Appendix C

California Northstate University
AB 900 Application

CALIFORNIA NORTHSTATE UNIVERSITY

September 20, 2019

Mr. Steve Zelinka
Staff Air Pollution Specialist
Greenhouse Gas and Toxics Emission Inventory Branch
1001 I Street
Sacramento, California 95814

Subject: California Northstate University Medical Center Project AB 900 Application Submittal

Dear Mr. Zelinka:

The Jobs and Economic Improvement Through Environmental Leadership Act of 2011 (AB 900) authorizes the Governor to certify a leadership project for streamlining of environmental review under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the Project does not result in any net additional emissions of greenhouse gas (GHG), including GHG emissions from employee transportation, as determined by the California Air Resources Board (CARB).

California Northstate University (CNU) hereby submits its Application for the California Northstate University Medical Center Project (Project) seeking certification of the Project as an Environmental Leadership Development Project (ELDP) pursuant to AB 900. The Project has committed to meeting the requirements set forth in California Public Resources Code Section 21183(c), which requires that the Project demonstrate that it will not result in any net additional greenhouse gas (GHG) emissions. CNU has committed to no net increase in construction- and operations-related GHG emissions over the Project's 30-year lifetime.

As required by the Governor's Guidelines for Streamlining Judicial Review under CEQA, the application includes proposed GHG quantification methodologies and supporting documentation. If you have any questions about the methodologies or supporting documentation, please contact Patrick Angell at pat.angell@ascentenvironmental.com or 916.732.3324, or Poonam Boparai at poonam.boparai@ascentenvironmental.com or 858.354.4151.

Sincerely,

Alvin Cheung, PharmD, MHSA
California Northstate University, LLC

cc: Sarah Kirchgessner, City of Elk Grove

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1 INTRODUCTION

The Project Sponsor, California Northstate University (CNU), is submitting this Application for certification of the California Northstate University Medical Center Project (hereinafter "Project") as an Environmental Leadership Development Project (ELDP), pursuant to Assembly Bill (AB) 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011, as amended effective January 1, 2018, and codified in Public Resources Code (PRC) Section 21178 et seq. Although codified within the California Environmental Quality Act (CEQA), the process for certification of a project as an ELDP is separate from all but a few of the steps required for preparing a CEQA environmental review document.

The Project is located within the City of Elk Grove (City) and, as proposed, would be consistent with ELDP requirements because it would develop a hospital and associated uses that would not result in any net additional emissions of greenhouse gases (GHGs), be built to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Gold certification or better on an infill site, provide high-quality jobs, implement a Transportation Demand Management Plan, and be consistent with the Sacramento Area Council of Governments' (SACOG's) 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

2 PROPOSED DEVELOPMENT PROJECT

2.1 PROJECT OVERVIEW

CNU is a private, for-profit education institution that operates a pharmacy and medical college (hereinafter "School of Medicine") at 9700 West Taron Drive and an approximately 15,000-square-foot event center in the office building at 9650 West Taron Drive in Elk Grove, California.

CNU is proposing to expand its facilities and services to provide emergency and other medical-related services in the western portion of the City through redevelopment of several CNU-owned parcels adjacent to the existing CNU School of Medicine. At buildout, the Project would consist of an expanded pharmacy and medical college, a medical center (hospital) with a helistop, an outpatient clinic, a medical office building, two public parking structures with accessory retail, a dormitory, one student parking structure with rooftop sports facilities, a central plant and mechanical yard, public gathering spaces, and surface parking. The Project would employ approximately 4,000 people who could be accommodated within the planned growth of the City as set forth in the 2019 City of Elk Grove General Plan. The Project's dormitory would include 150 units to house 300 students. See **Appendix A** for the Project location, the existing and proposed site plan, a massing diagram, exterior renderings, and projected views of the Project.

2.2 PROJECT LOCATION

The Project site is located at 9650 and 9700 West Taron Drive in Elk Grove, California, in Sacramento County. The approximately 24.4-acre Project site, situated along the western boundary of the City, consists of 12 parcels (Assessor Parcel Numbers 132-2480-001, -002, -003, -004, -005, -007, -008, -010, and -011; 132-2160-001 and -002; 132-0460-076) owned by CNU. The site is bordered by Elk Grove Boulevard to the north, Interstate 5 to the west, West Taron Drive to the east, and the Laguna Stone Lake subdivision to the south (**Appendix A**).

The site is developed, except for one approximately 0.5-acre vacant lot on the southwest corner of Riparian Court (also known as [aka] West Taron Court) and West Taron Drive (**Appendix A**). A total of nine structures encompassing 282,246 square feet of building space currently occupy the Project site. This total includes the 109,800-square-foot, two-story School of Medicine building at 9700 West Taron Drive, the 76,000-square-foot office building at 9650 West Taron Drive currently occupied by All Data, and seven additional one-story buildings (2501 through 2619 West Taron Drive) currently occupied by a number of different uses, including eating establishments, a brewery, an animal

hospital, the CNU Psychology College, and other commercial and retail uses. Directly adjacent to the site are a gas station, fast-food restaurants, and a church. Roadway access to the Project site is provided from West Taron Drive and Riparian Drive, while Riparian Court (aka West Taron Court) provides access to the interior of the site.

2.3 PROPOSED PROJECT

Development of the proposed CNU Medical Center would be guided by its District Development Plan, which would provide for overall site plan approval and establish development elements, including, but not limited to, parking, landscaping, pedestrian improvements, and other features that are common across the site (Appendix A). The Project would include the demolition of existing buildings and the construction of proposed uses over three phases.

2.3.1 Phase 1

Phase 1 would include construction of a 596,790-square-foot, 250-patient-bed hospital in the northwest corner of the Project site. The hospital would include an eight-story, 220-patient-bed tower atop a four-story, 30-patient-bed main hospital building with one basement level providing underground parking for up to 230 vehicles using a semiautomatic stacked parking system. A helicopter landing pad (helistop) and one-story mechanical "penthouse" for housing equipment would be constructed on the roof of the patient-bed tower, such that the total height of the hospital would be 13 stories. Phase 1 would also include construction of a 37,500-square-foot, two-story central plant building with a basement level providing underground parking for up to 80 vehicles. The central plant would house support equipment for the hospital and include a 15,500-square-foot exterior mechanical yard.

When completed, Phase 1 would include a total of 1,426 parking spaces, including 1,116 surface parking spaces and 310 parking spaces on the lower levels of the hospital and central plant buildings. This phase would require demolition of the buildings, totaling 170,559 square feet of retail and restaurant space, and parking lots occupying 2501, 2505, 2509/2513, and 2525 West Taron Court, and a parking lot associated with 9650 West Taron Drive.

2.3.2 Phase 2

Phase 2 would include construction of a second 150-patient-bed tower atop the main hospital building, an outpatient services building, a medical office building, and the first of two public parking structures. The additional eight-story patient-bed tower would increase the hospital square footage to its ultimate size of 733,290 square feet and 400 total patient beds. The 168,500-square-foot outpatient clinic would include four stories aboveground and a basement-floor parking level with 170 parking spaces. This building would contain outpatient medical services and ambulatory care. The 100,000-square-foot medical office building would include five stories aboveground and contain outpatient medical clinics and hospital administration. The first public parking structure would be 257,000 square feet in size and include four stories aboveground and one basement level. The ground floor would include approximately 51,400 square feet of retail, medical offices, and other supporting uses. The remaining three floors and basement level would provide parking for 1,500 vehicles. A semiautomatic stacked parking system would be used on the three aboveground parking levels, and the basement level would be standard parking.

Upon completion of Phase 2, the Project would include a total of 2,597 parking spaces, including 617 surface parking spaces, 480 parking spaces on the lower levels of the hospital, an outpatient clinic, and central plant buildings, and 1,500 parking spaces in the public parking structure. This phase would require demolition of the 26,040-square-foot building housing retail and restaurant uses at 2521 West Taron Court, the 374,256-square-foot commercial building occupying 9650 West Taron Drive, parking lots associated with 2521 and 2525 West Taron Court, and a parking lot associated with 9650 West Taron Drive.

2.3.3 Phase 3

Phase 3 would include construction of a second public parking structure, a dormitory, and a third parking structure for medical student use with sports facilities on the roof. The second public parking structure would be 207,000 square feet and would include four stories aboveground and one basement level. The ground floor would include approximately 41,400 square feet of retail, medical offices, and other supporting uses. The remaining three floors and basement level would provide parking for 1,000 vehicles. A semiautomatic stacked parking system would be used on the three aboveground stories, and the basement level would be standard parking. The 120,000-square-foot, five-story dormitory would be constructed directly adjacent to the existing 109,800-square-foot, two-story School of Medicine and would include a 76,500-square-foot dormitory with 150 units capable of housing approximately 300 students and 43,500 square feet of additional office space for administration purposes. A 70,000-square-foot parking structure intended to provide parking and recreational facilities for medical students would also be constructed in this phase. This student parking structure would include one story aboveground and a basement level that would accommodate 200 standard parking spaces. The roof would be occupied by basketball, tennis, and volleyball courts.

With completion of Phase 3, the Project would include a total of 3,144 parking spaces, including 404 surface parking spaces, 40 parking spaces on the lower level of the central plant building, 2,500 parking spaces in the public parking structure, and 200 parking spaces in the student parking structure. This phase would require demolition of the buildings, totaling 57,969 square feet of retail and restaurant space and the parking lots occupying 2615 and 2619 West Taron Court, as well as the parking lots associated with 9700 West Taron Drive.

2.3.4 Other Project Improvements

The Project would also include construction of a left-turn pocket on west-bound Elk Grove Boulevard restricted for emergency vehicle use, streetscape modifications to Riparian Court (aka West Taron Court), modifications to existing parking areas, driveway improvements to West Taron Drive, and construction of new landscaped/open space public gathering areas (Appendix A).

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3 CONSISTENCY WITH STATUTORY REQUIREMENTS FOR CEQA STREAMLINING

This Application was prepared in accordance with the Governor's Guidelines for Streamlining Judicial Review under CEQA, provided on the Governor's Office of Planning and Research website and updated in January 2018 to comply with Senate Bill (SB) 734 (2016) and AB 246 (2017).[1] The following information (including all attachments) is submitted to show that the Project satisfies the statutory requirements for CEQA streamlining, as further set forth in the Governor's Guidelines, pursuant to PRC Section 21187 et seq.

1. **Project Land Uses.** *Information to show the project is residential, retail, commercial, sports, cultural, entertainment, or recreational in nature.*

A qualifying project must be a residential, retail, commercial, sports, cultural, entertainment, or recreational use project (PRC Section 21180(b)(1)). The Project proposes to build a hospital and support buildings, including but not limited to a dormitory, medical offices, and mixed-use parking structures as described in Section 2.3, "Proposed Project," above. As a hospital and medical campus, the proposed Project is primarily commercial in nature. Under the City's Zoning Code (Title 23 of the City of Elk Grove Municipal Code), the hospital is an allowable use (with conditional use permit) in commercial zones, as are the proposed accessory uses (including mixed use retail with parking garage, biotechnical laboratory). The proposed dormitory is a residential use. Because the Project includes retail and commercial uses, this criterion is satisfied.

2. **LEED Gold Certification.** *Information to show that the project, upon completion, will qualify for LEED Gold Certification or better. The Application shall specify those design elements that make the project eligible for LEED Gold Certification or better, and the Applicant shall submit a binding commitment to delay operating the project until it receives LEED Gold Certification or better. If, upon completion of construction, LEED Gold Certification or better is delayed as a result of the certification process rather than a project deficiency, the Applicant may petition the Governor to approve project operation pending completion of the certification process.*

The Project is being designed to achieve LEED Gold certification under the LEED rating system for Healthcare version 4. CNU agrees to a binding commitment to delay operating the Project until it receives LEED Gold certification or better (**Appendix C**). Because final LEED certification is not granted until a project is completed and operational, the Applicant will petition the Governor to approve construction and project operation pending completion of the certification process, as permitted under PRC Section 21178 et seq.

A Gold level certification target under the LEED rating system for Healthcare version 4 will encourage design and construction decisions meant to protect surrounding ecosystems; reduce energy use, water use, and GHG emissions; create healthier indoor environments; and promote environmental- and health-conscious sourcing of construction materials, all through an integrated design process.

Achieving LEED Gold certification requires obtaining at least 60 points in nine categories: Integrative Process, Location & Transportation, Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials & Resources, Indoor Environmental Quality, Innovation, and Regional Priority. The result is a positive impact on resource conservation, the built environment, and the local community.

LEED provides a level of flexibility for a project to choose the exact credits and project features. At the time of this Application, the exact LEED credits and project features that would be selected to achieve LEED Gold certification have not yet been finalized. However, some of the design features that are anticipated for contributing to the achievement of LEED Gold certification are listed below under their respective LEED categories.

[1] Governor's Office of Planning and Research, Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act Pursuant to AB 900 (Chapter 352, Statutes of 2011), available: http://opr.ca.gov/docs/20190412-AB_900_Guidelines-Updated-April-2019.pdf. Accessed September 9, 2019.

Integrative Process

- The design team studied energy and water strategies during early design phases and held a 4-hour integrated design team charrette, including the architect, owner, LEED consultant, and designers from lighting, civil, landscape, and structural scopes of work.

Location & Transportation

- The Project is located on a previously developed site.
- The campus will provide bicycle storage and shower facilities.
- Parking for the new building will have preferred parking areas for electric vehicles and charging infrastructure. This would include 166 electric vehicle parking spaces with chargers.

Sustainable Sites

- The sponsor plans to offset the development area with an off-site habitat protection project.
- Low-impact development rainwater management strategies will be used to manage runoff from the developed site for the 95th percentile of regional or local rainfall events.
- Rooftops and landscaping will use light-colored materials meeting solar reflectance and low albedo requirements to reduce heat island effects.
- Exterior lighting will be directed downward and shielded to prevent excessive light pollution.
- The new building includes access for patients, visitors, and staff to outdoor landscaped areas that serve as places of respite.

Water Efficiency

- Reduction of water use by 30–40 percent compared to a typical healthcare development will be achieved through the use of low-flow fixtures, cooling tower efficiency, and drought-tolerant landscaping.
- Water metering to track highest demand end uses will help maintenance and operations staff detect malfunctions.

Energy and Atmosphere

- Reduction of energy use by 7 percent compared to a typical healthcare development will be achieved through the use of higher-efficiency condensing boilers, variable frequency drives cooling tower fan controls, light-emitting diode (LED) lighting, and other energy conservation measures.
- Integrated rooftop photovoltaic panels will be used to produce on-site renewable energy.
- Enhanced commissioning will be used to verify installed systems are working as intended upon construction completion and start-up of operations.

Materials & Resources

- Construction and demolition waste management strategies will be used to divert at least 50 percent of total construction and demolition materials from landfills.
- Whole building life-cycle assessment will be conducted to help identify strategies to reduce environmental impacts embodied in materials, such as reducing the amount of cement in concrete.
- Several building product disclosure documents will be included in the materials specifications.
- All LED lighting eliminates potential mercury contamination, while lead, copper, and cadmium will be avoided except where necessary for radiation and magnetic resonance imaging (MRI) shielding.
- Partitions, casework, and spaces will be designed for future flexibility.

Indoor Environmental Quality

- Low-emitting materials will be installed.
- Indoor air quality will be regularly tested.

- High level of individual controls will be used to provide lighting and thermal comfort for patients and staff.
- High number of patient rooms will offer quality views.

Innovation

- The Project team will select many credits from among the Innovation Catalog, Pilot Credits Catalog, or other innovative project design or construction achievements to improve environmental performance.

Regional Priority

- Extra points awarded for strategies that warrant extra consideration, due to a project design addressing local stresses on the environment, include:
  - Sourcing of raw materials
  - Rainwater management
  - Outdoor water use reduction
  - Indoor water use reduction

3. Transportation Efficiency. *Information to show the project will achieve at least 15 percent greater transportation efficiency, as defined in Public Resources Code section 21180(c), than comparable projects. The Applicant shall provide information setting forth its basis for determining and evaluating comparable projects and their transportation efficiency, and how the proposed project will achieve at least 15 percent greater transportation efficiency. For residential projects, the applicant shall also submit information demonstrating that the number of vehicle trips by residents divided by the number of residents is 15 percent more efficient than for comparable projects. For the purposes of this provision, comparable means a project of the same size, capacity and location type.*

The AB 900 Transportation Analysis for the Project provides detailed trip generation calculations and transportation efficiency analysis of the existing development on the Project site, the proposed Project, and a comparable project. The AB 900 Transportation Analysis is attached to this Application as **Appendix B** and is summarized below.

Project Elements

The Project site is surrounded by an extensive bicycle and pedestrian network and is close to existing transit services. West Taron Drive and the other roadways in the vicinity of the Project site all provide pedestrian amenities, including sidewalks, crosswalks, and curb ramps. Additionally, the major roadways in the vicinity of the Project site (i.e., West Taron Drive and Elk Grove Boulevard) provide continuous Class II bike lanes, thus providing bicycle connectivity to the surrounding neighborhoods and the City as a whole.

Elk Grove Transit (e-Trans) operates seven bus routes and 10 bus stops located within one-quarter mile of the Project site (i.e., 66, 70, 151, 152, 153, 157, Wknd). Bus stops are located directly adjacent to the Project site along West Taron Drive, and along the surrounding roadways of Riparian Drive, Elk Grove Boulevard, and Harbour Point Drive.

The City adopted the Climate Action Plan: 2019 Update in February of 2019. Consistent with the requirements of the City, the Project could be required to develop a Transportation Demand Management (TDM) Plan. Climate Action Plan Measure TACM-3 (Intercity Transportation Demand Management) focuses on the implementation of TDM strategies to reduce the use of single-occupancy vehicle trips, with a target of achieving a 15-percent reduction in local commute traffic. To aid the development of TDM plans, the City developed the City of Elk Grove Transportation Demand Management Plan Guidelines (TDM Plan Guidelines). These guidelines identify TDM measures by category that include marketing and promotion, bike facilities, transit benefits, commuter benefits, and parking facilities. The TDM Plan Guidelines outline the requirements for each TDM plan and identifies the following for each TDM measure:

- Measure Requirements – describes the transportation amenity being provided, the amount/frequency of the amenity, and the property owner's responsibilities. Each TDM measure is assigned a point value between 1 and 5. The higher the value, the more effective the measure is at reducing vehicle travel

- Compliance Requirements – identifies the required actions and obligations of the applicant or property owners for compliance with the TDM measure during the development review phase of a project
- TDM Plan Annual Progress Report – identifies the annual reporting requirement for the property owners' TDM coordinator, which includes the number of employees participating in the plan (i.e., by measure) and the commute mode share of employees, along with other performance measures that demonstrate performance

TDM plans shall include all required measures and a set of optional TDM measures that total a minimum of 10 points.

The Project applicant has committed to the development and implementation of a TDM Plan based on the TDM Plan Guidelines (Appendix C). Table 1 summarizes the Project-specific measures that would be incorporated into the TDM Plan. More information on the proposed TDM measures and compliance requirements are provided in Appendix B.

Table 1 Proposed Project TDM Plan

TDM Category	TDM Measure	Required	Optional	Measure Points
Marketing and Promotion	Transportation Marketing Services	X		-
Bike Facilities	Short-Term Bicycle Parking		X	1
	Long-Term Bicycle Parking		X	2
	Improved Access to Bike Network		X	1
	Showers and Locker Rooms		X	3
On-Site Amenities	On-Site Cafe		X	3
Transit	Subsidized Transit Passes		X	3
Commuter Benefits	Shuttle Bus Service		X	5
	Carpooling Program		X	3
	Guaranteed Ride Home		X	4
Parking Facilities	Parking Cash Out Program		X	3
			Total	28

Source: Fehr & Peers 2019

As shown in Table 1, consistent with the TDM Plan Guidelines the proposed Project would include all required TDM measures and would achieve an additional 28 points based on the optional TDM measures to be implemented. As detailed in the AB 900 Transportation Analysis, the proposed TDM Plan could achieve a range of overall reduction between 4 percent and 31 percent for the Project as a whole. Based on this evaluation, the Project commits to a minimum 30-percent reduction (15-percent reduction in addition to City TDM requirements). In order to ensure the effectiveness of the TDM Plan, the applicant has committed to the monitoring of the program's performance to ensure that a 30 percent or greater reduction in trips is achieved (Appendix C).

In addition to the TDM measures detailed in Table 1 above, and consistent with the reporting requirements detailed in the City of Elk Grove TDM Plan Guidelines, the applicant shall be subject to annual reporting and monitoring requirements to ensure that the TDM Plan and all the associated measures are being implemented. The CNU TDM coordinator is required to submit annual progress reports on implementation of the TDM Plan beginning one year after the date of TDM Plan approval by the City. If the responsible party fails to submit an annual report demonstrating implementation of the TDM Plan within sixty days following the established date for annual report submittal, an administrative citation will be issued pursuant to Elk Grove Municipal Code Chapter 1.12. The required items to be included in the Annual Progress Report are:

1. Contact information of TDM coordinator
2. Sample of marketing materials provided to new employees about the TDM program
3. Number of employees participating in each TDM measure offered to employees

4. Commute mode share of employees at the project site
5. Other information demonstrating implementation of specific TDM measures

Comparison of Scenarios

As detailed in PRC Section 21180(c), a project must demonstrate that it will achieve at least 15 percent greater transportation efficiency than comparable projects. Transportation efficiency is defined as the number of vehicle trips made by employees, visitors, or customers of the residential, retail, commercial, sports, cultural, entertainment, or recreational use project divided by the total number of employees, visitors, and customers. For the purposes of this analysis, the transportation efficiency of the proposed Project is compared to that of the existing development and a comparable project. A comparable project is defined as a project of the same size, capacity, and location type.

