping	Total	
	GPD Projected	AFY Projected	Potable (%)	Recycled (%)	Potable (AFY)	Recycled (AFY)	Additional Recycled Water (AFY)	Potable + Recycled (AFY)
Residential	145,200	163	70%	30%	113.9	48.8	46.1	208.8
Office	211,900	237	20%	80%	47.5	189.9	28.1	265.5
Total	357,100	400		Total:	161.4	238.7	74.2	474.3

### ATTACHMENT Q (1 of 3)

### WATER DEMAND PROJECTION WORKSHEET CAL. BY \_\_\_\_\_ JOB TITLE CHKD. BY \_\_\_\_\_ JOB NUMBER JOB LOCATION \_\_\_\_\_ DATE \_\_\_\_\_ INDOOR WATER DEMAND PROJECTION A. RESIDENTIAL 1. Multi - Family \_\_\_\_\_Units X 2.2 Persons =\_\_\_ Persons 2. Single Family \_\_\_\_\_Units X 3.4 Persons = \_\_\_\_\_Persons \_\_\_\_\_Persons X 60\*GPD = \_\_\_\_\_GPD Projected **B. OFFICE/COMMERCIAL** sqft X 0.13 gpd/sqft = GPD Projected C. HOTEL \_\_\_\_\_rooms X 195 gpd/room = \_\_\_\_\_ **GPD Projected** D. RESTAURANTS seats X 30 gpd/seat = GPD Projected = GPD Projected E. ALL OTHERS SEE PAGE 3: LANDSCAPING WATER DEMAND PROJECTION A. RESIDENTIAL 17 gpd X \_\_\_\_\_ persons = \_\_\_ **GPD Projected** B. COMMERCIAL sqft X 3.5 cuft of water /sqft of = CUFT/YR landscape per year To convert to GPD: cuft/yr X 7.48 gal/ X 1 yr/ = GPD Projected cuft 365 days TOTAL DOMESTIC WATER DEMAND PROJECTION

\* From SFPUC Demand Study by URS, "Projected Water Usage for BAWSCA Agencies", Tech Memo of August 2006.

INDOOR + LANDSCAPING PROJECTION = GPD Projected

### ATTACHMENT Q (2 of 3)

## WATER DEMAND PROJECTION WORKSHEET OCCUPANT LOADS

JOB TITLE  JOB NUMBER  JOB LOCATION	CAL. BY CHKD. BY DATE
DESIGNED USE OF THE FACILITY	OCCUPANT LOAD OF FLOOR AREA
A. SCHOOL/CLASSROOM	20 sqft/person
B. HEALTH CLUB	50 sqft/person/shift (3 shifts per day)
C. MANUFACTURING AREAS	200 sqft/person
D. NURSERIES (DAY-CARE)	35 sqft/person
E. STORAGE FACILITIES	300 sqft/person

### ATTACHMENT Q (3 of 3)

## WATER DEMAND PROJECTION WORKSHEET UNIT LOADS

JOB TITLE	CAL. BY
JOB NUMBER	CHKD. BY
JOB LOCATION	DATE
	VOLUME OF

#### **TYPE OF ESTABLISHMENT**

Assembly Halls **Bowling Alley** Churches Dance Halls **General Hospitals** Health Clubs Laundries Manufacturing (excluding industrial usage) Motels with bath, toilet and kitchen wastes Nursing homes/Daycare Medical Offices (other than hospitals) Research and Development Schools Service Station Storage facilities Stores (Retail type)

(Food -- non-restaurant type)

Trailer parks or tourist camps (with built-in bath)

2 gal per seat 75 gal per lane 7 gal per seat 2 gal per person 0.27 gal per sqft 25 gal per person 400 gal per machine 30 gal per person/shift 170 gal per room 75 gal per person 0.18 gal per sqft 0.21 gal per sqft 35 gal per person 750 gal per bay 1 gal per person 450 gal per 25 ft frontage 900 gal per 25 ft frontage 50 gal per person

CONSUMPTION/DAY

### Appendix B

Regional Water System Supply Reliability and UWMP 2020 (June 2021)





F 415.554.3161



TO:

SFPUC Wholesale Customers

FROM:

Steven R. Ritchie, Assistant General Manager, Water

DATE:

June 2, 2021

RE:

Regional Water System Supply Reliability and UWMP 2020

This memo is in response to various comments from Wholesale Customers we have received regarding the reliability of the Regional Water System supply and San Francisco's 2020 Urban Water Management Plan (UWMP).