The number of daily trips generated by each of the three distinct scenarios (i.e., existing development, proposed Project, and comparable project) was calculated using trip rates published in the Institute of Transportation Engineers (ITE) 10th Edition Trip Generation Manual, and trip reductions were applied to the proposed Project consistent with the proposed TDM Plan. The comparable project for the purposes of this analysis is defined as the proposed Project without the implementation of the proposed TDM Plan. Detailed trip generation estimates are provided in Appendix B.

The number of employees, visitors, and customers was derived using a combination of data including information provided by CNU, trip generation, and average vehicle occupancy rates. Detailed employee, visitor, and customer estimates are provided in Appendix B.

The daily trip generation estimates, and the number of employees, visitors, and customers, were used to determine the transportation efficiency for the existing development, the proposed Project, and the comparable project. Table 2 shows the results of the transportation efficiency analysis as detailed in the AB 900 Transportation Analysis attached as Appendix B.

Table 2 Transportation Efficiency

Development Scenario	Daily Trips	Employees, Visitors and Customers	Transportation Efficiency Ratio	Percent Change (Existing/Comparable)
Existing Development	5,808	3,399	1.71	N/A
Comparable Project (No TDM Reduction)	21,106	14,728	1.43	N/A
Proposed Project (With 15% TDM Reduction)	17,940	14,728	1.22	29%/15%

Source: Fehr & Peers 2019

As identified above, the City already requires a 15 reduction in local commute traffic that would apply to comparable projects located in the City. With implementation of the proposed TDM Plan, the proposed Project will commit to at least a 30 percent transportation efficiency to achieve a 15 percent or greater transportation efficiency than a comparable project located in the City.

4. Infill Site in an Urbanized Area. *Information to show that the project is located on an infill site as defined by Public Resources Code Section 21061.3, and in an urbanized area, as defined by Public Resources Code Section 21071.*

In order to receive AB 900 certification, the Project must be located on an infill site, as well as located in an urbanized area. An infill site includes a "site [that] has been previously developed for qualified urban uses" (PRC Section 21061.3[b]). "Qualified urban use" means any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses" (PRC Section 21072). The Project site is located on an infill site surrounded by existing retail and commercial uses consisting of various retail stores and fast food establishments. Because these uses are considered commercial and retail uses, they are qualified urban uses within the meaning of the PRC. Accordingly, because the Project would be replacing these uses, the Project location is a valid infill site.

The Project site is also located within an urbanized area. An urbanized area includes "[a]n incorporated city that…[h]as a population of at least 100,000 persons" (PRC Section 21071[a][1]). The Project site is located within the western portion of the City, which currently has a population of over 171,000 people, and was incorporated in 2000.

Accordingly, the Project site is located in an urbanized area. The Project will replace existing urban uses at 9650 and 9700 West Taron Drive, and 2501, 2505, 2509, 2513, 2521, 2525, 2615 and 2619 West Taron Court in the City—an urbanized area. Accordingly, it meets the definition of an infill site pursuant to PRC Sections 21061.3 and 21071, which support the Project's AB 900 Certification.

5. Consistency with Sustainable Communities Strategy. *Information required by Public Resources Code section 21180(b)(1) is available for projects within a metropolitan planning organization for which a sustainable communities strategy or alternate planning strategy is in effect. For the purposes of this provision "in effect" means that the sustainable communities strategy or the alternative planning strategy has been adopted by the metropolitan planning organization, and that the Air Resources Board has accepted the metropolitan planning organization's determination that the sustainable communities strategy or alternative planning strategy meets the adopted greenhouse gas reduction targets and is not the subject of judicial challenge.*

SB 375 was adopted by the Legislature in August 2008 and signed into law by the Governor in September 2008. This legislation links regional planning for housing and transportation with the GHG reduction goals in AB 32. Each Metropolitan Planning Organization (MPO) is required to adopt a Sustainable Communities Strategy to encourage compact land development to reduce passenger vehicle miles traveled (VMT) and vehicle trips so that the region will meet targets established by the California Air Resources Board (CARB) for reducing GHG emissions.

In September 2010, CARB adopted regional GHG targets for passenger vehicles and light trucks for the years 2020 and 2035 for the various MPOs in California. The proposed Project is within the jurisdiction of SACOG. The GHG emissions reduction target approved by CARB for the SACOG region under the current regional transportation plan/sustainable communities strategy is a 16 percent per capita GHG reduction below 2005 levels by 2035.

SACOG released the MTP/SCS on February 18, 2016. The MTP/SCS supports the Sacramento Region Blueprint, which implements smart growth principles, including housing choice, compact development, natural resource conservation, use of existing assets, quality design, and transportation choice, and achieves the 16 percent GHG emissions reduction target set by CARB.

Upon the request of a lead agency, the applicable MPO may provide a consistency determination with the applicable Regional Transportation Plan/Sustainable Communities Strategies. In response to the City's request for a consistency determination, SACOG has determined that the Project is consistent with the MTP/SCS (Appendix D). SACOG concurs that the Project is in the Established Community type in the 2016 MTP/SCS, which forecasts about 1,800 new housing units and 8,135 new employees. The MTP/SCS anticipates a range of residential and employment uses within the Established Community, including commercial, office, industrial, and public development. Because the Project includes a hospital and medical center, which are generally considered public and office uses, it is consistent with the assumptions of the Established Community type, including the MTP/SCS assumption that a new hospital would be built, resulting in an increase in medical employment in the City.

The Project is also consistent with MTP/SCS policies within the metrics and growth forecast assumptions of the MTP/SCS. The forecast for this Project is based on the City's land use plans and policies, as well as an assessment of jobs-housing balance and the City's continued efforts to increase employment in the City. Increasing employment within the City, which is currently housing-rich, is essential to the success of the Blueprint Preferred Scenario and the MTP/SCS. One of the essential steps to achieving the transportation, air quality, and other quality of life benefits outlined in the Blueprint Preferred Scenario, the adopted 2016 MTP/SCS, and the draft 2020 MTP/SCS, includes relying on communities such as the City to achieve a better jobs-housing balance, which reduces VMT and GHG emissions by providing more job opportunities for Elk Grove residents. Thus, SACOG provided their determination that the Project was consistent with the applicable MTP/SCS.

6. Multi-Family Residential Project. *If the project is a multi-family residential project, evidence that (1) private vehicle parking spaces are priced and rented or purchased separately from dwelling units; or (2) the dwelling units are subject to affordability restrictions that prescribe rent or sale prices, and the cost of parking spaces cannot be unbundled from the cost of dwelling units.*

The Project does not include a multi-family residential component but does provide a dormitory facility for CNU students only. This section is not applicable to the Project.

7. **Minimum Investment.** *Information establishing that the project entails a minimum investment of $100 million in California through the time of completion of construction.*

The proposed Project includes development of a 400-bed, 733,290-square-foot hospital with a helistop, an outpatient clinic, medical office building, two parking structures with accessory retail, a dormitory, one parking structure with rooftop sports facilities, expansion of the existing School of Medicine administration building, a central plant and mechanical yard, public gathering spaces, and surface parking. Construction would occur in three phrases, each involving demolition and construction of new buildings and structures. Phase 1 is expected to be complete in 2023, with Phase 2 to follow in 2028, and Phase 3 by 2032. Over the course of the nearly 10-year time period for completion of all Project-related construction, the Project is expected to significantly exceed the minimum investment of $100 million described in PRC Section 21183(a).

The Project would have expended over $600 million in construction costs by the time construction of Phase 1 alone is complete, which includes employment of between 443 and 660 workers for demolition and construction of the Phase 1 structures, which is expected to occur over approximately 30 months. In addition, once complete, Phase 1 would provide jobs for 1,140 permanent hospital employees who would fill a range of jobs including 420 high-paid, highly skilled nursing positions and 180 high-paid, highly skilled physician positions. Project completion at Phase 3 is anticipated to generate approximately 4,000 jobs. Thus, the Project would exceed the minimum investment of $100 million with completion of Phase 1 construction alone.

8. **Prevailing Wage and Living Wage Commitments.** *Information establishing that the prevailing and living wage requirements of Public Resources Code section 21183(b) will be satisfied.*

PRC Section 21183(b) requires that a project to be certified by the Governor must create "high-wage, highly skilled jobs that pay prevailing wages for construction jobs and living wages and provide construction jobs and permanent jobs for Californians, and help reduce unemployment." PRC Section 21183(b) defines "jobs that pay prevailing wages" as "all construction workers employed in the execution of the project will receive at least the general prevailing rate of per diem wages for the type of work and geographic areas as determined by the Director of Industrial Relations pursuant to sections 1773 and 1773.9 of the Labor Code."

As stated above, the Project would create high-wage jobs for highly skilled laborers, both during construction and during operation. Approximately 2,280 permanent jobs would be created upon completion of all phases, which would help reduce unemployment. Up to 660 construction workers are expected to be employed during the 30-month construction period estimated for Phase 1. The Applicant has entered into a Memorandum of Understanding (**Appendix E**) dated August 21, 2019, with the Northern California Carpenters Regional Council and its Affiliated Unions to enter into a Letter of Intent for the construction of the proposed Project. The Applicant has committed to retaining a general contractor for construction that is a signatory to the Carpenters Master Agreement for Northern California, which includes prevailing wage requirements.

9. **Greenhouse Gas Analysis.** *Information establishing that the project will not result in any net additional greenhouse gas emissions. This information is subject to a determination signed by the Executive Officer of the Air Resources Board that the project does not result in any net additional greenhouse gas emissions, following the procedures set forth in section 6 of the Governor's Guidelines.*

PRC Section 21183(b) requires that a project demonstrate that it will not result in any net additional GHG emissions. CARB must review the analysis of GHG emissions from construction and operation of the Project. The analysis, provided in **Appendix F**, presents the technical methodology for and results of quantifying the GHG emissions from the existing land uses at the Project site, and the construction and operation-related GHG emissions of the Project by phase (as identified in Section 2.3, "Proposed Project," above).

The baseline for the analysis of the Project is the GHG emissions from the existing land uses at the Project site. Annual GHG emissions associated with the existing uses would be 9,337 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year. Project-generated emissions were calculated annually during construction phases, with operation

of earlier phases overlapping with later construction phases. Construction was assumed to occur over a 10-year buildout period and operational emissions were calculated for 2023 through 2060 to account for a 30-year lifetime for each of the three phases of operation.

Total construction-generated GHG emissions would be 8,273 $MTCO_2e$. Total operation-related emissions would be 1,370,530 $MTCO_2e$ over the Project's operational lifetime. The net increase in GHG emissions over the Project's lifetime (removing the annual baseline emissions) would be 997,058 $MTCO_2e$. The incorporation of GHG reduction measures such as on-site solar photovoltaics, purchased renewable electricity, electric vehicle charging, and the TDM Plan would reduce the project's net increase to 527,983 $MTCO_2e$. The remaining operational emissions, combined with construction-generated emissions, would be offset through the purchase of carbon credits, as specified in the letter of commitment provided in **Appendix G**.

10. **Waste Recycling.** *Information establishing that the project will comply with the requirements for commercial and organic waste recycling in Chapters 12.8 (commencing with Public Resources Code section 42649) and 12.9 (commencing with Public Resources Code section 42649.8), as applicable.*

California has had statutory and regulatory requirements related to solid waste recycling for well over 10 years requiring local governments to reduce solid waste in landfills with waste diversion programs. The two more recent statutes, in Chapters 12.8 and 12.9 of Division 30 of the PRC related to waste management, require recycling of solid waste and organic waste. Chapter 12.8 requires that businesses and multi-family residential buildings with five units or more that generate more than four cubic yards of solid waste per week source-separate their solid waste and subscribe to some kind of recycling service consistent with local ordinances or state regulations. Chapter 12.9 requires that businesses generating over specified amounts of organic solid waste per week arrange for recycling services for that organic solid waste, and also requires that if the state has not reached a reduction of 50 percent below the 2014 level of disposal of organic waste by 2020, businesses that generate more than two cubic yards of solid waste per week must source-separate and arrange for recycling of organic solid waste. These statutes also require local jurisdictions to establish a commercial solid waste recycling program if they did not already have one as of July 2012, and an organic solid waste recycling program by January 2016 if they did not already have one.

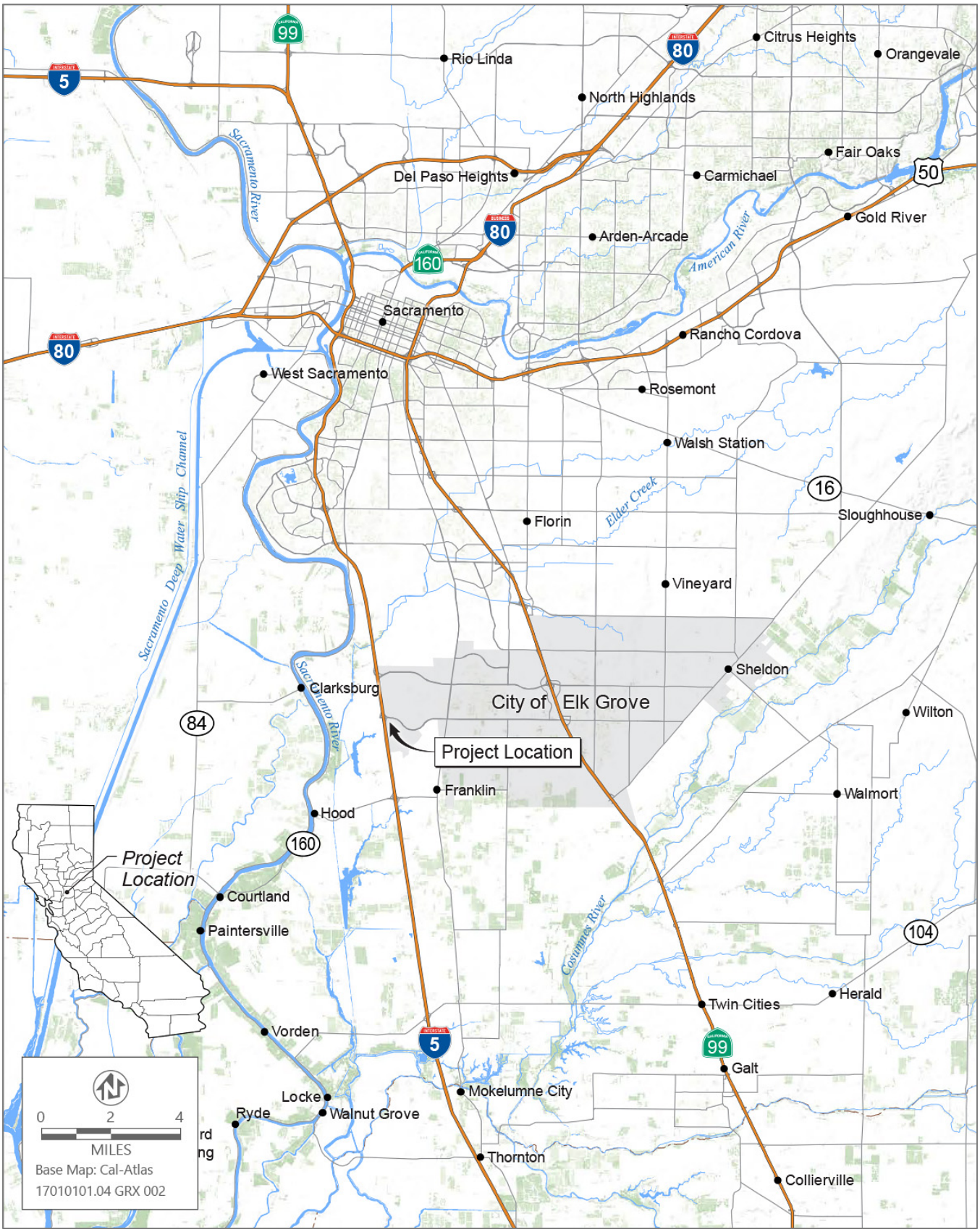
The proposed Project will be subject to these statutory requirements and has prepared an Integrated Waste Management Plan to comply with the requirements of the Sacramento Regional Solid Waste Authority, and any other applicable local recycling and composting ordinances (**Appendix H**). **Appendix H** also contains recycling requirements of the Sacramento Regional Solid Waste Authority set forth in Chapter 4.01 (Business Recycling, Non-Residential Property Recycling, Multi-Family Property Recycling, and Single Family Residential Property [Property Managed by an Association or Other] Recycling).

11. **Commitments Regarding Pub. Res. Code section 21183(e), (f), and (g).** *Information documenting a binding agreement between the project proponent and the lead agency establishing the requirements set forth in Public Resources Code section 21183(e) (all mitigation measures will be conditions of approval and enforceable, and environmental mitigation measures will be monitored and enforced for the life of the obligation), (f) applicant will pay costs of repairing the record of proceedings.*

Written acknowledgement from CNU containing commitments regarding PRC Sections 21183(e), (f) and (g) is included as **Appendix I**. The Applicant is committed to complying with all Mitigation Monitoring and Reporting Program measures from the EIR that are included as conditions of approval and are fully enforceable by the City. The Applicant agrees to pay the costs for hearing by the Court of Appeal, and will pay the costs of preparing the record of proceedings.

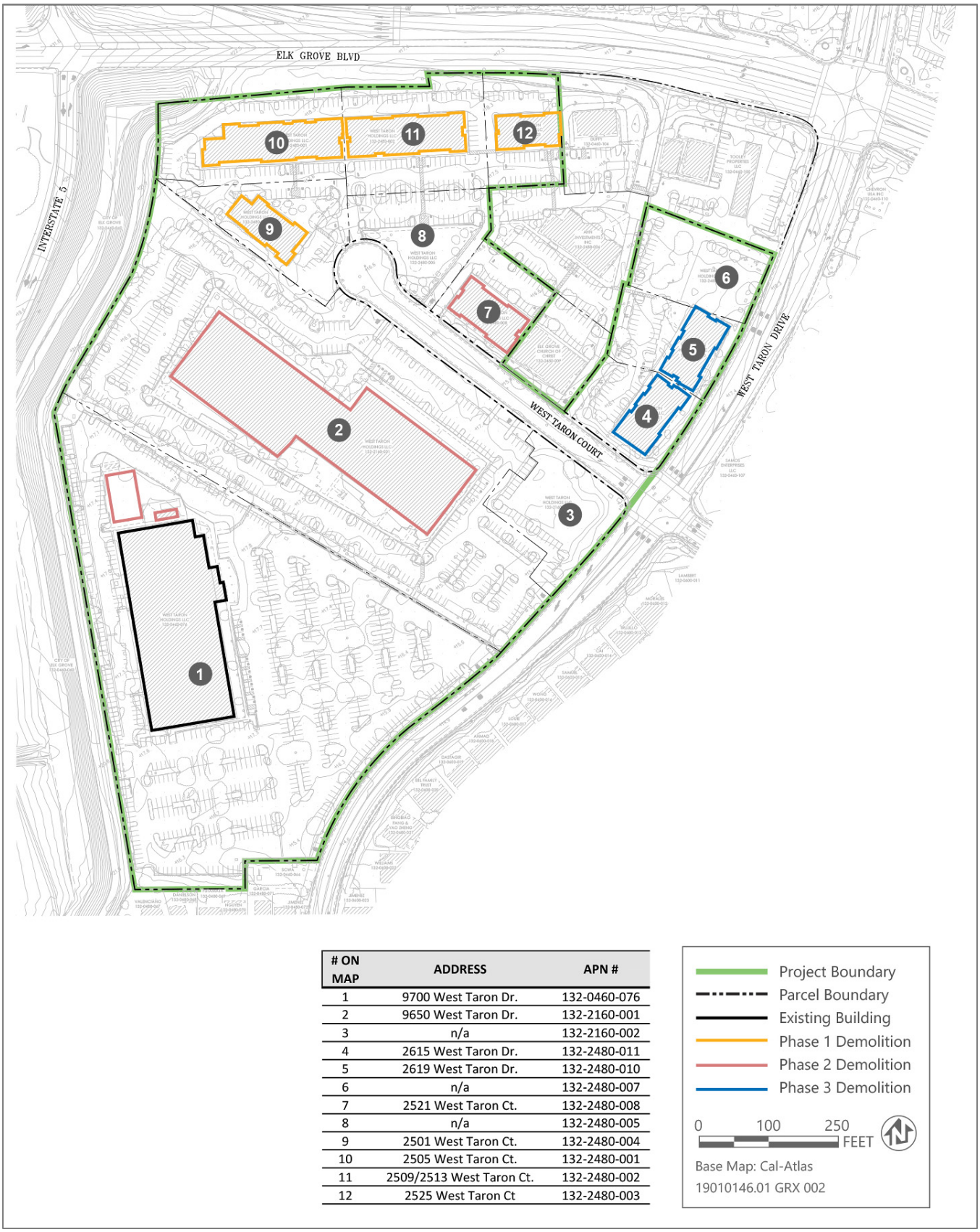
Appendix A

Location Map, Site Plans, Massing Diagram, and Renderings



Source: Data adapted by Ascent Environmental in 2019

California North State University Medical Center Regional Location Map



# ON MAP	ADDRESS	APN #
1	9700 West Taron Dr.	132-0460-076
2	9650 West Taron Dr.	132-2160-001
3	n/a	132-2160-002
4	2615 West Taron Dr.	132-2480-011
5	2619 West Taron Dr.	132-2480-010
6	n/a	132-2480-007
7	2521 West Taron Ct.	132-2480-008
8	n/a	132-2480-005
9	2501 West Taron Ct.	132-2480-004
10	2505 West Taron Ct.	132-2480-001
11	2509/2513 West Taron Ct.	132-2480-002
12	2525 West Taron Ct	132-2480-003

Project Boundary
Parcel Boundary
Existing Building
Phase 1 Demolition
Phase 2 Demolition
Phase 3 Demolition

0 100 250 FEET

Base Map: Cal-Atlas
19010146.01 GRX 002

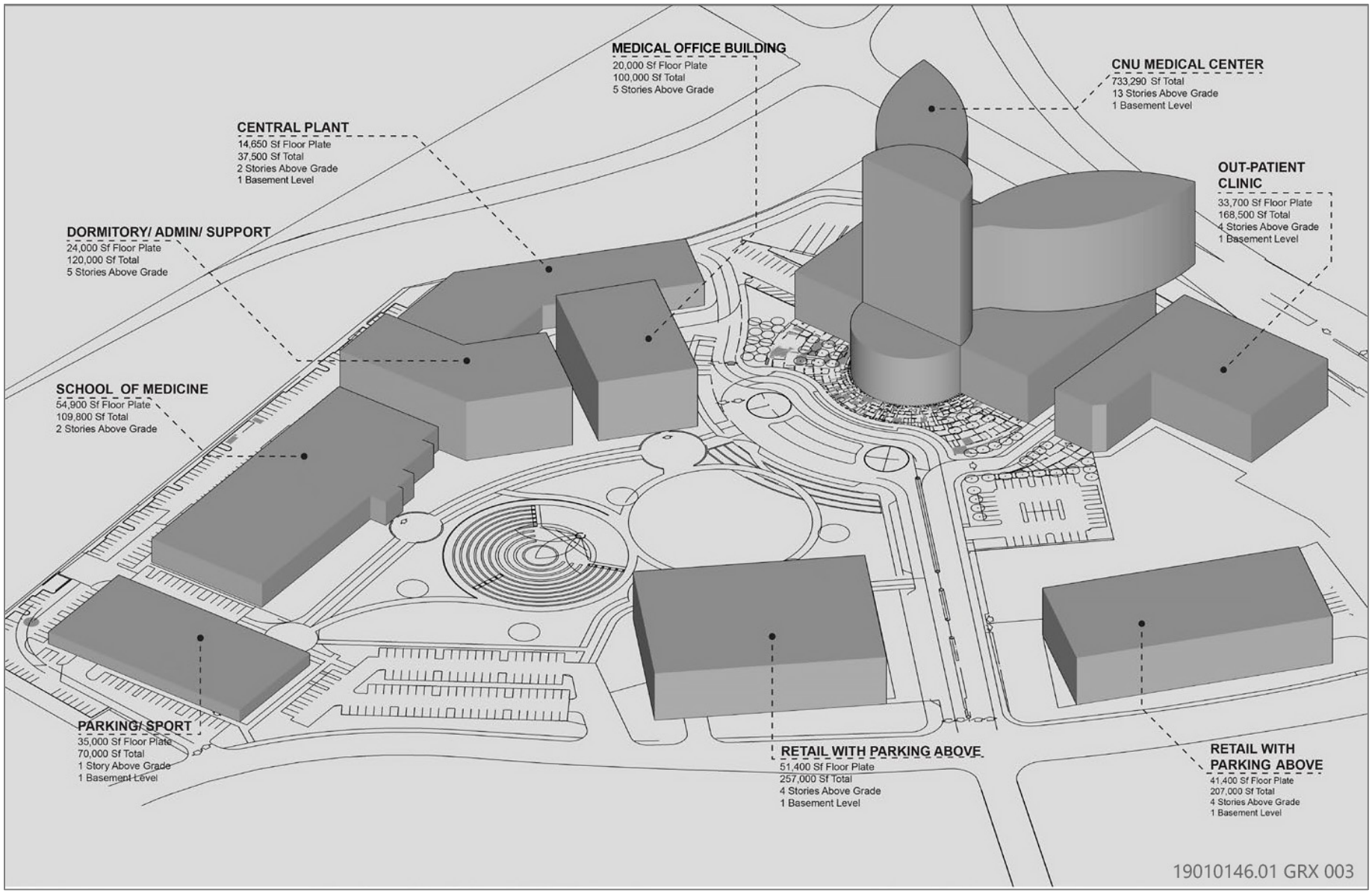
Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Existing Buildings and Proposed Demolition

PHASE	USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BUILDING AREA (Sq Ft)	STORIES ABOVE GRADE (#)	BASEMENT LEVELS (#)
Existing	School of Medicine	54,900	109,800	2	0
Phase 1	Hospital - podium and east tower	85,000	596,790	13	1
	Central Plant	14,650	37,500	2	1
	Mechanical Yard	15,500	15,500	1	0
Phase 2	Hospital - west tower	85,000	733,290	13	1
	Out-Patient Clinic	33,700	168,500	4	1
	Medical Office Building	20,000	100,000	5	0
	Parking Structure 1 - Retail with Parking Above	51,400	257,000	4	1
Phase 3	Parking Structure 2 - Retail with Parking Above	41,400	207,000	4	1
	Dormitory/Admin Support	24,000	120,000	5	0
	Medical School Parking - With Rooftop Sport Courts	35,000	70,000	1	1

Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Master Site Plan



Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Massing Diagram

Source: Image provided by Fong & Chan Architects in 2019

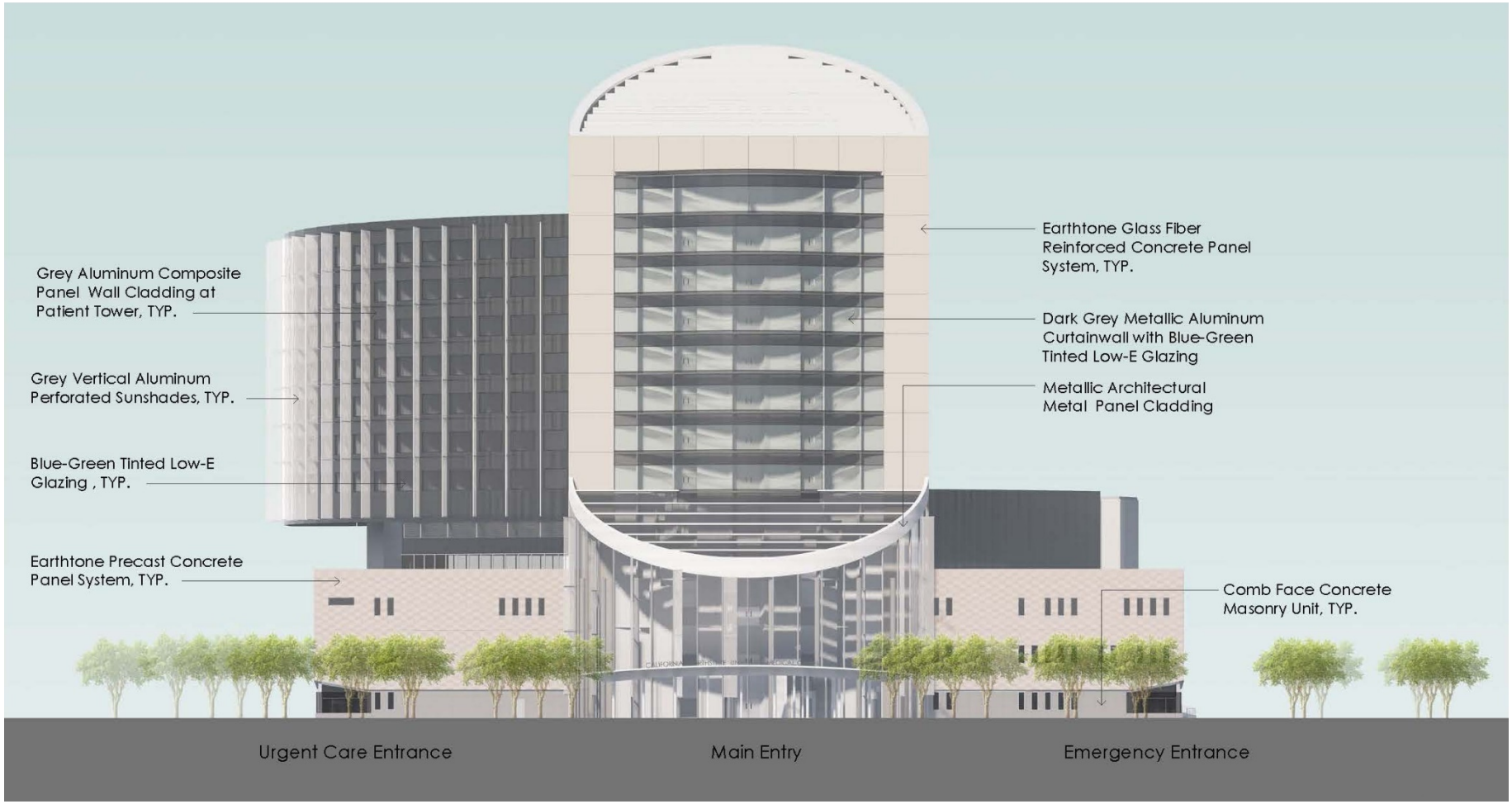
California North State University Medical Center Rendering – View from Main Entry Drive

Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Rendering – View from Service Access Road

Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Rendering – View of Patient Tower



Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Rendering – South Elevation

Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Rendering – West Elevation

Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Rendering – North Elevation

Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Rendering – East Elevation

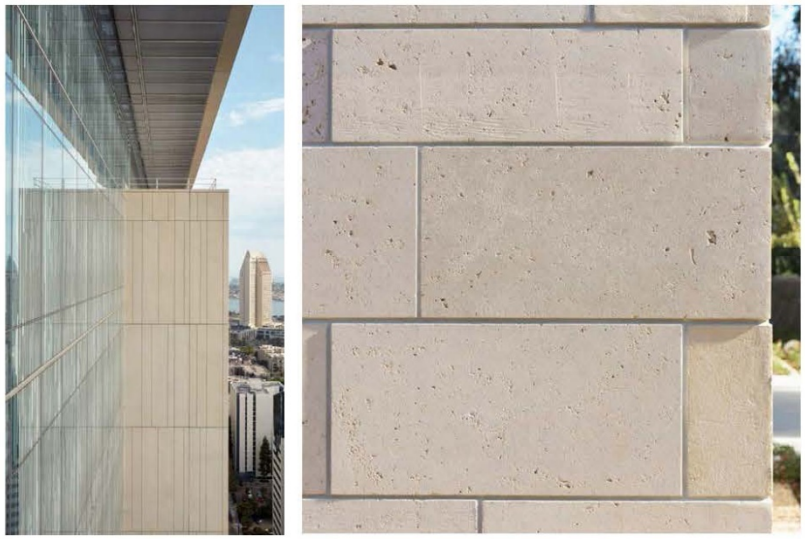
Aluminum Composite Panel | Alucobond Anodic Dark Bronze Mica
(Color Approximation)

Glazing | Viracon Green 2
(Color Approximation)

Source: Image provided by Fong & Chan Architects in 2019

California North State University Medical Center Rendering – Materials

Glass Fiber Reinforced Concrete / Precast Concrete | Clark Pacific 4-1
(Color Approximation)



Concrete Masonry Unit | Basalite 397
(Color Approximation)

Perforated Panel | McNichols 9022 Pearl Light Grey

Source: Image provided by Fong & Chan Architects in 2019

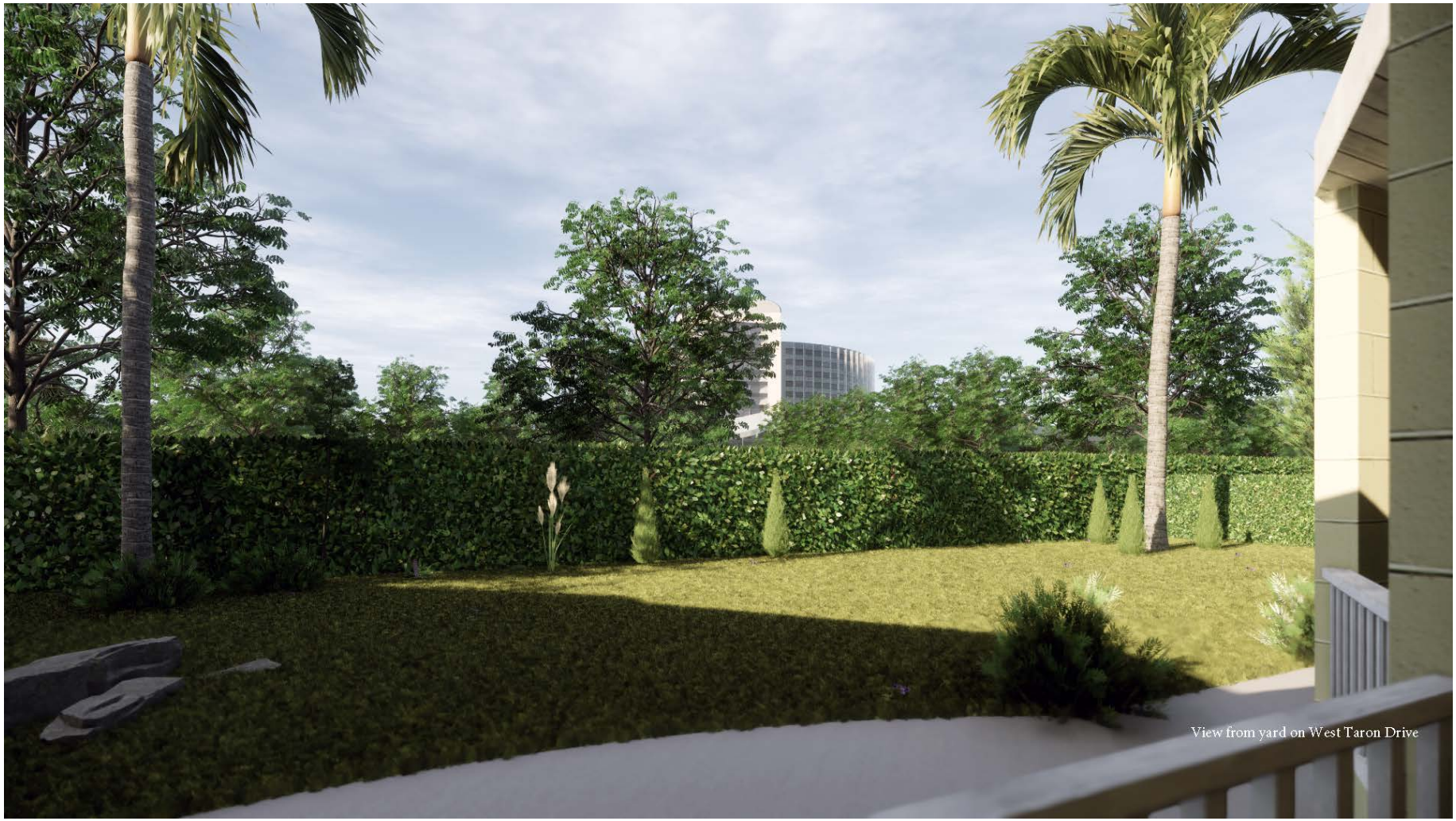
California North State University Medical Center Rendering – Materials

California North State University Medical Center –Camera Angles for Renderings of Views from Surrounding Area

California North State University Medical Center Rendering – View from Elk Grove Boulevard

California North State University Medical Center Rendering – View from Riparian Drive

California North State University Medical Center Rendering – View from West Taron Drive



California North State University Medical Center Rendering – View from Yard on West Taron Drive

California North State University Medical Center Rendering – View from Rudy Duck Way and West Taron Drive

Appendix B

Transportation Analysis

FEHR PEERS

TECHNICAL MEMORANDUM

Date: September 6, 2019

To: Pat Angell, Ascent Environmental

From: Carly Panos & David B. Robinson, Fehr & Peers

Subject: ***California Northstate University – AB 900 Analysis***

RS19-3789

Fehr & Peers has completed a transportation efficiency and vehicle miles traveled analysis for the proposed California Northstate University (CNU) project located in the City of Elk Grove. This memorandum provides information regarding the methodology and results of the analysis for the purposes of the Assembly Bill 900 application. Additional analysis and a complete transportation impact study will be completed and provided during preparation of the Environmental Impact Report. It is important to note that the proposed project will be constructed in three phases. The transportation efficiency analysis was completed for the project at full build out. Total daily VMT is provided by development phase.

Project Description

The proposed project includes expanding the existing CNU, which consists of one 109,800 square foot building, to include a hospital, outpatient building, medical office building, dormitories, administrative offices, restaurant and retail space, and three parking garages. An existing 76,000 square foot office building and seven commercial buildings totaling approximately 68,500 square feet will be demolished with phased construction of the project.

The project is located southwest of the Elk Grove Boulevard/West Taron Drive intersection. Access is proposed via one existing driveway on Elk Grove Boulevard, four existing driveways on West Taron Drive, and three existing driveways on Riparian Drive.

Consistent with the requirements of the *City of Elk Grove Climate Action Plan: 2019 Update*, the project also includes a Transportation Demand Management (TDM) Plan. The Climate Action Plan (CAP), CAP measure TACM-3 (Intercity Transportation Demand Management) focuses on implementing TDM strategies to reduce the use of single-occupancy vehicle trips, with a target of achieving a 15 percent reduction in project vehicle trips and associated vehicle miles of travel (VMT).

To aid the development of TDM plans, the City of Elk Grove developed the City of Elk Grove Transportation Demand Management Plan Guidelines. The guidelines identify TDM measure by category that include marketing and promotion, bike facilities, transit benefits, commuter benefits, and parking facilities. The guidelines outline the requirements for each TDM plan and identifies the following for each TDM measure:

- Measure Requirements – describes the transportation amenity being provided, the amount/frequency of the amenity, and the property owner's responsibilities. Each TDM measure is assigned a point value between one and five. The higher the value the more effective the measure is a reducing vehicle travel
- Compliance Requirements – identifies the required actions and obligations of the applicant or property owner's for compliance with the TDM measure during the development review phase of the project
- TDM Plan Annual Progress Report – identifies the annual reporting requirement for the property owners of TDM coordinator, which include the number of employees participating in the plan (i.e., by measure) and the commute mode share of employees, along with other performance measures that demonstrate performance

The TDM Plan is required to include all required measures and a set of optional TDM measures that total to a minimum of 10 points.

Table 1 summarizes the measures included in the proposed project's TDM Plan. Consistent with the guidelines, the plan includes all required measures and 28 points of optional measures. A detailed description of the TDM measures is attached.

Table 1 – Proposed Project TDM Plan

TDM Category	TDM Measure	Required	Optional	Measure Points
Marketing and Promotion	Transportation Marketing Services	X		-
Bike Facilities	Short-Term Bicycle Parking		X	1
	Long-Term Bicycle Parking			2
	Improved Access to Bike Network			1
	Showers and Locker Rooms			3
On-Site Amenities	On-Site Cafe			3
Transit	Subsidized Transit Passes			3
Commuter Benefits	Shuttle Bus Service			5
	Carpooling Program			3
	Guaranteed Ride Home			4
Parking Facilities	Parking Cash Out Program			3
			Total	28

Source: Fehr & Peers, 2019

TDM+ was used to estimate a range of TDM reductions that could be expected from the TDM strategies like those listed in **Table 1**.

TDM+ incorporates the effects of numerous land use strategies as well as various travel incentives/disincentives. The VMT calculations applied in TDM+ are based on strategies identified in the California Air Resources Board's *Zero Carbon Buildings Study*, which in turn draws from the 2010 CAPCOA manual *Quantifying Greenhouse Gas Mitigation Measures*. These reductions are exclusive of built environment variables like land use mix and density, which are accounted for in our internalization estimate, developed using MXD+.

The TDM strategy reductions have been limited in effectiveness to only land uses where there is supporting research or case studies to support the reductions. The reductions reflect the suburban (single-family) environment of the project location.

TDM+ identified a range of overall reduction for the entire project between 4% and 31%. Based on this evaluation, the 15% reduction applied for the project analysis is achievable. The results of the TDM+ evaluation are attached.

Assembly Bill 900

Assembly Bill (AB) 900 allows qualifying leadership projects to expedite their environmental review process, upon signature of the Governor. In order to qualify as a leadership project, a project must demonstrate that it will achieve at least 15 percent greater transportation efficiency than comparable projects and will not result in any net additional greenhouse gas emissions, among other things. For the purposes of this analysis, transportation efficiency of the proposed project is compared to existing development and a comparable project.

Public Resources Code Section 21180 notes that transportation efficiency is the number of vehicle trips made by employees, visitors, or customers of the residential, retail, commercial, sports, cultural, entertainment, or recreational use project divided by the total number of employees, visitors, and customers. Vehicle miles traveled (VMT) is provided to support greenhouse gas emissions analysis.

Analysis Methodology

To calculate the transportation efficiency, we used local data and trip rates published in the Institute of Transportation Engineers (ITE) 10th Edition Trip Generation Manual to determine trip generation for both the existing and proposed project. **Table 2** displays the trip generation. Trip generation calculations are attached.