As you are all aware, the UWMP makes clear the potential effect of the amendments to the Bay-Delta Water Quality Control Plan adopted by the State Water Resources Control Board on December 12, 2018 should it be implemented. Regional Water System-wide water supply shortages of 40-50% could occur until alternative water supplies are developed to replace those shortfalls. Those shortages could increase dramatically if the State Water Board's proposed Water Quality Certification of the Don Pedro Federal Energy Regulatory Commission (FERC) relicensing were implemented.

We are pursuing several courses of action to remedy this situation as detailed below.

### Pursuing a Tuolumne River Voluntary Agreement

The State Water Board included in its action of December 12, 2018 a provision allowing for the development of Voluntary Agreements as an alternative to the adopted Plan. Together with the Modesto and Turlock Irrigation Districts, we have been actively pursuing a Tuolumne River Voluntary Agreement (TRVA) since January 2017. We believe the TRVA is a superior approach to producing benefits for fish with a much more modest effect on our water supply. Unfortunately, it has been a challenge to work with the State on this, but we continue to persist, and of course we are still interested in early implementation of the TRVA.

**Evaluating our Drought Planning Scenario in light of climate change** 

Ever since the drought of 1987-92, we have been using a Drought Planning Scenario with a duration of 8.5 years as a stress test of our Regional Water System supplies. Some stakeholders have criticized this methodology as being too conservative. This fall we anticipate our Commission convening a workshop

London N. Breed Mayor

Sophie Maxwell President

> Anson Moran Vice President

Tim Paulson Commissioner

Ed Harrington Commissioner

Newsha Ajami Commissioner

Michael Carlin Acting General Manager





regarding our use of the 8.5-year Drought Planning Scenario, particularly in light of climate change resilience assessment work that we have funded through the Water Research Foundation. We look forward to a valuable discussion with our various stakeholders and the Commission.

### **Pursuing Alternative Water Supplies**

The SFPUC continues to aggressively pursue Alternative Water Supplies to address whatever shortfall may ultimately occur pending the outcome of negotiation and/or litigation. The most extreme degree of Regional Water System supply shortfall is modeled to be 93 million gallons per day under implementation of the Bay-Delta Plan amendments. We are actively pursuing more than a dozen projects, including recycled water for irrigation, purified water for potable use, increased reservoir storage and conveyance, brackish water desalination, and partnerships with other agencies, particularly the Turlock and Modesto Irrigation Districts. Our goal is to have a suite of alternative water supply projects ready for CEQA review by July 1, 2023.

#### In litigation with the State over the Bay-Delta Plan Amendments

On January 10, 2019, we joined in litigation against the State over the adoption of the Bay-Delta Water Quality Control Plan Amendments on substantive and procedural grounds. The lawsuit was necessary because there is a statute of limitations on CEQA cases of 30 days, and we needed to preserve our legal options in the event that we are unsuccessful in reaching a voluntary agreement for the Tuolumne River. Even then, potential settlement of this litigation is a possibility in the future.

## In litigation with the State over the proposed Don Pedro FERC Water Quality Certification

The State Water Board staff raised the stakes on these matters by issuing a Water Quality Certification for the Don Pedro FERC relicensing on January 15, 2021 that goes well beyond the Bay-Delta Plan amendments. The potential impact of the conditions included in the Certification appear to virtually double the water supply impact on our Regional Water System of the Bay-Delta Plan amendments. We requested that the State Water Board reconsider the Certification, including conducting hearings on it, but the State Water Board took no action. As a result, we were left with no choice but to once again file suit against the State. Again, the Certification includes a clause that it could be replaced by a Voluntary Agreement, but that is far from a certainty.

I hope this makes it clear that we are actively pursuing all options to resolve this difficult situation. We remain committed to creating benefits for the Tuolumne River while meeting our Water Supply Level of Service Goals and Objectives for our retail and wholesale customers.

cc.: SFPUC Commissioners
Nicole Sandkulla, CEO/General Manager, BAWSCA