Table 2 – Trip Generation															
Land Use (ITE Code)	Quantity	Vehicle Trip Rate							Vehicle Trips						
		Daily	AM			PM			Daily	AM			PM		
		Total	In	Out	Total	In	Out	Total	Total	In	Out	Total	In	Out	Total
Existing Development Trip Generation															
CNU Building (550)	109.8 ksf	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
Office (710)	76 ksf	9.74	1.00	0.16	1.16	0.18	0.97	1.15	740	76	12	88	14	73	87
Shopping Center (820)	68.5 ksf	37.75	0.58	0.36	0.94	1.83	1.98	3.81	2,586	40	24	64	125	136	261
								Existing Trips	6,185	208	64	272	180	296	476
								Internal Trips[3]	288	27	8	35	31	50	81
								Pass By Trips[1]	89				43	46	89
								Total Existing External Trips	**5,808**	**181**	**56**	**237**	**106**	**200**	**306**
Comparable Project (Buildout) Trip Generation															
Hospital and Supporting Uses (610)	733.3 ksf	10.72	0.61	0.28	0.89	0.31	0.66	0.97	7,861	444	209	653	227	484	708
Outpatient Clinic (610)	168.5 ksf	10.72	0.61	0.28	0.89	0.31	0.66	0.97	1,806	102	48	150	52	111	163
Medical Office (720)	100 ksf	34.80	2.17	0.61	2.78	0.97	2.49	3.46	3,480	217	61	278	97	249	346
CNU Building (550)	109.8 ksf	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
Dormitory[2]	300 beds	2.11	0.03	0.04	0.07	0.08	0.08	0.16	633	10	11	21	24	24	48
High-Turn Over Restaurant (932)	41.4 ksf	112.18	5.47	4.47	9.94	6.06	3.71	9.77	4,644	227	185	412	250	154	404
Retail (820)	51.4 ksf	37.75	0.58	0.36	0.94	1.83	1.98	3.81	1,940	30	18	48	94	102	196
Admin Office (710)	24 ksf	9.74	1.00	0.16	1.16	0.18	0.97	1.15	234	24	4	28	4	24	28
								Proposed Project Trips	23,457	1,146	564	1,710	789	1,235	2,021
								Internal Trips[3]	2,177	193	95	288	139	216	355
								Pass By Trips[1]	174				108	66	174
								Total Proposed Project External Trips	**21,106**	**953**	**469**	**1,422**	**542**	**953**	**1,492**

Notes:
[1] A 34% pass by trip reduction was applied to the existing shopping center during the PM peak hour. A 43% pass by trip reduction was applied to the proposed restaurant during the PM peak hour. Pass by reduction rates are based on data published in ITE's 3rd Edition *Trip Generation Handbook.*
[2] Trip rates for dormitories are based on data collected at two local privately operated student housing complexes.
[3] Internal trips were calculated using MXD+.
ksf = 1,000 square feet.
Source: Fehr & Peers, 2019

The number of employees, visitors, and customers was derived using a combination of data including information provided by CNU, trip generation, and average vehicle occupancy rates. **Table 3** displays the number of employees, visitors, and customers for both the existing development and proposed project at buildout.

Table 3 – Employee, Visitor and Customer Information	
Land Use	**Employee, Visitors, and Customers**
Existing Development	
CNU School Building	840
Office Building	400
Shopping Center	2,159
Total Employees, Visitors, and Customers	**3,399**
Proposed Project	
Hospital Employees	1,080
Nurses	840
Doctors	360
Patients	2,400
Visitors	3,000
CNU Students	1,200
CNU Staff	350
Retail	5,498
Total Employees, Visitors and Customers	**14,728**
Source: Fehr & Peers, 2019	

Transportation Efficiency

Daily trip generation and the number of employees, visitors, and customers were used to determine the transportation efficiency for the existing development and the proposed project at buildout. **Table 4** displays the results of the calculation. As shown, the proposed project will achieve at least 15% greater transportation efficiency than the comparable project. Therefore, the project complies with the AB 900 requirement.

Table 4 – Transportation Efficiency			
Development Scenario	**Daily Trips**	**Employees, Visitors and Customers**	**Transportation Efficiency Ratio**
Existing Development	5,808	3,399	1.71
Comparable Project (Buildout)	21,106	14,728	1.43
Proposed Project (With 15% TDM Reduction)	17,940	14,728	1.22
Source: Fehr & Peers, 2019			

Details of the transportation efficiency calculation, including the source of the employee, visitor, and customer estimates are attached.

Vehicle Miles Traveled

Vehicle miles of travel (VMT) for both the existing development and the proposed project by development phase. Moblie-sourced from StreetLight was used to obtain the average trip length for the existing CNU school building, the existing office building (ALLDATA), and the existing shopping center, as well as seven comparable hospitals and medical centers within the Sacramento region. **Table 5** displays the average trip length based on observed data on Mondays, Tuesdays, Wednesdays and Thursdays during March, April, September and October 2018.

Table 5 – Observed Daily Trip Counts and Daily Average Trip Lengths		
Location	**Number of Observations**	**Average Trip Length (Miles)**
Existing Development		
Existing CNU School Building	1,162	7.55
Existing Office Building	980	24.35
Existing Shopping Center	1,992	9.90
Comparable Hospitals		
Kaiser Permanente Roseville Medical Center	20,839	10.25
Kaiser Permanente South Sacramento Medical Center	17,148	8.75
Mercy General Hospital	7,119	11.05
Mercy Hospital of Folsom	2,075	11.35
Mercy San Juan Medical Center	10,948	10.20
Methodist Hospital of Sacramento	8,408	8.45
Sutter Roseville Medical Center	16,817	9.90
Hospital Weighted Average Trip Length		**9.78**
Source: StreetLight Data and Fehr & Peers, 2019		

The trip lengths were multiplied by the number of daily trips (excluding internal and pass by trips) provided to calculate average VMT. **Table 6** displays the VMT for the existing development and development phase for the comparable and proposed project. Detailed VMT calculations are attached.

Table 6 – Daily VMT by Development Phase		
Development Scenario		**VMT**
Existing Development		61,232
Comparable Project	Phase 1	102,607
	Phase 2	162,571
	Phase 3 (Buildout)	201,388
Proposed Project With 15% TDM Reduction	Phase 1	87,216
	Phase 2	138,185
	Phase 3 (Buildout)	171,180
Source: Fehr & Peers, 2019		

Detailed VMT calculations are attached.

Attachments

1. MARKETING AND PROMOTION

This measure category focuses on ensuring that employees are informed of the TDM Plan being implemented and understand all the available transportation amenities, services, and/or incentives.

TDM MEASURE	MEASURE REQUIREMENTS	COMPLIANCE REQUIREMENTS	MEASURE POINTS
Transportation Marketing Services	The building owner, in coordination with the building tenants, shall administer a comprehensive marketing and communication campaign which provides all tenants and employees at the project site with information about available transportation amenities, services, and/or incentives. Marketing services shall be provided by a TDM coordinator or a communications professional. Marketing services shall include, at a minimum, the following activities: 1. Promotions. The TDM coordinator or communications professional shall develop and deploy promotions to encourage the use of sustainable transportation modes. Marketing materials may include targeted messaging, communications campaigns, incentives (e.g., subsidized transit passes, employee parking cash out options), contests, and other creative strategies for existing and new employees. 2. Welcome Packets. New employees at the project site shall be provided with marketing information about the available transportation amenities, services, and/or incentives. For employees, the packet shall reflect options for major commute origins and offer one-on-one consultations.	The applicant or property owner shall provide the contact information for the provider of TDM marketing services, a description of qualifications, and a sample TDM Plan. City staff shall contact the designated provider and/or review the plan to verify that the applicant or property owner is prepared to offer marketing services in the time frame specified for project approval.	Required Measure

2. BIKE FACILITIES

This measure category encourages employees to use active modes of transportation to commute to and from work by providing convenient on-site amenities tailored to bike commuters.

TDM MEASURE	MEASURE REQUIREMENTS	COMPLIANCE REQUIREMENTS	MEASURE POINTS
Short-Term Bicycle Parking	For new office buildings, provide secure bicycle parking for five percent of the vehicular parking spaces being added, with a minimum of one space. Acceptable parking facilities shall be conveniently located near the building entrance and meet the requirements in 23.58.090 (D)(1) of the Elk Grove Municipal Code.	The applicant or property owner shall submit plans during the development review stage that identify the location and number of short-term bicycle parking spaces.	1
Long-Term Bicycle Parking	For new office buildings, provide secure bicycle parking for five percent of the vehicular parking spaces being added, with a minimum of one space. Acceptable parking facilities shall be conveniently located near the building entrance and shall meet one of the following: 1. Covered, lockable enclosures with permanently anchored racks for bicycles; 2. Lockable bicycle rooms with permanently anchored racks; or 3. Lockable, permanently anchored bicycle lockers.	The applicant or property owner shall submit plans during the development review stage that identify the location and number of long-term bicycle parking spaces.	2
Improved Access to Bike Network	The project shall design features which improve pedestrian and bicycle connectivity consistent with the City's Bicycle, Pedestrian, and Trails Master Plan and related planning efforts. The applicant shall provide pathways that are a minimum of 10 feet in width that allow pedestrians and cyclists to connect from adjacent roadways, bike lanes and sidewalks to the main entrance of a building(s). Applicants shall demonstrate, as part of the site design plans, that the proposed project includes pedestrian and bicycle infrastructure and connections to existing facilities.	The applicant or property owner shall submit plans during the development review stage that identify improved access to the City's bike network in the site designs.	1
Showers and Locker Rooms	For new office buildings, projects shall provide at least one shower and six clothes lockers for every 30 Bicycle Parking spaces, but no fewer than one shower and six clothes lockers.	The applicant or property owner shall submit plans during the development review stage that identify the location and number of showers and clothes lockers. City staff shall review the proposed plan to ensure that the included showers and clothes lockers meet the measure requirements.	3

3. On-Site Amenities

This measure category provides a set of on-site design features and amenities that assist employees in reducing single-occupancy vehicle trips during the workday.

TDM Measure	Measure Requirements	Compliance Requirements	Measure Points
On-Site Cafe	For new office buildings, projects shall provide an on-site café with full coffee and lunch menu services to help reduce coffee break and lunchtime vehicle trips.	The applicant or property owner shall submit information about the potential providers for the on-site cafe and a description of the services that would be offered at the project site. Information shall be submitted during the development review stage.	3

4. TRANSIT MEASURES

This measure category incentivizes employees that use transit as their primary commute mode. Transit measures shall only be included in the TDM Plan if the project site is located within 1/2 miles from a transit stop.

TDM MEASURE	MEASURE REQUIREMENTS		MEASURE POINTS
Subsidized Transit Passes	Provide free or subsidized monthly transit passes for on-site employees. Transit pass subsidies shall provide a minimum of $50 of monthly transit costs per employee. Publicize the availability of free or subsidized transit passes to employees through the new employee welcome package.	The applicant or property owner shall provide information on the method in which employees would be reimbursed or compensated for monthly transit costs and how this process would be managed for building tenants. This information will be verified by City staff before certificate of occupancy issuance.	3

5. COMMUTER BENEFITS

This measure category provides a set of commuter services and incentives that encourage employees to commute using modes other than single-occupancy vehicles.

TDM MEASURE	MEASURE REQUIREMENTS		MEASURE POINTS
Vanpool Program	The property owner shall implement an employer or building manager-sponsored vanpool program. The vanpool program would provide service between the project site and general locations where vanpool users live. The property owner shall purchase or lease vans for employee use and pay for mileage and maintenance of the vehicles. See Sac Region 511 website for vanpool incentives.	The applicant or property owner shall provide information on the method in which employees would be reimbursed or compensated for monthly vanpool costs and how this process would be managed for building tenants. This information will be verified by City staff before certificate of occupancy issuance.	4
Carpooling Program	Promote and provide discounts for employees who use rideshare services such as Waze Carpool, UberPOOL, and LyftLine	The applicant or property owner shall provide information on the method in which employees would be reimbursed or compensated for discounts when using rideshare services and how this process would be managed for building tenants. This information will be verified by City staff before certificate of occupancy issuance.	3
Bikeshare Program	Promote and provide discounts for employees who use bike or scooter share services, such as Gotcha, JUMP, SPIN, Lime, or other such services. Provide docks or other designated parking/storage area for the service on-site.	The applicant or property owner shall provide information on the method in which employees would be reimbursed or compensated for discounts when using these services and how this process would be managed for building tenants. This information will be verified by City staff before certificate of occupancy issuance.	1

TDM MEASURE	MEASURE REQUIREMENTS		MEASURE POINTS
Shuttle Bus Service	The applicant shall provide a service plan describing the hours of operation, stop location(s), routes, and headways for the shuttle service. The applicant or property owner shall also submit plans that identify the location and dimensions of potential shuttle stops at the project site and the proposed destination(s) stops. The plans shall identify any other relevant information that may be helpful in understanding potential conflicts at the proposed shuttle stop locations (e.g., proximity to transit stops, crosswalks).	The applicant or property owner shall submit a detailed service plan for the shuttle bus service which must be finalized and approved by the City before certificate of occupancy issuance.	5
Guaranteed Ride Home	The applicant shall submit a service plan describing the services provided by a Guaranteed Ride Home program. See Sacramento TMA for opportunity to participate in an existing program. Participants must pre-register in the program at no additional cost to the employee or employer and are eligible to use the Guaranteed Ride Home program as long as they have used a qualified commute alternative on the day they need assistance. 1. Qualified commute alternatives include carpool, vanpool, shuttles, transit, bicycling, and walking, and commute apps that are specifically for carpooling (such as Scoop and Waze Carpool). 2. Non-qualified commute alternatives include driving alone, motorcycles, and Transportation Network Companies/ride-hailing apps (such as Uber or Lyft) 3. Emergency-related side trips – such as picking up a sick child from school or getting a prescription filled at a pharmacy – are permitted. 4. Participants can be reimbursed a maximum of six times per calendar year (January-December).	The applicant or property owner shall submit a detailed service plan for the Guaranteed Ride Home program which must be finalized and approved by the City before certificate of occupancy issuance.	4

6. PARKING FACILITIES

This measure category focuses on discouraging trips made by private vehicles (particularly single occupancy vehicles) by controlling the supply of accessory parking spaces. Parking Facility measures shall only be included in the TDM Plan if the project site is located within 1/2 miles from a transit stop.

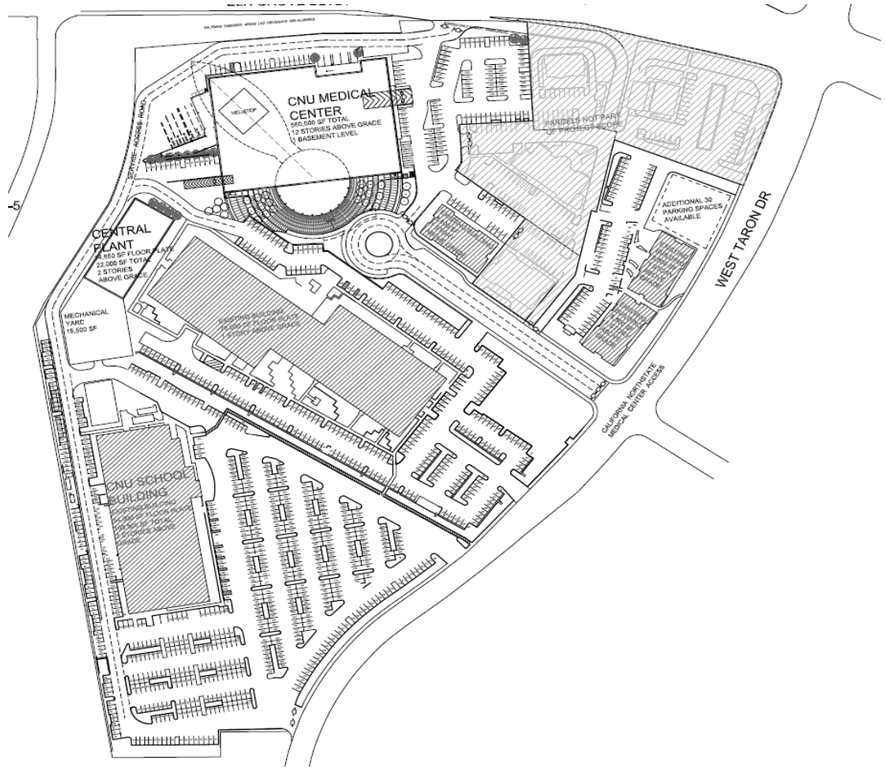
TDM MEASURE	MEASURE REQUIREMENTS		MEASURE POINTS
Parking Cash Out Program	Any tenant employer that subsidizes parking for its employees shall provide all employees with a choice of forgoing any subsidized/free parking for a cash payment equivalent to the cost of the parking space to the employer. Employers shall promote the program to all employees eligible to receive parking at a subsidized level.	The applicant, property owner, or TDM coordinator shall provide City staff with a signed letter agreeing to distribute the TDM Plan, including provisions for the Parking Cash Out Program, via new employee packets, tenant lease documents, and/or deeds. This information shall be submitted during the development review stage.	3
Unbundled Parking Requirement	50 percent of project parking spaces shall be leased or sold separately as part of the tenant or lease agreement rental so that tenants have the option of renting or buying a parking space at an additional cost, and would, thus, experience cost savings if they opt not to rent or purchase parking.	The applicant, property owner, or TDM coordinator shall submit a signed letter agreeing to distribute the TDM Plan, including provisions for the unbundled parking requirements as part of tenant lease documents, and/or deeds. This information shall be submitted during the development review stage.	3

TDM Reduction Summary Report: CNU Elk Grove Hospital				
Overall VMT Reduction: 4% to 31%				
	VMT % Reduction by Land Use			
Parking				
Parking1A: Increased Off-Street Fees				
Parking1B: Increased On-Street Fees				
Parking1D: Unbundled Parking				
Parking1E: Pay-as-you-Go Parking Rates				
Parking 2: Parking Supply				
Transit				
Transit 1: Subsidies	up to 2%	-	-	-
Transit 2A: Transit Frequency				
Transit 2B: Transit Coverage				
Transit 3A: Private Point-to-Point Shuttles	1% to 9%	up to 9%	up to 9%	up to 9%
Transit 3B: Last Mile Shuttle	up to 5%	up to 5%	up to 5%	up to 5%
Commute Programs				
Commute 1A: Commuter Incentives				
Commute 2: Commute Marketing Program	3% to 13%	3% to 13%	3% to 13%	3% to 13%
Commute 3: ERH	up to 1%	-	-	-
Commute 4: TNC Partnerships	up to 1%	-	-	-
Bike and Walk				
BikeWalk1: Secure Parking	up to 1%	up to 1%	up to 1%	up to 1%
BikeWalk2: Showers & Lockers	up to 1%	up to 1%	up to 1%	up to 1%
BikeWalk3: End of Trip Repair Stations	up to 1%	up to 1%	up to 1%	up to 1%
BikeWalk 4: Pedestrian-Oriented Design	up to 2%	up to 2%	up to 2%	up to 2%
BikeWalk 5: Bikeshare System & Subsidies				
Rideshare				
Rideshare 1: Carpool/Vanpool Incentives				
Rideshare 2: Ridematch Program	up to 6%	up to 6%	up to 6%	up to 6%
Rideshare 3: Carshare	up to 1%	up to 1%	up to 1%	up to 1%
Rideshare 4: Carshare Subsidy				
Total				
Total of all Measures	6% to 35%	3% to 29%	3% to 29%	3% to 31%

Trip Generation - Proposed Project (Phase 2)															
Land Use (ITE Code)	**Quantity (ksf and beds for dorms)**	**Vehicle Trip Rate**							**Vehicle Trips**						
		Daily	**AM**			**PM**			**Daily**	**AM**			**PM**		
			In	**Out**	**Total**	**In**	**Out**	**Total**		**In**	**Out**	**Total**	**In**	**Out**	**Total**
Hospital and Supporting Uses* (610)	596.8	10.72	0.61	0.28	0.89	0.31	0.66	0.97	6,398	361	170	531	227	394	708
CNU School Building (550)	109.8	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
Office (710)	76	9.74	1.00	0.16	1.16	0.18	0.97	1.15	740	76	12	88	14	73	87
Shopping Center (820)	26.2	37.75	0.58	0.36	0.94	1.83	1.98	3.81	989	15	9	25	48	52	100
Proposed Project Trips									**10,986**	**544**	**219**	**764**	**330**	**606**	**1,023**
Internal Trips									**875**	**78**	**32**	**111**	**86**	**84**	**267**
Proposed Pass By Trips***									**43**				**21**	**22**	**43**
Total Project Trips									**10,068**	**466**	**187**	**653**	**223**	**500**	**713**

*Includes 29 ksf data center

***43% of PM peak hour trips for proposed restaurant and 34% of PM peak hour trips for existing Shopping Center were removed from daily totals to account for pass by trips during the PM peak hours. Daily pass by percentages were not available. Shopping center pass by was not applied to proposed retail as the proposed retail will be primarily geared towards students.



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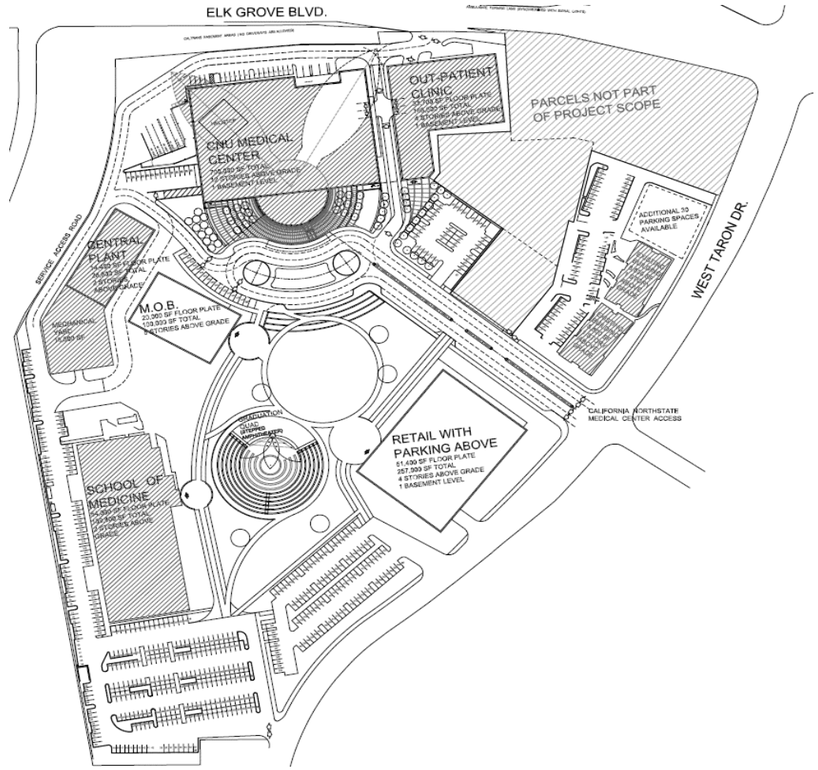
Trip Generation - Proposed Project (Phase 2)															
Land Use (ITE Code)	Quantity (ksf and beds for dorms)	Vehicle Trip Rate							Vehicle Trips						
		Daily	AM			PM			Daily	AM			PM		
			In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
Hospital and Supporting Uses* (610)	733.3	10.72	0.61	0.28	0.89	0.31	0.66	0.97	7,861	444	209	653	227	484	708
Outpatient Clinic (610)	168.5	10.72	0.61	0.28	0.89	0.31	0.66	0.97	1,806	102	48	150	52	111	163
Medical Office Building (720)	100	34.80	2.17	0.61	2.78	0.97	2.49	3.46	3,480	217	61	278	97	249	346
CNU School Building (550)	109.8	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
Retail (820)	51.4	37.75	0.58	0.36	0.94	1.83	1.98	3.81	1,940	30	18	48	94	102	196
Retail (820)	17.6	37.75	0.58	0.36	0.94	1.83	1.98	3.81	664	10	6	17	32	35	67
Proposed Project Trips									**18,610**	**895**	**370**	**1,266**	**543**	**1,068**	**1,608**
Internal Trips									**1,301**	**115**	**48**	**164**	**59**	**115**	**174**
Proposed Pass By Trips* **									**113**				**54**	**59**	**113**
Total Project Trips									**17,196**	**780**	**322**	**1,102**	**430**	**894**	**1,321**

*Includes 29 ksf data center

***43% of PM peak hour trips for proposed restaurant and 34% of PM peak hour trips for existing Shopping Center were removed from daily totals to account for pass by trips during the PM peak hours. Daily pass by percentages were not available. Shopping center pass by was not applied to proposed retail as the proposed retail will be primarily geared towards students.



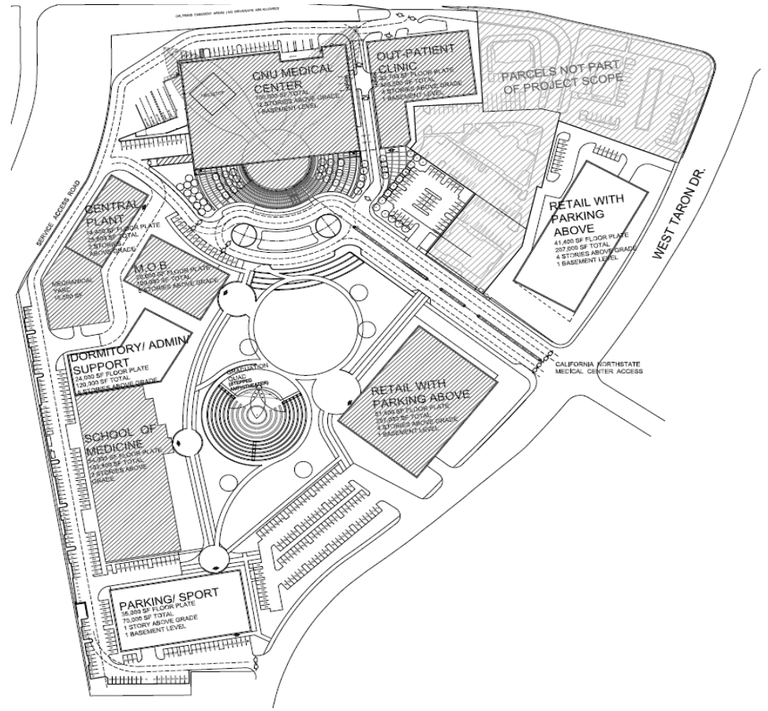
Trip Generation - Existing and Proposed Project (Buildout)

	Land Use (ITE Code)	Quantity (ksf and beds for dorms)	Vehicle Trip Rate							Vehicle Trips						
			Daily	AM			PM			Daily	AM			PM		
				In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
Proposed Land Use	Hospital and Supporting Uses* (610)	733.3	10.72	0.61	0.28	0.89	0.31	0.66	0.97	7,861	444	209	653	227	484	708
	Outpatient Clinic (610)	168.5	10.72	0.61	0.28	0.89	0.31	0.66	0.97	1,806	102	48	150	52	111	163
	Medical Office Building (720)	100	34.80	2.17	0.61	2.78	0.97	2.49	3.46	3,480	217	61	278	97	249	346
	CNU School Building (550)	109.8	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
	Dormitory**	300	2.11	0.03	0.04	0.07	0.08	0.08	0.16	633	10	11	21	24	24	48
	High-Turn Over Sit Down Restaurant (932)	41.4	112.18	5.47	4.47	9.94	6.06	3.71	9.77	4,644	227	185	412	250	154	404
	Retail (820)	51.4	37.75	0.58	0.36	0.94	1.83	1.98	3.81	1,940	30	18	48	94	102	196
	Admin (710)	24	9.74	1.00	0.16	1.16	0.18	0.97	1.15	234	24	4	28	4	24	28
									Proposed Project Trips	**23,457**	**1,146**	**564**	**1,710**	**789**	**1,235**	**2,021**
									Internal Trips	**2,177**	**193**	**95**	**288**	**139**	**216**	**355**
									Proposed Pass By Trips* **	**174**				**108**	**66**	**174**
									Total Project Trips	**21,106**	**953**	**469**	**1,422**	**542**	**953**	**1,492**
Existing Land Use	CNU School Building (550)	109.8	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
	Office (710)	76	9.74	1.00	0.16	1.16	0.18	0.97	1.15	740	76	12	88	14	73	87
	Shopping Center (820)	68.5	37.75	0.58	0.36	0.94	1.83	1.98	3.81	2,586	40	24	64	125	136	261
									Existing Trips	**6,185**	**208**	**64**	**272**	**180**	**296**	**476**
									Internal Trips	**288**	**27**	**8**	**35**	**31**	**50**	**81**
									Existing Pass By Trips* **	**89**				**43**	**46**	**89**
									Total Existing Trips	**5,808**	**181**	**56**	**237**	**106**	**200**	**306**
									Net New Project Trips	**15,298**	**772**	**413**	**1,185**	**436**	**753**	**1,186**

*Includes 29 ksf data center

**Based on data collected at two local privately operated student housing apartment complexes. One was located on UC Davis and the other was within one mile of the UC Davis core campus

***43% of PM peak hour trips for proposed restaurant and 34% of PM peak hour trips for existing Shopping Center were removed from daily totals to account for pass by trips during the PM peak hours. Daily pass by percentages were not available. Shopping center pass by was not applied to proposed retail as the proposed retail will be primarily geared towards students.



Transportation Efficiency

Scenario	Daily Trips	Employees, Visitors, Customers	Efficiency Ratio
Existing Conditions	5,808	3,399	1.71
Comparable Project	21,106	14,728	1.43
Proposed Project (With TDM Reductions)	17,940	14,728	1.22

Existing Conditions		**Source**
CNU	840	Provided by Client
Office	400	Provided by Client
Retail Employees/Visitors	2,159	Daily Trips/2*Average Occupancy
Total	**3,399**	

Proposed Project (Buildout)		
Hospital Employees	1,080	Provided by Client
Nurses	840	Provided by Client
Doctors	360	Provided by Client
Patients	2,400	Provided by Client
Visitors	3,000	Provided by Client
CNU Students	1,200	Provided by Client
CNU Staff	350	Provided by Client
Retail Employees/Visitors	5,498	Daily Trips/2*Average Occupancy
Total	**14,728**	

Average Vehicle Occupancy 1.67

Federal Highway Administration (FHWA), 2017 NHTS Weighted Vehicle Occupancy Factors

https://www.fhwa.dot.gov/policyinformation/nhstable.cfm

VMT - Existing Conditions

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
CNU School	2,859	2,685	7.6	20,272
Office	740	695	24.4	16,923
Retail	2,586	2,428	9.9	24,037
Total	6,185	5,808		**61,232**

VMT - Proposed Project (Phase 1)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	6,398	5,863	9.8	57,341
CNU School	2,859	2,620	7.6	19,781
Office	740	678	24.4	16,513
Retail/Restaurant	989	906	9.9	8,973
Total	10,986	10,068		**102,607**

*Internalization based on MXD+

VMT - Proposed Project (Phase 1 - With TDM Reductions)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	5,438	4,984	9.8	48,740
CNU School	2,430	2,227	7.6	16,814
Office	629	576	24.4	14,036
Retail/Restaurant	841	770	9.9	7,627
Total	9,338	8,557		**87,216**

*Internalization based on MXD+

VMT - Existing Conditions

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
CNU School	2,859	2,685	7.55	20,272
Office	740	695	24.35	16,923
Retail	2,586	2,428	9.90	24,037
Total	6,185	5,808		**61,232**

VMT - Proposed Project (Phase 2)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	13,147	12,148	9.78	118,806
CNU School	2,859	2,642	7.55	19,945
Dorms		-	9.78	-
Retail/Restaurant	2,604	2,406	9.90	23,820
Total	18,610	17,196		**162,571**

*Internalization based on MXD+

VMT - Proposed Project (Phase 2 - With TDM Reductions)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	11,175	10,326	9.78	100,985
CNU School	2,430	2,245	7.55	16,953
Dorms	-	-	9.78	-
Retail/Restaurant	2,213	2,045	9.90	20,247
Total	15,819	14,616		**138,185**

*Internalization based on MXD+

VMT - Existing Conditions

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
CNU School	2,859	2,685	7.55	20,272
Office	740	695	24.35	16,923
Retail	2,586	2,428	9.90	24,037
Total	6,185	5,808		**61,232**

VMT - Proposed Project (Buildout)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	13,381	12,040	9.78	117,748
CNU School	2,859	2,572	7.55	19,422
Dorms*	633	570	9.78	5,570
Retail/Restaurant	6,584	5,924	9.90	58,648
Total	23,457	21,106		**201,388**

*Internalization based on MXD+

VMT - Proposed Project (Buildout - With TDM Reductions)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	11,374	10,234	9.78	100,086
CNU School	2,430	2,187	7.55	16,508
Dorms*	538	484	9.78	4,735
Retail/Restaurant	5,596	5,035	9.90	49,851
Total	19,938	17,940		**171,180**

*Internalization based on MXD+

CALIFORNIA NORTHSTATE UNIVERSITY

December 3, 2019

Scott Morgan, Deputy Director of Administration, State Clearinghouse Director
Governor's Office of Planning and Research
1400 Tenth Street
Sacramento, California 95814

Subject: California Northstate University Medical Center Project – LEED and Transportation Demand Management Plan Commitment

Dear Mr. Morgan:

I am writing to inform the Governor's Office of Planning and Research that California Northstate University (CNU) has submitted an Application for the California Northstate University Medical Center Project (Project) seeking certification of the Project as an Environmental Leadership Development Project (ELDP) pursuant to AB 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011, as amended effective January 1, 2018, and codified in Public Resources Code Section 21178 et. seq.

As part of its Application, CNU commits to meeting the following requirements:

- CNU agrees to a binding commitment to delay operating the Project until it receives LEED Gold certification or better as required under Public Resources Code Section 21180(b). A Gold level certification target under the LEED rating system for Healthcare version 4 will encourage design and construction decisions meant to protect surrounding ecosystems, reduce energy use, water use, and GHG emissions, create healthier indoor environments, and promote environmental- and health-conscious sourcing of construction materials, all through an integrated design process.

  Achieving LEED Gold certification requires obtaining at least 60 points in eight categories: Integrative Process, Location & Transportation, Sustainable Sites, Energy & Atmosphere, Water Efficiency, Materials & Resources, Indoor Environmental Quality, Innovation, and Regional Priority. The result is a positive impact on resource conservation, the built environment, and the local community.

  LEED provides a level of flexibility for a project to choose the exact credits and project features. At the time of this Application, the exact LEED credits and project features that will be selected to achieve LEED Gold certification have not yet been finalized. However, some of the design features that are anticipated for contributing to the achievement of LEED Gold certification are listed below under their respective LEED categories:

  Integrative Process
  - The design team studied energy and water strategies during early design phases and held a four-hour-long integrated design team charrette, including the architect, owner, LEED consultant, and designers from lighting, MEP, civil, landscape, and structural scopes of work.

  Location & Transportation
  - The Project is located on a previously developed site.
  - The campus will provide bicycle storage and shower facilities.
  - Parking for the new building will have preferred parking areas for electric vehicles and charging infrastructure. This would include 166 electric vehicle parking spaces with chargers.

  Sustainable Sites
  - The sponsor plans to offset the development area with an off-site habitat protection project.

- Low-impact development rainwater management strategies will be used to manage runoff from the developed site for the 95th percentile of regional or local rainfall events.
- Rooftops and landscaping will use light colored materials meeting solar reflectance and low albedo requirements to reduce heat island effects.
- Exterior lighting will be directed downwards and shielded to prevent excessive light pollution.
- The new building includes access for patients, visitors, and staff to outdoor landscaped areas that serve as places of respite.

Water Efficiency

- Reduction of water use by 30-40 percent compared to a typical healthcare development will be achieved through the use of low-flow fixtures, cooling tower efficiency, and drought-tolerant landscaping.
- Water metering to track highest demand end uses will help maintenance and operations staff detect malfunctions.

Energy and Atmosphere

- Reduction of energy use by 7 percent compared to a typical healthcare development will be achieved through the use of higher efficiency condensing boilers, variable frequency drives (VFD) cooling tower fan controls, light-emitting diode (LED) lighting, and other energy conservation measures.
- Integrated rooftop photovoltaic panels will be used to produce on-site renewable energy.
- Enhanced commissioning will be used to verify installed systems are working as intended upon construction completion and start-up of operations.

Materials & Resources:

- Construction and demolition waste management strategies will be used to divert at least 50 percent of total construction and demolition materials from landfills.
- Whole building life-cycle assessment will be conducted to help identify strategies to reduce environmental impacts embodied in materials, such as reducing the amount of cement in concrete.
- Several building product disclosure documents will be included in the materials specifications.
- All LED lighting eliminates potential mercury contamination, while lead, copper, and cadmium will be avoided except where necessary for radiation and magnetic resonance imaging (MRI) shielding.
- Partitions, casework, and spaces will be designed for future flexibility.

Indoor Environmental Quality

- Low-emitting materials will be installed.
- Indoor air quality will be regularly tested.
- High level of individual controls will be used to provide lighting and thermal comfort for patients and staff.
- High number of patient rooms will offer quality views.

Innovation

- The Project team will select many credits from among the Innovation Catalog, Pilot Credits Catalog, or other innovative project design or construction achievements to improve environmental performance.

Regional Priority

- Extra points awarded for strategies that warrant extra consideration, due to a project design addressing local stresses on the environment, include:
  - Sourcing of raw materials
  - Rainwater management
  - Outdoor water use reduction
  - Indoor water use reduction
- CNU commits to meeting the requirement set forth in Public Resources Code Section 21183(c), which requires that the Project demonstrate that it will achieve at least 15 percent greater transportation efficiency than comparable projects in the City in the following manner:

1. Prior issuance of building permits, the Applicant shall develop and submit a TDM Plan to the City of Elk Grove for review. The TDM Plan shall be reviewed by City staff and finalized and approved prior to certificate of occupancy issuance.

2. The TDM Plan shall be developed according to the City of Elk Grove Transportation Demand Management Plan Guidelines; and thus, shall comply with the following requirements:

   Measure Requirements. Each measure is described in a level of detail which allows the applicant to adhere to the requirements of the measure while providing flexibility for implementation for individual projects. The measure includes a description of the transportation amenity being provided, the amount/frequency of this amenity, and the property owner's responsibilities.

   Compliance Requirements. Compliance information is provided that specifies the required actions and obligations of the applicant or property owner's for compliance with the TDM measure during the development review phase of the project.

   TDM Plan Requirements. To develop a successful TDM strategy, a TDM Plan should include a variety of measures which work in conjunction to form a comprehensive strategy. The TDM Guidelines include a variety of both required and optional measures to be included in the final TDM Plan. The required measure shall be included in all TDM Plans submitted to the City. Each optional TDM measure is assigned a point value based on its importance and effectiveness. **The TDM Plan submitted by the Applicant to the City shall include all required measures and a set of optional measures that total a minimum of 28 points, as detailed in the AB 900 Transportation Analysis for the Project conducted by Fehr & Peers (see Appendix B of the application). The City already requires a 15 reduction in local commute traffic that would apply to comparable projects located in the City as part of its TDM requirements. With implementation of the proposed TDM Plan, the proposed Project will commit to at least a 30 percent transportation efficiency to achieve a 15 percent or greater transportation efficiency than a comparable project located in the City.**

   TDM Plan Annual Progress Report. The CNU TDM coordinator is required to submit annual progress reports on implementation of the TDM Plan beginning one year after the date of TDM Plan approval by the City. If the responsible party fails to submit an annual report demonstrating implementation of the TDM Plan within sixty days following the established date for annual report submittal, an administrative citation will be issued pursuant to Elk Grove Municipal Code Chapter 1.12. Projects which have made a good faith effort to carry out the provisions of the plan as determined by the TDM administrator and/or

have achieved significant VMT reductions shall be recognized for their accomplishments by the City. The required items to be included in the Annual Progress Report are:

1. Contact information of TDM coordinator
2. Sample of marketing materials provided to new employees about the TDM program
3. Number of employees participating in each TDM measure offered to employees
4. Commute mode share of employees at the project site
5. Other information demonstrating implementation of specific TDM measures

3. The following TDM measures were accounted for in the AB 900 Application for the purposes of increasing transportation efficiency; and thus, at a minimum, shall be implemented and are included as commitments in this letter.

    a. Transportation Marketing Services
    b. Short-Term Bicycle Parking
    c. Long-Term Bicycle Parking
    d. Improved Access to Bike Network
    e. Showers and Locker Rooms
    f. On-Site Café
    g. Subsidized Transit Passes
    h. Shuttle Bus Service
    i. Carpooling Program
    j. Guaranteed Ride Home
    k. Parking Cash Out Program

    The TDM Plan commitments outlined in this letter will be incorporated into the Project's Environmental Impact Report (EIR) as Project design features or mitigation measures. The Applicant shall agree to comply with all Project design features and mitigation measures contained in the EIR through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement with the lead agency, the City of Elk Grove.

Sincerely,

Alvin Cheung, PharmD, MHSA
President & CEO
California Northstate University, LLC

cc: Sarah Kirchgessner, City of Elk Grove

Appendix D

Consistency with Sustainable Communities Strategy

Sacramento Area Council of Governments

1415 L Street,
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95814

tel: 916.321.9000
fax: 916.321.9551
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www.sacog.org

September 3, 2019

Mr. Darren Wilson, PE, Developer Services Director
City of Elk Grove
8401 Laguna Palm Way
Elk Grove, Ca 95758

Re: MTP/SCS Consistency Determination for the California Northstate University Medical Center Project (PLNG18-110)

Dear Mr. Wilson:

This letter is in response to your request for review of the California Northstate University Medical Center Project on Elk Grove Boulevard at West Taron Drive. Thank you for inviting SACOG's comments on the project as it relates to consistency with the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). SACOG provides a consistency determination at the request of the lead agency. However, it is the responsibility of the lead agency to make the final determination on a project's consistency with the MTP/SCS. This letter confirms SACOG has determined the project is consistent with the MTP/SCS. SACOG reviewed the project description provided to us compared to the MTP/SCS project assumptions for the city to make our determination.

The Northstate University Medical Center Project, at build out, includes a medical center, pharmacy, medical college, out-patient clinic, medical offices, two parking structures, and a dormitory. Our understanding of the projects is based on the project description provided to us with the request for consistency determination. The project area is part of SACOG's 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy and longer-term Blueprint Vision. The project is in the Established Community Type in the 2016 MTP/SCS. In the Established Community, the MTP/SCS forecasts about 1,800 new housing units and 8,135 new employees. Within the Established Community, the MTP/SCS forecasts a range of residential and employment uses including commercial, office, industrial and public development (MTP/SCS Appendix E-3, Land Use Forecast Background Documentation, pp. 134, February 19, 2016). Hospitals and medical centers are generally considered public and office uses in our forecast, therefore, the proposed project is consistent with the assumptions for this community type in the MTP/SCS. Additionally, although this specific project was not yet proposed, the MTP/SCS assumes a new hospital and an increase in medical employment overall in the City because of the size of the City and the population growth expected.

With respect to consistency with the MTP/SCS policies, the applicable policies are embedded in the metrics and growth forecast assumptions of the MTP/SCS. For the purposes of determining SCS consistency, projects consistent with the growth forecast

Auburn
Citrus Heights
Colfax
Davis
El Dorado County
Elk Grove
Folsom
Galt
Isleton
Live Oak
Lincoln
Loomis
Marysville
Placer County
Placerville
Rancho Cordova
Rocklin
Roseville
Sacramento
Sacramento County
Sutter County
West Sacramento
Wheatland
Winters
Woodland
Yolo County
Yuba City
Yuba County

assumptions of the MTP/SCS are consistent with these policies. The MTP/SCS employment forecast for the City was based not only on the City's land use plans and policies, but also on an assessment of jobs-housing balance and the City's continued efforts to increase employment in the City. Having more jobs in the City, which is housing-rich today, is a strategy essential to the success of the Blueprint Preferred Scenario and the MTP/SCS. The Blueprint Preferred Scenario, the adopted 2016 MTP/SCS, and the draft 2020 MTP/SCS achieve transportation, air quality, and other quality of life benefits by relying in part on communities like Elk Grove achieving a better jobs-housing balance. The proposed project support this and is consistent with MTP/SCS growth forecast assumptions. Our confirmation of the project's consistency with the MTP/SCS is not intended to express any opinion on the site design, the appropriate conditions of approval of the project. Project consistency with the MTP/SCS means that the project was reviewed and found consistent with the land use, density, intensity, and related policies of the MTP/SCS.

Thank you for inviting SACOG's input as to the consistency of the California Northstate University Medical Center Project with the 2016 MTP/SCS. If you have further questions or need further assistance, please don't hesitate to contact me at or Clint Holtzen choltzen@sacog.org or (916) 340-6247.

Sincerely,

Kacey Lizon
Deputy Executive Director of Planning and Programs

CC: Christopher Jordan, Elk Grove, Director of Strategic Planning and Innovation
Clint Holtzen, SACOG, Planning Manager

Appendix E

Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING
BETWEEN
NORTHERN CALIFORNIA CARPENTERS REGIONAL COUNCIL AND ITS AFFILIATED UNIONS
AND
CALIFORNIA NORTHSTATE UNIVERSITY

Purpose

This Memorandum of Understanding ("MOU") codifies the intentions of California Northstate University (the "University") and the Northern California Carpenters Regional Council and its Affiliated Unions (the "Carpenters") to enter into a Letter of Intent ("LOI") for the construction of California Northstate University Medical Center (the "Project"). The Project is mutually beneficial to the Parties and to that end, the LOI will include provisions for efficient construction, mutual support and advocacy. To that end the University commits to retain a general contractor that is signatory to the Carpenters Master Agreement for Northern California. In addition, the LOI will include commitments from the Carpenters to support the Project at all public forums.

California Northstate University

Signed: _____

Name: Alvin Cheung

Date: 8/21/2019

IN WITNESS THEREOF, this MOU has been executed by the parties hereto as of the date of the last signing party:

Northern California Carpenters regional Council and its Affiliated Unions

Signed: _____

Name: Robert Alvarado

Date: 8-21-19

Draft Technical Report

for the

California Northstate University Medical Center Campus

Greenhouse Gas Emissions Analysis under Assembly Bill 900

Prepared For:

California Northstate University

Alvin Cheung, PharmD, MHSA, CEO & President
916.686.7400

Prepared By:

Ascent Environmental

455 Capitol Mall, Suite 300
Sacramento, CA 95814
916.444.7301

November 2019

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LIST OF ABBREVIATIONS

CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recovery and Recycling
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH_4	methane
CNU	California Northstate University
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
EDLP	Environmental Leadership Development Project
EV	electric vehicle
GHG	greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
kWh	kilowatt-hour
LEED	U.S. Green Building Council's Leadership in Energy and Environmental Design
LTO	landing and take-off
$MTCO_2e$	metric tons of carbon dioxide equivalent
MWh	megawatt-hour
N_2O	nitrous oxide
OPR	Governor's Office of Planning and Research
PG&E	Pacific Gas and Electric Company
PRC	Public Resources Code
RPS	Renewables Portfolio Standard
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Municipal Utility District
VMT	vehicle miles traveled

1 INTRODUCTION

Ascent Environmental (Ascent) is conducting a comprehensive greenhouse gas (GHG) emissions assessment for the California Northstate University (CNU) Medical Center Campus Project (Project) to demonstrate that the Project meets the GHG requirements of the Jobs and Economic Improvement Through Environmental Leadership Act (the Act) (Public Resources Code [PRC] Section 21178 et seq.). The Governor's Office of Planning and Research (OPR) has provided approved guidelines for submitting applications for streamlined environmental review pursuant to the Act. With respect to GHG emissions, a Project must demonstrate to the California Air Resources Board (CARB) that it would not result in any net additional GHGs including GHG emissions from employee transportation in accordance with PRC Section 21183(c). The GHG emissions associated with construction of the Project are also to be considered in the analysis.

This submittal describes the methodology used to estimate the GHG emissions from baseline and Project conditions and describes the methodology used to quantify GHG emission reductions from Project design features and mitigation measures.

1.1 ASSEMBLY BILL 900

In September 2011, Governor Brown signed the Act, which required the Governor to establish procedures for applying for streamlined environmental review under the California Environmental Quality Act (CEQA) for projects that meet certain requirements. OPR has provided approved guidelines for submitting applications for streamlined environmental review pursuant to the Act. With respect to GHG emissions, a Project must demonstrate that it would not result in any net additional GHGs, including GHG emissions from employee transportation in accordance with PRC Section 21183(c). For purposes of PRC Section 21183(c), the following process applies, as quoted from OPR:

a. The applicant shall submit electronically to AB900@arb.ca.gov a proposed methodology for quantifying the Project's net additional greenhouse gas emissions. The Air Resources Board will review and comment on the methodology, at its discretion, within 30 days of submission.

b. At the same time, the applicant shall submit to AB900@arb.ca.gov, documentation that the Project does not result in any net additional greenhouse gas emissions. The documentation must at least quantify:

i. Both direct and indirect greenhouse gas emissions associated with the Project's construction and operation, including emissions from the Project's projected energy use and transportation related emissions: and

ii. The net emissions of the Project after accounting for any mitigation measures that will be monitored and enforced consistent with PRC Section 21183(d).

c. Within 60 days of receiving the documentation in section b above, the Board will determine whether the conditions specified in PRC Section 21183(c) has been met or, if more time is needed, notify the applicant of the expected completion date.

d. The Board will determine and report to the Governor in writing that a Project does not result in any net additional emissions of GHGs if the Project demonstrates through a combination of Project design features, compliance with (or exceeding minimum requirements of) existing regulations, and mitigation that it would result in zero additional GHG emissions.

2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

The Project site consists of approximately 24 acres along the western boundary of the City of Elk Grove (City) in Sacramento County. The Project site consists of 12 parcels (assessor parcel numbers 132-2480-001, -002, -003, -004, -005, -007, -008, -010, -011, 132-2160-001, -002, 132-0460-076) and is bordered by Elk Grove Boulevard to the north, Interstate 5 to the west, West Taron Drive to the east, and the Laguna Stone Lake subdivision to the south. The Project location is shown in Figure 1). The area is fully developed except one approximately 0.5-acre undeveloped parcel on the southwest corner of Riparian Court and West Taron Drive.

2.2 EXISTING CONDITIONS

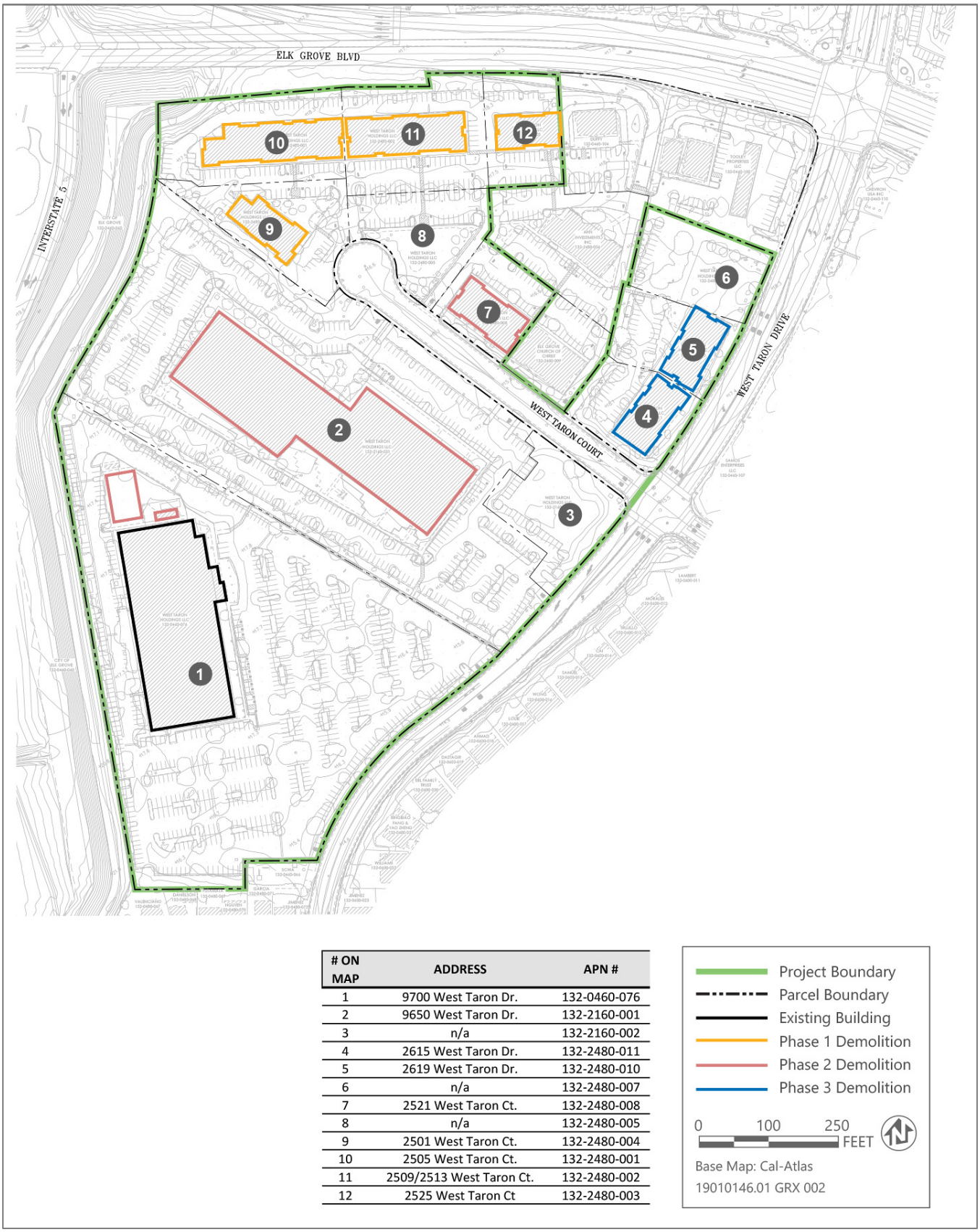
The Project site is currently occupied by a total of nine structures that encompass a total of 282,246 square feet of building space. This includes the 109,800-square-foot, 2-story School of Medicine building at 9700 West Taron Drive, a 76,000-square-foot office building at 9650 West Taron Drive currently occupied by All Data, and seven additional buildings comprising 2501 through 2619 West Taron Drive currently occupied by a number of different uses, including eating establishments, a brewery, an animal hospital, the CNU Psychology College, and other commercial and retail uses. A gas station, fast-food restaurants, and a church are adjacent to the site. Roadway access to the Project site is provided from West Taron Drive and Riparian Drive.

2.3 PROPOSED PROJECT

Development of the proposed CNU Medical Center Campus would be guided by its District Development Plan, which would provide for overall site plan approval and establish development elements including, but not limited to, parking, landscaping, pedestrian improvements, and other features that are common across the site. Development would be completed over three phases.

The Project would include the demolition of existing buildings and the construction of the various uses over three phases. Under Phase 1, the Project would include construction of a 596,790-square-foot hospital with 250 beds. The proposed hospital would include an 8-story 150-patient-bed tower atop a 4-story 100-patient-bed main hospital building with one basement level providing underground parking for up to 230 vehicles using a semi-automatic stacked parking system. A 22,850-square-foot central plant is also proposed under Phase 1 of development. This facility would be two stories, including a basement parking level with 80 spaces, and would house support equipment for the hospital and a 15,000-square-foot exterior mechanical yard. A total of 1,426 parking spaces would be provided under Phase 1 of development. This would consist of 1,116 surface parking spaces and 310 structure parking spaces to be provided in the lower levels of the hospital and central plant buildings. This phase would require the demolition of the buildings and parking lots occupying 2501, 2505, 2513, and 2525 West Taron Court, and part of 9650 West Taron Drive.

Phase 2 of the proposed Project would include a second 150-patient-bed tower atop the main hospital, an out-patient clinic, a medical office building, and the first of two public parking structures (Parking Structure 1). The additional 8-story patient-bed tower would be 103,210 square feet and would add 150 beds for a total of 400 beds at the hospital. The 168,500-square-foot out-patient clinic would include four stories above ground and a basement floor parking level with 170 parking spaces. This building would contain outpatient medical services and ambulatory care. The 100,000-square-foot medical office building would include five stories above ground and contain out-patient medical clinics and hospital administration. Parking Structure 1 would be 257,000 square feet and include four stories above ground and one basement level. The ground floor would include 51,400 square feet of retail, medical offices, and other supporting uses. The remaining three floors and basement level would provide parking for 1,500 vehicles. A semi-automatic stacked parking system would be used on the three above-ground parking levels and the basement level would be standard parking. This phase would require demolition of the buildings and parking lots occupying 2521 West Taron Court and part of 9650 West Taron Drive.



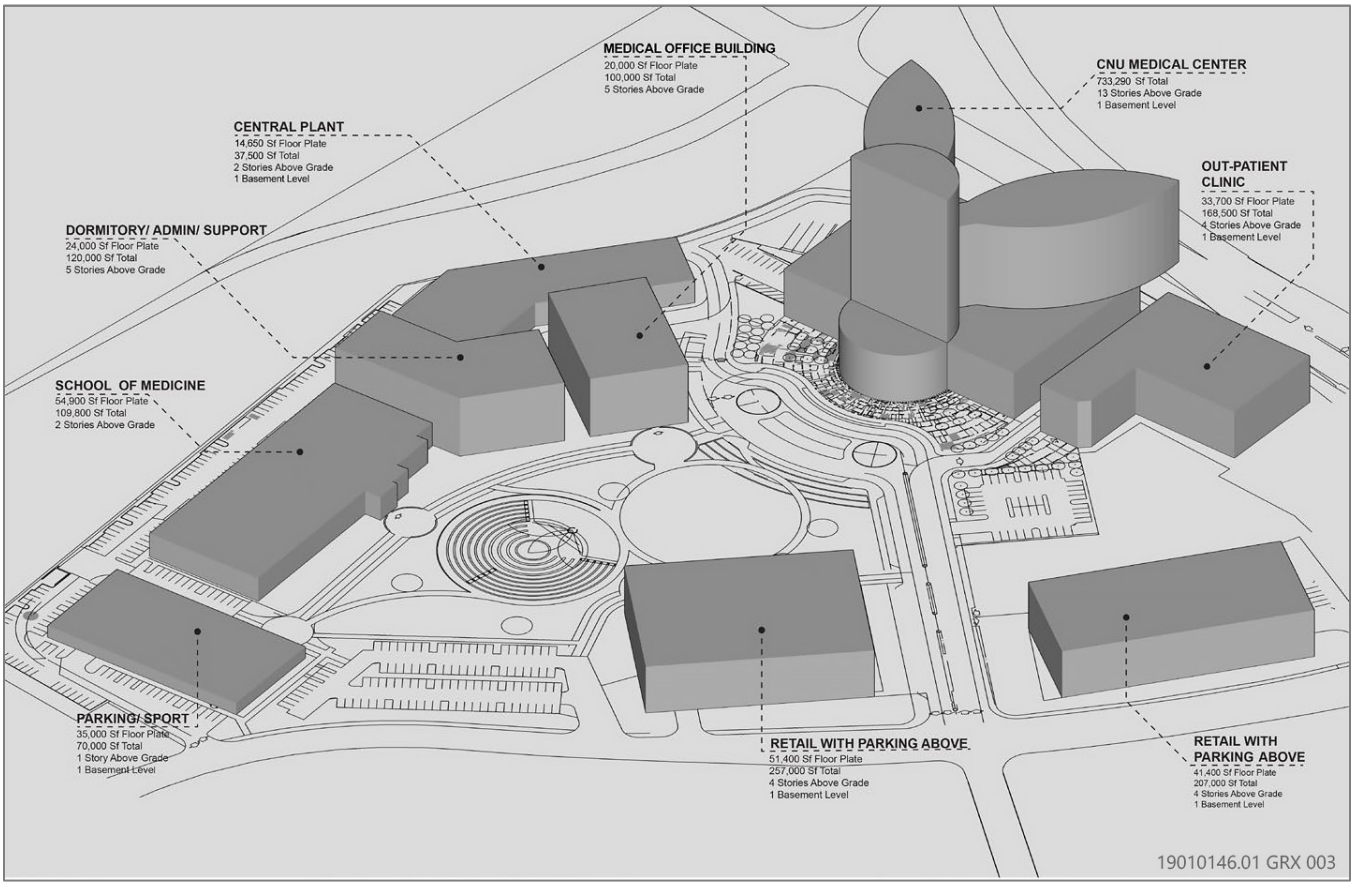
# ON MAP	ADDRESS	APN #
1	9700 West Taron Dr.	132-0460-076
2	9650 West Taron Dr.	132-2160-001
3	n/a	132-2160-002
4	2615 West Taron Dr.	132-2480-011
5	2619 West Taron Dr.	132-2480-010
6	n/a	132-2480-007
7	2521 West Taron Ct.	132-2480-008
8	n/a	132-2480-005
9	2501 West Taron Ct.	132-2480-004
10	2505 West Taron Ct.	132-2480-001
11	2509/2513 West Taron Ct.	132-2480-002
12	2525 West Taron Ct	132-2480-003

Source: Image provided by Fong & Chan Architects in 2019

Figure 1 California North State University Demolition Phases

Lastly, Phase 3 of construction would incorporate a second parking structure (Parking Structure 2), a dormitory, and a parking structure for medical student use with sports facilities on the roof. Parking Structure 2 would be 207,000 square feet and include four stories above ground and one basement level. The ground floor would include approximately 41,400 square feet of retail, medical offices, and other supporting uses. The remaining three floors and basement level would provide parking for 1,000 vehicles. A semi-automatic stacked parking system would be used on the three above-ground stories and the basement level would be standard parking. The proposed 120,000 square-foot, 5-story dormitory is also proposed under Phase 3, to be located in the southern portion of the Project site, adjacent to the school facilities (the 109,800 square-foot 2-story school building would remain onsite). A 70,000 square-foot structure intended to provide parking and recreational facilities for medical students would also be constructed under this phase. This student parking structure would include one story above-ground and a basement level that would accommodate 200 standard parking spaces. The roof would be occupied by basketball, tennis, and volleyball courts. This phase would require demolition of the buildings and parking lots occupying 2615 and 2619 West Taron Court, and 9700 West Taron Drive.

The Project would also include streetscape modifications to Riparian Court (also known as West Taron Court), modifications to existing parking areas, driveway improvements to West Taron Drive, and construction of new landscaped public gathering areas. The site plan for the proposed Project is shown in Figure 2.



Source: Image provided by Fong & Chan Architects in 2019

Figure 2 CNU Center Final Buildout Massing

The proposed Project is being designed to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Gold version 4 certification for Healthcare. For details about how the Project will achieve this certification, refer to Attachment A.

Land uses for the proposed Project and existing conditions are shown in Table 1 below.

Table 1 Land Uses Associated with Existing Site and Proposed Project

Land Use	Existing Site Size	Proposed Project Size	Unit
General Office Building	76,000	24,000	Square feet
Retail	58,946	92,800	Square feet
Hospital	0	733,290	Square feet
Central Plant	0	22,850	Square feet
Out-Patient Clinic	0	168,500	Square feet
Medical Office Building	0	100,000	Square feet
Dormitory	0	96,000	Square feet
Enclosed Parking with Elevator	0	680	Spaces
Unenclosed Parking with Elevator	0	2,500	Spaces
Mechanical Yard	0	15,500	Square feet
Surface Parking Lot	95,323	26,040	Square feet

Source: Data compiled by Ascent Environmental in 2019

3 GREENHOUSE GAS EMISSIONS

3.1 CONSTRUCTION EMISSIONS

The Project would demolish and remove five of the nine existing structures from the Project site. The existing uses will be vacated prior to construction and all uses would cease to operate. Construction of the Project would result in one-time GHG emissions during the period of construction activity. Construction of the Project would be completed over three phases lasting approximately 10 years total, with emissions estimated for each year of construction. After the three phases of construction are completed, the Project would become fully operational in 2030. Therefore, Project-generated construction emissions would occur contemporaneously with segmented Project operational emissions, as detailed in the construction schedules for each phase below.

Phase 1 of construction would commence with the demolition of the buildings located at 2501, 2505, 2509/2513, and 2525 West Taron Court. Construction of Phase 1 is expected to begin in May 2020 and end in November 2022. Structural components of Phase 1 will include a hospital building of 596,790 square feet in size, 13 stories tall, with a basement level of 230 parking spaces; a campus central plant of 22,850 square feet with 80 parking spaces at the basement level; and a mechanical yard of 15,500 square feet in size.

Phase 2 demolition and construction would succeed Phase 1 and is expected to begin in December 2023 and end in October 2025. The existing buildings to be demolished include buildings at 2521 and 9650 West Taron Court. Building construction would include the patient bed tower of 103,210 square feet in size; the out-patient clinic of 134,800 square feet in size and four stories tall with 170 parking spaces at the basement level; the medical office building of 100,000 square feet in size and five stories tall; and Parking Structure 1 of 257,000 square feet in size and 1,500 parking spaces.

Phase 3 demolition and construction would follow Phase 2 and is anticipated to begin December 2026 and end in October 2029. The remaining buildings to be demolished on the Project site include buildings at 2615 and 2619 West Taron Court. Phase 3 building construction would include Parking Structure 2 with 1,000 parking spaces; a 150-unit

dormitory building; a parking and sports structure approximately 70,000 square feet in size and 200 parking spaces; and a 24,000-square-foot expansion of the existing School of Medicine building for administrative services.

To be consistent with other Environmental Leadership Development Projects (ELDP), Project-generated construction emissions were estimated on an annual, calendar year, basis to estimate GHG emissions generated during the construction phases. To meet Project application standards, the Project's emissions are required to be offset fully to meet the requirements of net zero increase in GHG emissions. Based on the construction schedule provided by the applicant, construction of Phase 2 would occur during operation of Phase 1, and construction of Phase 3 would occur during operation of Phases 1 and 2.

Table 2 shows the Project's anticipated construction schedule by phase and subphases. For details about construction subphases, refer to Attachment B.

Table 2 Project Construction Schedule

Phase	Start Date	End Date
1	5/1/2020	11/30/2022
2A	12/1/2023	12/31/2024
2B	4/1/2024	3/31/2025
2C	12/1/2023	5/30/2025
2D	5/1/2025	10/31/2025
3A	12/1/2026	11/30/2027
3B	11/1/2027	12/29/2028
3C	1/1/2029	10/31/2029

Source: Fong & Chan Architects 2019

Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2, a computer software developed by the California Air Pollution Control Officers Association (CAPCOA). Quantifying Project-generated GHG emissions with CalEEMod is recommended by the local Sacramento Metropolitan Air Quality Management District (SMAQMD). CalEEMod construction emissions modeling is based on data from CARB's OFFROAD2011 off-road equipment emissions tool and EMFAC2014 on-road vehicle emissions tool. CalEEMod was manually programmed with Project-specific data provided by the applicant such as construction activities and phasing, number of haul truck trips, amount of excavated material, and number of construction workers by phase. Where construction information was not available from the Applicant, CalEEMod default values were used. For details on construction modeling inputs, refer to Attachment B.

Each of the three construction phases would include demolition, site preparation, excavation, building construction, paving, and architectural coating. During demolition, building waste would be hauled off-site. Site preparation and excavation phases would involve the import and export of soil. Phases 2 and 3 were separated into several subphases based on the order in which buildings are anticipated to be constructed. For details on construction phasing, refer to Attachment B.

Table 3 Project Land Uses by Construction Phase

Land Use	Phase 1	Phase 2	Phase 3	Unit
General Office Building	0	0	24,000	Square feet
Retail	0	51,400	41,400	Square feet
Hospital	596,790	103,210	0	Square feet
Central Plant	22,850	0	0	Square feet
Out-Patient Clinic	0	168,500	0	Square feet
Medical Office Building	0	100,000	0	Square feet
Dormitory	0	0	96,000	Square feet
Enclosed Parking with Elevator	310	170	200	Spaces
Unenclosed Parking with Elevator	0	1,500	1,000	Spaces

Mechanical Yard	15,500	0	0	Square feet
Surface Parking Lot	27,606	26,040	0	Square feet

Source: Data compiled by Ascent Environmental in 2019

3.1.1 Emissions from Diesel-Fueled Construction Equipment

Emissions associated with diesel-fueled construction equipment were estimated using CalEEMod Version 2016.3.2, in accordance with SMAQMD recommendations. Emissions were calculated based on the number and type of equipment, the length of each construction phase, and the hours per day each piece of equipment would be used. The amount and types of diesel-fueled equipment was based on the land uses input into the model as shown in Table 3 above. CalEEMod's default equipment list was used based on these land uses, which is derived from a construction survey conducted by South Coast Air Quality Management District. All construction equipment used in the modeling was assumed to have CalEEMod default diesel engines without any mitigation.

Emissions associated with the use of diesel-fueled equipment include only running exhaust emissions because starting and evaporative emissions are considered to be de minimis (CAPCOA 2016:A-7). The running exhaust emissions are based on CARB's OFFROAD2011 methodology, as follows:

$$Emissions\ (MTCO_2e) = \sum_i (EF_i\ x\ Pop_i\ x\ AvgHp_i\ x\ Load_i\ x\ Activity_i\ x\ GWP_i)$$

Where:

EF = emission factor in grams per brake horsepower-hour (g/bhp-hr) as processed from OFFROAD2011

Pop = population, or the number of pieces of equipment

AvgHp = maximum rated average horsepower

Load = load factor

Activity = hours of operation

i = equipment type

GWP_i = global warming potential of each GHG pollutant

GHG emissions associated with diesel-fueled equipment were estimated by construction phase and year based on the phasing schedule provided by the Project applicant. Refer to Attachment B for additional details on construction phasing. Estimated emissions are shown in Table 4 below.

3.1.2 Emissions from On-Road Construction Trips

On-road construction trips include those of construction workers for commuting and haul trucks exporting and delivering materials to the Project site. GHG emissions were quantified based on the number of trips, distance of trips, and EMFAC2014 emission factors that are included in CalEEMod. The number of trips is based on the anticipated number of construction workers for each phase of construction and the number of haul truck trips for each phase of construction based on the amount of demolished and excavated material to be transported off-site, as well as building materials imported to the site. For details on the maximum number of construction workers and haul trips by phase, refer to Attachment B. Default trip lengths for haul trucks and worker commutes from CalEEMod were used to quantify construction-generated vehicle miles traveled (VMT). Worker commute vehicles were assumed to be a default mix provided by CalEEMod of 50 percent light-duty autos, 25 percent light-duty truck type 1, and 25 percent light-duty truck type 2. Haul trucks were assumed to be all heavy heavy-duty trucks. Exhaust running and running loss emissions were estimated in CalEEMod using EMFAC2014 (as contained in CalEEMod) and direct methane emission factors provided by CARB for CalEEMod as follows:

$$Emissions\ (MTCO_2e) = \left(VMT\ x\ EF_{running\ pollutant}\right)\ x\ GWP_i$$

Where:

VMT = vehicle miles traveled

$EF_{running\ pollutant}$ = emission factor for running emissions from EMFAC2014

GWP_i = global warming potential of each GHG pollutant

Evaporative, starting, and idling emissions were also estimated in CalEEMod by multiplying the number of trips by the respective emission factor for each GHG pollutant as provided in EMFAC2014.

3.1.3 Summary of Construction Emissions

The total construction-generated emissions are shown by source and by year in Table 4 below. The total GHG emissions for Project construction from off-road construction equipment and on-road travel over the 10-year buildout period would be 8,273 metric tons of carbon dioxide equivalent ($MTCO_2e$).

Table 4 Construction-Generated GHG Emissions by Source ($MTCO_2e$)

Construction Year	Off-Road Construction Equipment	On-Road Travel[1]	Total GHG Emissions
2020	607	453	1,267[2]
2021	417	1,394	1,810
2022	30	1,215	1,245
2023	71	15	86
2024	709	1,267	1,976
2025	292	495	787
2026	39	8	47
2027	290	210	500
2028	141	180	321
2029	134	98	232
Total	**2,732**	**5,334**	**8,273**

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent; GHG = greenhouse gas.

[1] Includes worker commute trips and haul truck trips.

[2] Includes loss of carbon sequestration from removal of 292 trees.

For calculation details, refer to Attachment B.

Source: Data compiled by Ascent Environmental in 2019

3.2 OPERATIONAL EMISSIONS

Operation of the existing uses and Project uses results in annual GHG emissions from mobile sources, building energy use, water demand and wastewater treatment, and solid waste generation. The Project's annual, calendar year, operational emissions were compared to the baseline annual operational GHG emissions to determine the net change in GHG emissions. Emissions were estimated for a 30-year land use Project lifetime.

Operational emissions were estimated using a variety of sources and models. The CalEEMod (Version 2016.3.2) software was used to estimates emissions from water and wastewater, solid waste disposal, and area sources such as landscaping equipment. Operational GHG emissions were estimated using Project-specific information, where available, and default values in CalEEMod based on the Project's location, size, and land use type. Mobile source emissions associated with on-road VMT was estimated using EMFAC2017 emission factors for the default fleet mix in Sacramento County for each applicable year (i.e., existing emissions in 2020 and Project-generated emissions by phase in 2023, 2026, and 2030) and Project-specific VMT provided in Appendix B. Helicopter emissions were calculated using Climate Registry emission factors and project-specific data. Energy-related emissions associated with electricity, natural gas, and diesel fuel were estimated using utility-specific and Climate Registry emission factors.

Operational emissions are shown in terms of carbon dioxide equivalents (CO_2e). The CO_2e metric translates each GHG to an equivalent volume of carbon dioxide (CO_2) by weighing its relative global warming potential (GWP). Per the Intergovernmental Panel on Climate Change's (IPCC's) Fourth Assessment Report, methane (CH_4) and nitrous oxide (N_2O) are approximately 25 and 298 times more potent, respectively, than CO_2 in their abilities to trap heat in the atmosphere (IPCC 2007). The GHG emissions quantified herein use the IPCC's Fourth Assessment Report values to maintain consistency with the statewide GHG emissions inventory prepared by CARB.

3.2.1 Existing Site Emissions

Emissions associated with land uses currently operating at the Project site were quantified by Project phase for buildings which would be demolished in each Phase. Under Phase 1, the buildings at 2501, 2505, 2509/2513, and 2525 West Taron Court would be demolished in 2020. Total GHG emissions associated with existing land uses under Phase 1 would be 2,521 $MTCO_2e$ per year. Under Phase 2, the buildings at 2521 and 9650 West Taron County would be demolished in 2023. Total GHG emissions associated with existing land uses under Phase 1 would be 5,249 $MTCO_2e$ per year. Under Phase 3, the buildings at 2615 and 2619 West Taron Court would be demolished in 2026. Total GHG emissions associated with existing land uses under Phase 3 would be 813 $MTCO_2e$ per year. Mobile-source emissions account for the largest portion of the site's emissions, followed by energy use (both electricity and natural gas). Table 5 below shows GHG emissions associated with existing land uses by Project phase.

To quantify emissions from the existing land uses, CalEEMod was used for operational years of 2020, 2023, and 2026 based on the buildings types and sizes that would be demolished under each Project phase. Water demand for existing uses was provided by the Project applicant and existing VMT was provided by the traffic impact analysis conducted for the Project (see Appendix B). A backup diesel-powered generator was assumed to be used 96 hours per year for the All Data building located at 9650 West Taron Drive, based on data provided by the applicant. For all other GHG emissions sources, default values in CalEEMod were used. The lifetime of a building is assumed to be 30 years from the first year of full operation. Full buildout of the Project was assumed to occur in 2030, after completion of Phase 3 of the Project. The corresponding operational lifetime emissions were estimated through the year 2059. GHG emissions associated with the existing land uses were assumed to remain constant over each Project phase for an operational lifetime of 30 years from completion of Phase 3 of the Project. Existing buildings under Phase 1 were assumed to remain constant from 2020 through 2059, existing buildings under Phase 2 were assumed to remain constant from 2023 through 2059, and existing buildings under Phase 3 were assumed to remain constant from 2026 through 2059. Details on the modeling inputs for the existing land uses can be found in Attachment C.

AREA SOURCES

Area-source emissions estimated for the existing site only include fossil fuel–powered landscape maintenance equipment. CalEEMod landscape equipment defaults were used based upon the existing land uses at the Project site. Landscape equipment emissions are considered as direct because they are generated on-site due to activities from the existing land uses. Emissions factors used in CalEEMod are generated from CARB's OFFROAD2011 model using average horsepower and load factors according to equipment types. These emissions are shown in Table 5 below and the methodology used in CalEEMod is as follows:

$$Annual\ Emissions\ (MTCO_2e) = \sum (\ Units\ x\ EF_{LE}\ x\ A_{LE}\ x\ GWP_i)$$

Where:

Units = number of land use units (1,000 square feet)

EF_{LE} = GHG emission factor for landscape equipment ($MTCO_2e$/1000 sq. ft./day)

A_{LE} = number of landscaping days per year

GWP_i = global warming potential of each GHG pollutant

ENERGY

Energy-related GHG emissions include the indirect emissions associated with electricity consumption and the direct emissions associated with natural gas consumption, which were quantified using CalEEMod. Electricity is provided to the Project site by the Sacramento Municipal Utility District (SMUD) and natural gas is provided by the Pacific Gas & Electric Company (PG&E). The existing buildings on the Project site were constructed to the 2008 California Energy Code (i.e., California Code of Regulations Title 24, Part 6). Electricity and natural gas demand factors are provided in CalEEMod based on land use types. Historical data was selected on the Energy tab of CalEEMod to represent the project's energy consumption associated with compliance with the 2008 California Energy Code, which is less stringent than later iterations of the code.

The GHG intensity factor associated with electricity provided by SMUD was used for the year 2020. The default value provided in CalEEMod for SMUD was replaced with an adjusted factor based on the utility's compliance with the California Renewables Portfolio Standard (RPS) in 2020. The RPS requires all utilities to procure at least 33 percent of their electricity from renewable sources by 2020. For details on the adjustment of the electricity intensity factor, refer to Attachment C. Electricity-related emissions were calculated in CalEEMod using the following methodology:

$$Annual\ Emissions\ (MTCO_2e) = \sum_i (\ Utility\ x\ Energy\ Intensity\ x\ Size\ x\ CF)$$

Where:

Energy Intensity = electricity energy intensity for a land use (kilowatt-hour [kWh] per square foot)

Utility = electricity intensity factor for SMUD adjusted for 2020 RPS ($MTCO_2e$/megawatt-hour [MWh])

Size = square feet of existing land uses

i = land use type

CF = conversion factor

Natural gas-related GHG emissions were quantified using default emission factors provided in CalEEMod. Energy-related GHG emissions from the existing site are shown in Table 5 below. Natural gas-related emissions were calculated in CalEEMod using the following methodology:

$$Annual\ Emissions\ (MTCO_2e) = \sum_j (\ EF_i\ x\ Energy\ Intensity\ x\ Size\ x\ CF\ x\ GWP_i)$$

Where:

Energy Intensity = natural gas energy intensity for a land use (thousand British thermal units [kBTU] per square foot)

EF = emission factor based on AP-42 or Climate Registry (pounds CO_2e per kBTU)

Size = square feet of existing land uses

i = each GHG pollutant

j = land use type

CF = conversion factor

GWP_i = global warming potential of each GHG pollutant

MOBILE SOURCES

Mobile source-related GHG emissions were estimated based on the existing site's daily trip generation and VMT of on-road vehicles provided in the traffic impact analysis prepared by Fehr & Peers (see Appendix B). The existing site's daily trip generation and daily VMT were estimated based on all existing land uses during a typical weekday. Annual VMT was based on multiplying the daily VMT by a factor 347, which takes into account reduced VMT from weekends

and holidays (CARB N.d.:14). Mobile-source emissions were estimated using EMFAC2017 emissions factors for Sacramento County in 2020. The mobile-source emissions were estimated using the following methodology:

$$Annual\ Emissions\ (MTCO_2e) = VMT\ x\ P_{mix}\ x\ \sum(EF_v\ x\ GWP_i)$$

Where:

VMT = Existing uses-generated annual vehicle miles traveled

P_{mix} = percent mode of total vehicle mix

EF_v = composite emission factor for EMFAC2017 fleet mix in Sacramento in 2020

GWP_i = global warming potential of each GHG

For details of the existing VMT calculation, refer to Attachment C.

Mobile sources associated with the existing land uses are the largest source of GHG emissions, as shown in Table 5 below.

SOLID WASTE

Solid waste-related GHG emissions were estimated in CalEEMod based on waste generation rates for each land use type as reported by the California Department of Resources Recovery and Recycling (CalRecycle). Emission estimates include the indirect methane emissions associated with the decomposition of waste and the carbon dioxide emissions associated with the combustion of methane, as follows:

$$Annual\ Emissions\ (MTCO_2e) = DOC\ x\ DANF\ x\ 0.5$$

Where:

DOC = degradable organic carbon

DANF = degradable anaerobic fraction (0.5)

0.5 = assumes half anaerobic carbon is methane and half is carbon dioxide

GHG emissions associated with solid waste from the existing site are shown in Table 5 below.

WATER AND WASTEWATER

Water consumption associated with the existing land uses was provided by the Project applicant. Water consumption includes both water demand for water fixtures and landscaping, as well as wastewater generation. GHG emissions are associated with the indirect electricity used to pump, treat, and convey water to and from the existing buildings, as well as methane and nitrous oxide emissions associated with wastewater treatment. CalEEMod was used to estimate the GHG emissions associated with water consumption using SMUD's adjusted electricity intensity as discussed above, and the gallons of water per year required by the existing land uses. CalEEMod was also used to estimate the GHG emissions associated with wastewater treatment, assuming all aerobic facilities with anaerobic digesters, which is the CalEEMod default assumption. The methodology for water and wastewater emissions is as follows:

$$Indoor\ Water\ Emissions\ (MTCO_2e) = Water_{Indoor}\ x\ Electricity_{Indoor}\ x\ Utility\ x\ CF$$

$$Outdoor\ Water\ Emissions\ (MTCO_2e) = Water_{Outdoor}\ x\ Electricity_{Outdoor}\ x\ Utility\ x\ CF$$

$$Wastewater\ Emissions\ (MTCO_2e) = Water_{Indoor}\ x\ R_T\ x\ EF_T\ x\ CF$$

$$Annual\ Emissions\ (MTCO_2e) = Indoor\ Water\ Emissions + Outdoor\ Water\ Emissions + Wastewater\ Emissions$$

Where:

$Water_{Indoor}$ = total water used indoors (million gallons)

$Water_{Outdoor}$ = total water used outdoors (million gallons)

$Electricity_{Indoor}$ = electricity required to supply, treat, and distribute water and resulting wastewater (kWh/million gallons)

$Electricity_{Outdoor}$ = electricity required to supply, treat, and distribute water (kWh/million gallons)

R_T = percent of indoor water resulting in wastewater

EF_T = emission factor for wastewater treatment process ($MTCO_2e$/MWh)

CF = conversion factor

Utility = electricity intensity factor for SMUD adjusted for 2020 RPS ($MTCO_2e$/kWh)

Emissions associated with water and wastewater from the existing site are shown in Table 5 below.

STATIONARY SOURCES

The existing All Data building has a back-up diesel generator with a kilowatt rating of 400. It was assumed that the back-up generator is used 96 hours per year based on estimates of Project-related back-up generator use, as provided by the Applicant. Because it was unknown how much fuel is consumed annually by the generator, emissions associated with the generator were calculated using CalEEMod and are shown in Table 5 below. The methodology used in CalEEMod is as follows:

$$Annual\ Emissions\ (MTCO_2e) = EF\ x\ n\ x\ HP\ x\ Load\ x\ Activity$$

Where:

EF = emission factor ($MTCO_2e$/hp-hr)

n = number of generators

HP = maximum rated horsepower

Load = load factor

Activity = hours of operation per year

SUMMARY

GHG emissions associated with the existing land uses at the Project site are shown in Table 5 below for each Project phase by emissions source.

Table 5 Existing Site Operational GHG Emissions by Phase in Demolition Years ($MTCO_2e$/year)

Emissions Source	Greenhouse Gas Emissions		
	Phase 1	Phase 2	Phase 3
Area	<1	<1	<1
Energy	114	340	34
Mobile	2,381	4,843	771
Solid Waste	20	39	8
Stationary	0	20	0
Water & Wastewater	6	8	0
Total	**2,521**	**5,249**	**813**

Notes: GHG = greenhouse gas; $MTCO_2e$/year = metric tons of carbon dioxide equivalent per year.

Totals may not sum exactly due to rounding

For calculation details, refer to Attachment C.

Source: Modeling conducted by Ascent Environmental in 2019

3.2.2 Proposed Project Emissions

AREA SOURCES

Area-source emissions estimated for the Project type only include landscape maintenance equipment. CalEEMod landscape equipment defaults were used based upon the land uses that will be included in the Project. Landscape equipment emissions are considered as direct because they are generated on-site due to activities from the proposed land uses. Emissions factors used in CalEEMod are generated from CARB's OFFROAD2011 model using average horsepower and load factors according to equipment types. Area-source emissions are shown by phase in Table 6 below and the CalEEMod methodology is as follows:

$$Annual\ Emissions\ (MTCO_2e) = \sum (\ Units\ x\ EF_{LE}\ x\ A_{LE}\ x\ GWP_i)$$

Where:

Units = number of land use units (1,000 square feet or dwelling units)

EF_{LE} = GHG emission factor for landscape equipment ($MTCO_2e$/1000 sq. ft./day)

A_{LE} = number of landscaping days per year

GWP_i = global warming potential of each GHG pollutant

ENERGY

The Project's on-site central plant would supply natural gas to the hospital, as well as provide heating and cooling capabilities to other Project buildings. Energy emissions were quantified by Project phase for both natural gas and electricity. Indirect emissions associated with electricity generation were quantified using consumption estimates provided by the Project applicant and emissions factors for SMUD that were adjusted for RPS compliance for each phase's buildout year (i.e., 2023, 2026, and 2030). There is no RPS target for 2023 so the 2020 target of 33 percent renewable was used. Pursuant to Senate Bill 100 of 2018, the RPS targets for 2026 and 2030 are 50 and 60 percent renewables, respectively, which were applied for Phases 2 and 3. The methodology used to quantify electricity-related emissions is as follows:

$$Annual\ Emissions\ (MTCO_2e) = \sum (\ Utility_{RPS}\ x\ Energy\ Intensity_P\ x\ CF)$$

Where:

Energy $Intensity_P$ = electricity energy intensity for each Project phase (kWh per year)

Utility = electricity intensity factor for SMUD ($MTCO_2e$/MWh)

RPS = adjustment for RPS target years for each Project phase

CF = conversion factor

Emissions associated with the use of on-site natural gas combustion were quantified using consumption estimates provided by the Project applicant and emission factors provided in the Climate Registry's 2017 Default Emission Factors. These emissions factors were not anticipated to change over the project buildout period. The methodology used to quantify natural gas-related emissions is as follows:

$$Annual\ Emissions\ (MTCO_2e) = \sum (\ EFx\ Energy\ Intensity\ x\ CF)$$

Where:

Energy Intensity = natural gas energy intensity for each Project phase (cubic feet per year)

EF = emission factor provided by Climate Registry (kg CO_2e/MMBTU)

CF = conversion factor

All energy-related GHG emissions associated with the Project are shown by phase in Table 6 below.

MOBILE SOURCES

Mobile source emissions were estimated based on the Project's daily trip generation and VMT of on-road vehicles provided in the traffic impact analysis prepared by Fehr & Peers (see Appendix B). The Project's daily trip generation and daily VMT by phase were estimated based on the operation of all proposed land uses under each phase during a typical weekday. Annual VMT by phase was based on multiplying the daily VMT by a factor 347, which takes into account reduced VMT from weekends and holidays (CARB N.d.:14). Mobile-source emissions were estimated using EMFAC2017 emissions factors for Sacramento County in 2023 for Phase 1, 2026 for Phase 2, and 2030 for Phase 3. For details of the existing VMT calculation, refer to Attachment C. The methodology for quantifying mobile-source emissions by phase is as follows:

$$Annual\ Emissions\ (MTCO_2e) = VMT_{Phase}\ x\ P_{mix}\ x \sum_{Phase} (EF_v\ x\ GWP_i)$$

Where:

VMT_{Phase} = Project-generated annual vehicle miles traveled by Project phase

P_{mix} = percent mode of total vehicle mix

EF_v = composite emission factor for fleet mix provided in EMFAC2017 for Sacramento County for each operational year

GWP_i = global warming potential for each GHG pollutant

Mobile emissions for helicopter activity associated with the Project were estimated using emission factors for jet fuel derived from the Climate Registry's 2017 Default Emission Factors and average fuel consumption from helicopter activity. Emissions from helicopter use are based on the number of landing and take-offs (LTO) cycles, number of cruising hours per day, and the helicopter engine model type and fuel used. For details about helicopter use assumptions, refer to Attachment C. The methodology for quantifying helicopter emissions is as follows:

$$LTO\ Emissions\ (MTCO_2e) = Fuel_{LTO}\ x\ Hours\ x\ Days\ x\ EF_{CO2}$$

$$Cruising\ Emissions\ (MTCO_2e) = Fuel_C\ x\ Hours\ x\ Days\ x\ (EF_{CO2} + (EF_{N2O}\ x\ GWP))$$

$$Annual\ Emissions\ (MTCO_2e) = LTO\ Emissions + Cruising\ Emissions$$

Where:

$Fuel_{LTO}$ = gallons of jet fuel used per LTO

$Fuel_C$ = gallons of jet fuel used per hour

Hours = average hours per day of use

Days = average days per year of use

EF_{CO2} = carbon dioxide emission factor provided by Climate Registry (kg CO_2/gallon)

EF_{N2O} = nitrous oxide emission factor provided by Climate Registry* (kg N_2O/gallon)

GWP = global warming potential for N_2O

*Note that CH_4 emission factors are not available for jet fuel

All mobile source-related GHG emissions are shown in Table 6 by Project phase.

SOLID WASTE

Solid waste emissions occur from the decomposition of waste that has been disposed of in landfills. Project-generated solid waste was estimated using CalEEMod defaults, which consider disposal rates based on land use types and their size. Annual disposal rate data is gathered from CalRecycle. The Project would comply with the requirements for commercial recycling and organic waste diversion pursuant to PRC Section 42649 and is anticipated to divert at least 50 percent of its solid waste generation. CalEEMod's mitigation module was used to reduce solid waste disposal by 50 percent. Solid waste emission factors depend on characteristics of landfills and gas capture assumed in the CARB GHG emissions inventory. GHG emissions associated with solid waste are shown in Table 6 below and the methodology for quantifying solid waste emissions is as follows:

$$Annual\ Emissions\ (MTCO_2e) = (DOC\ x\ DANF\ x\ 0.5)\ x\ W_D$$

Where:

DOC = degradable organic carbon

DANF = degradable anaerobic fraction (0.5)

0.5 = assumes half anaerobic carbon is methane and half is carbon dioxide

W_D = waste diversion rate (50 percent)

WATER AND WASTEWATER

Emissions from water usage and wastewater generation were estimated using anticipated consumption provided by the Project applicant for indoor and outdoor water use by Project phase. GHG emissions are associated with the indirect electricity used to pump, treat, and convey water to and from the existing buildings, as well as methane and nitrous oxide emissions associated with wastewater treatment. CalEEMod was used to estimate the GHG emissions associated with water consumption using SMUD's adjusted electricity intensity as discussed above for the operational years of each Project phase (i.e., Phase 1 in 2023, Phase 2 in 2026, and Phase 3 in 2030). CalEEMod was also used to estimate the GHG emissions associated with wastewater treatment, assuming all aerobic facilities with anaerobic digesters, which is the CalEEMod default assumption. Water efficiency features included in the Project were factored in to the anticipated water consumption provided by the Project applicant. These features include reduced turf and increased native and drought-tolerant landscaping, low-flow fixtures, water-efficient dishwashers and clothes washers, and water metering. The methodology used to quantify water and wastewater emissions is as follows:

$$Indoor\ Water\ Emissions\ (MTCO_2e) = Water_{Indoor}\ x\ Electricity_{Indoor}\ x\ Utility_{RPS}\ x\ CF$$

$$Outdoor\ Water\ Emissions\ (MTCO_2e) = Water_{Outdoor}\ x\ Electricity_{Outdoor}\ x\ Utility_{RPS}\ x\ CF$$

$$Wastewater\ Emissions\ (MTCO_2e) = Water_{Indoor}\ x\ R_T\ x\ EF_T\ x\ CF$$

$$Annual\ Emissions\ (MTCO_2e) = Indoor\ Water\ Emissions + Outdoor\ Water\ Emissions + Wastewater\ Emissions$$

Where:

$Water_{Indoor}$ = total water used indoors by Project phase (million gallons)

$Water_{Outdoor}$ = total water used outdoors by Project phase (million gallons)

$Electricity_{Indoor}$ = electricity required to supply, treat, and distribute water and resulting wastewater (kWh/million gallons)

$Electricity_{Outdoor}$ = electricity required to supply, treat, and distribute water (kWh/million gallons)

R_T = percent of indoor water resulting in wastewater

EF_T = emission factor for wastewater treatment process ($MTCO_2e$/MWh)

CF = conversion factor

Utility = electricity intensity factor for SMUD ($MTCO_2e$/kWh)

RPS = adjustment for RPS target years for each Project phase

STATIONARY SOURCE EMISSIONS

Stationary source emissions from the maintenance and operation of on-site emergency generators were also estimated. The Project would install four back-up diesel-powered generators that would be anticipated to run for 96 hours per year, consuming 89,376 gallons of diesel per year, as provided by the Applicant. Fuel consumption was estimated by multiplying the consumption rate (175 gallons per hour) by 96 hours per year by 4 generators by 133 percent (per National Fire Protection Association codes and standards). All generators would be installed under Phase 1 of the Project. Emissions were quantified using diesel emission factors provided by the Climate Registry's 2017 Default Emission Factors. Emissions associated with stationary sources are included in Table 6 below. The methodology used to quantify stationary source-related emissions is as follows:

$$Annual\ Emissions\ (MTCO_2e) = EF\ x\ Fuel$$

Where:

EF = emission factor for diesel provided by Climate Registry (kg CO_2e/gallon)

Fuel = annual gallons of diesel consumed

SUMMARY

GHG emissions associated with the Project's operation by phase are shown in Table 6 below by emissions source.

Table 6 Project-Generated GHG Emissions by Source at Full Buildout ($MTCO_2e$/year)

Emissions Source	Phase 1[1] Emissions	Phase 2[2] Emissions	Phase 3[3] Emissions
Area	<1	<1	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Solid Waste	3,256	2,046	68
Stationary	925	0	0
Water & Wastewater	82	45	12
Total	**26,553**	**14,061**	**5,071**

Notes: GHG = greenhouse gas; $MTCO_2e$/year = metric tons of carbon dioxide equivalent per year; SMUD = Sacramento Municipal Utility District.

[1] First year of operation for Phase 1 would be 2023.

[2] First year of operation for Phase 2 would be 2026.

[3] First year of operation for Phase 3 would be 2030.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

For calculation details, refer to Attachment C.

4 MEASURES FOR OFFSETTING NET INCREASE IN GHG EMISSIONS

SOLAR REDUCTION

The Project would install solar photovoltaics on Project building roofs. Phase 1 would include solar installations on the existing CNU School of Medicine building, covering approximately 47,000 square feet. Phase 2 would include solar installations on the out-patient clinic, medical office building, and Parking Garage 1, covering approximately 89,000 square feet. Phase 3 would include solar installations on the dormitory and Parking Garage 2, covering approximately 56,600 square feet. The National Renewable Energy Laboratory's PVWatts Calculator was used to estimate the

amount of electricity generated by the system based on the roof size, Project location, and a premium module type (see Attachment D). The PVWatts Calculator estimated approximately 1,327,446 kWh per year would be generated by the system under Phase 1; 2,537,432 kWh per year under Phase 2; and 1,578,453 kWh per year under Phase 3. The adjusted SMUD electricity intensity factors for 2020, 2026, and 2030 were used to quantify GHG emissions that would be reduced as a result of each phase's solar systems. The GHG reductions are shown in Table 6 below.

SMUD GREENERGY REDUCTION

After installation of the solar systems described above, the Project would still consume electricity provided by SMUD. The Project would purchase 100 percent renewable energy provided through SMUD's Greenergy program for the remaining electricity demands of the Project, rather than using SMUD's average renewable mix for the operational years of each phase. This would effectively offset all electricity-related GHG emissions associated with the Project. The GHG reductions from the Greenergy program are shown in Table 7 below by phase.

ELECTRIC VEHICLE CHARGING REDUCTION

The Project would install Level 2 electric vehicle (EV) charging stations as part of each phase. Under Phase 1, 37 Level 2 EV chargers would be installed, serving 74 parking spaces. Under Phase 2, 36 additional Level 2 EV chargers would be installed, serving and additional 70 parking spaces. Under Phase 3, 11 additional Level 2 EV chargers would be installed, serving an additional 22 parking spaces. The GHG reductions associated with the use of EV chargers was calculated using average fuel efficiency of gas-powered light duty vehicles in each of the Project phase buildout years, the efficiency of EVs, the charging power of a Level 2 EV charger, and the SMUD electricity intensity factor for each of the Project phase buildout years. Table 7 below shows the GHG reductions associated with the installation of EV chargers by phase.

TRANSPORATION DEMAND MANAGEMENT PLAN REDUCTION

The Project would include a Transportation Demand Management (TDM) Plan consistent with the *City of Elk Grove Climate Action Plan: 2019 Update* and the *City of Elk Grove Transportation Demand Management Plan Guidelines* that aims to reduce VMT by 15 percent. The TDM Plan developed for the Project would include required and optional measures that the Project could implement to achieve a 15 percent reduction in VMT. The measure categories include marketing and promotion, bike facilities, on-site amenities, transit, commuter benefits, and parking facilities. Attachment B of this application identifies up to 28 possible points the Project could achieve through design features. Ten points would be required to meet the 15 percent VMT reduction goal. As specified in the commitment letter, the TDM Plan would be incorporated as a mitigation measure in the environmental impact report prepared for the Project. All mitigation measures will be enforceable through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement between the Applicant and the lead agency (City of Elk Grove). Table 7 below shows the GHG reduction associated with implementation of the TDM Plan by phase.

VEGETATION CHANGE

The Project would preserve 83 existing trees on the Project site and remove 292 trees. After Project construction, 313 new trees would be planted. The carbon sequestration associated with the net increase in trees was quantified in CalEEMod and is shown in Table 7 below as part of Phase 3.

SUMMARY

Table 7 below shows the Project's operational emissions by phase with the reduction measures identified above.

Table 7 Project-Generated GHG Emissions by Source at Full Buildout with Reduction Measures ($MTCO_2e$ per year)

Emissions Source	Phase 1[1] Emissions	Phase 2[2] Emissions	Phase 3[3] Emissions
Area	<1	<1	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Solid Waste	1,628	1,023	34
Stationary	925	0	0
Water & Wastewater	82	45	12
Solar Reduction	-319	-456	-227
SMUD Greenergy Reduction	-4,950	-2,076	-338
Electric Vehicle Charging Reduction	-335	-353	-113
TDM Plan	-1,974	-1,050	-613
Vegetation Change	0	0	-11
Total	**17,347**	**9,103**	**3,736**

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMUD = Sacramento Municipal Utility District; TDM = Transportation Demand Management.

[1] First year of operation for Phase 1 would be 2023.

[2] First year of operation for Phase 2 would be 2026.

[3] First year of operation for Phase 3 would be 2030.

Totals may not sum exactly due to rounding.

For calculation details, refer to Attachment C.

Source: Modeling conducted by Ascent Environmental in 2019

4.1 OVERALL YEAR-BY-YEAR EMISSIONS

Table 8 below shows the summary of construction emissions associated with the project. Table 9 below shows the year-by-year comparison of GHG emissions from the baseline and the operational emissions associated with the Project. Once Phase 1 is operational in 2023, Project-generated emissions would exceed the baseline emissions. The amount by which the Project exceeds the baseline emissions would increase in 2026 when Phase 2 becomes operational, and again in 2030 when Phase 3 becomes operational. All three phases' lifetime operation would overlap from 2030 through 2059.

Total construction emissions associated with the Project would be 8,273 $MTCO_2e$ and are shown in Table 8 below. Total baseline emissions over the Project's lifetime (i.e., 2023 through 2059) would be 296,152 $MTCO_2e$. The Project's net increase in operational emissions over the baseline would be 767,349 $MTCO_2e$ over the Project's lifetime, as shown in Table 9 below. Combining the construction emissions and net increase in operational emissions, the Project would be required to purchase carbon offset credits for a total of 775,622 $MTCO_2e$.

The Applicant has agreed to meet the requirement set forth in PRC Section 21183(c) to demonstrate that the Project would result in no net additional GHG emissions through the purchase of voluntary carbon offset credits sufficient to offset all projected additional GHG emissions. A copy of the commitment letter is provided in Appendix H.

Notably, the commitments to enter into contract(s) to offset net additional GHG emissions will be incorporated as a mitigation measure in the environmental impact report prepared for the Project. All mitigation measures will be enforceable through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement between the Applicant and the lead agency (City of Elk Grove).

Table 8 Summary of Construction-Generated GHG Emissions ($MTCO_2e$)

Year	Construction Emissions
2020	1,267
2021	1,810
2022	1,245
2023	86
2024	1,976
2025	787
2026	47
2027	500
2028	321
2029	232
Total	8,273

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

Table 9 Year-by-Year Comparison of GHG Emissions ($MTCO_2e$)

Year	Baseline Emissions	Project Operational Emissions	Project Operational Difference
2023[1]	2,521	17,347	14,825
2024	2,521	17,347	14,825
2025	2,521	17,347	14,825
2026[2]	7,771	26,449	18,678
2027	7,771	26,449	18,678
2028	7,771	26,449	18,678
2029	7,771	26,449	18,678
2030[3]	8,583	30,185	21,602
2031	8,583	30,185	21,602
2032	8,583	30,185	21,602
2033	8,583	30,185	21,602
2034	8,583	30,185	21,602
2035	8,583	30,185	21,602
2036	8,583	30,185	21,602
2037	8,583	30,185	21,602
2038	8,583	30,185	21,602
2039	8,583	30,185	21,602
2040	8,583	30,185	21,602
2041	8,583	30,185	21,602
2042	8,583	30,185	21,062
2043	8,583	30,185	21,602
2044	8,583	30,185	21,602
2045	8,583	30,185	21,602
2046	8,583	30,185	21,602
2047	8,583	30,185	21,602
2048	8,583	30,185	21,602
2049	8,583	30,185	21,602
2050	8,583	30,196	21,613
2051	8,583	30,196	21,613
2052	8,583	30,196	21,613
2053	8,583	30,196	21,613
2054	8,583	30,196	21,613
2055	8,583	30,196	21,613
2056	8,583	30,196	21,613
2057	8,583	30,196	21,613
2058	8,583	30,196	21,613
2059	8,583	30,196	21,613
Total	**296,152**	**1,063,501**	**767,349**

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent.

[1] First year of operation for Phase 1 would be 2023.

[2] First year of operation for Phase 2 would be 2026.

[3] First year of operation for Phase 3 would be 2030.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

The Project would not result in any net additional GHG emissions after the purchase of carbon offset credits, in accordance with PRC Section 21183(c). Therefore, the Project would meet the GHG emission requirements for streamlined environmental review under CEQA.

5 LIST OF PREPARERS

Ascent Environmental

Poonam Boparai, Principal

Pat Angell, Project Director

Hannah Kornfeld, AICP, Technical Analyst

6 REFERENCES

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Attachment A

LEED Checklist

LEED Checklist for New Construction / Healthcare v4

Project: California Northstate University Hospital, Elk Grove, CA
Last Updated: 6/18/2019
Goal: Gold

ARUP

Yes	Maybe?+	Maybe?-	No
50	21	19	20

110 **Project Totals** (pre-certification estimates) — 110 Points Possible

Certified 40-49 **Silver** 50-59 points **Gold** 60-79 points **Platinum** 80-110 points

Project Information Form

d = Design Submittal
C = Construction Submittal

Yes	Maybe?+	Maybe?-	No
1	0	0	0

Integrative Process (IP) - 1 Points Available

						Points		Responsible Party	Status
Y					**Integrative Project Planning and Design** Prepare an Owner's Project Requirements (OPR) document; conduct a preliminary LEED meeting with a minimum of four key project team members and the owner or owner's representative; assemble an integrated project team and include as many of the professionals as feasible (minimum of four), in addition to the owner or owner's representative; conduct a minimum four-hour, integrated design charrette with the project team	P		All	
1				IPc1	**Integrative Process** (1) Beginning in pre-design and continuing throughout the design phases, identify and use opportunities to achieve synergies across disciplines and building systems described below. Use the analyses described below to inform the owner's project requirements (OPR), basis of design (BOD), design documents, and construction documents	1	d	Fong & Chan/Arup	

Yes	Maybe?+	Maybe?-	No
4	1	0	4

Location and Transportation (LT) - 16 Points Available

						Points		Responsible Party	Status
			9	LTc1	**LEED for Neighborhood Development location** (5-9) Locate the project in within the boundary of a development certified under LEED for Neighborhood Development: Points are awarded according to Certification level (BD+C): Certified-5pts, Silver-6pts, Gold-7pts, Platinum-9pts Projects attempting this credit are not eligible to earn points under other Location and Transportation credits.	9	d	n/a	N/A
1				LTc2	**Sensitive land protection** (1) Locate the development footprint on land that has been previously developed. OR Locate the development footprint on land that has been previously developed or that does not meet the criteria for sensitive land: -Prime farmland -Floodplains -Habitat for threatened or endangered species -Water bodies -Wetlands	1	d	Fong & Chan	Previously developed land (currently retail + parking)
			2	LTc3	**High Priority Site** (1-2) **Option 1. Historic district**(1 point): Locate the project on an infill location in a historic district OR **Option 2. Priority designation**(1 point): Locate the project on one of following listed sites: EPA National Priorities List, Federal Empowerment Zone, Federal Enterprise Community, Federal Renewal Community, Department of Justice Weed and Seed Strategy Community, Department of the Treasury Community Development Financial Institutions Fund Qualified Low-Income Community (a subset of the New Markets Tax Credit Program), U.S. Department of Housing and Urban Development's Qualified Census Tract (QCT) or Difficult Development Area (DDA), or local equivalent for projects outside the United States. OR **Option 3. Brownfield remediation** (2 points): Locate on a project site where soil or groundwater contamination has been identified, and where the local, state, or national authority (whichever has jurisdiction) requires its remediation. Perform remediation to the satisfaction of that authority.	2	d	Fong & Chan	
1				LTc4	**Surrounding density and diverse uses** (1) **Option 1. Surrounding density (1 point):**Locate on a site whose surrounding existing density within a ¼-mile [400-meter] radius of the project boundary meets the values in Table 1. Use eith the "separate residential and non-residential densities" or the "combined density" values OR **Option 2. Diversity of uses (1 point):**Construct or renovate a building or a space within a building such that the building's main entrance is within a ½-mile (800-meter) walking distance of the main entrance at least seven existing and publicly available diverse uses (listed in Appendix 1).	1	d	Arup/Fong & Chan	
			2	LTc5	**Access to quality transit** (1-2) Locate any functional entry of the project within a ¼-mile (400-meter) walking distance of existing or planned bus, streetcar, or rideshare stops, or within a ½-mile (800-meter) walking distance of existing or planned bus rapid transit stops, light or heavy rail stations, commuter rail stations or ferry terminals. The transit service at those stops and stations in aggregate must meet the minimums listed in Tables 1 and 2. Planned stops and stations may count if they are sited, funded, and under construction by the date of the certificate of occupancy and are complete within 24 months of that date. Both weekday and weekend trip minimums must be met. Projects served by two or more transit routes such that no one route provides more than 60% of the prescribed levels may earn one additional point, up to the maximum number of points. If existing transit service is temporarily rerouted outside the required distances for less than two years, the project may meet the requirements, provided the local transit agency has committed to restoring the routes with service at or above the prior level.	2	d	Arup/Fong & Chan	

1				LTc6	**Bicycle facilities** (1) **Bicycle network:** Design or locate the project such that a functional entry and/or bicycle storage is within a 200-yard (180-meter) walking distance or bicycling distance from a bicycle network that connects to at least one of the following: at least 10 diverse uses (see Appendix 1); a school or employment center, if the project total floor area is 50% or more residential; or a bus rapid transit stop, light or heavy rail station, commuter rail station, or ferry terminal. All destinations must be within a 3-mile (4800-meter) bicycling distance of the project boundary. **Bicycle Storage and Shower Rooms: Case 1.** commercial or institutional projects Provide short-term bicycle storage for at least 2.5% of all peak visitors, but no fewer than four storage spaces per building. Provide long-term bicycle storage for at least 5% of all full-time equivalent (FTE) occupants, but no fewer than four storage spaces per building in addition to the short-term bicycle storage spaces. Provide at least one on-site shower with changing facility for the first 100 FTE occupants and one additional shower for every 150 FTE occupants thereafter. **Case 2. residential projects:** Provide short-term bicycle storage for at least 2.5% of all peak visitors but no fewer than four storage spaces per building. Provide long-term bicycle storage for at least 30% of all FTE occupants, but no less than one storage space per residential unit in addition to the short-term bicycle storage spaces. **Case 3. mixed-use projects:** Meet the Case 1 and Case 2 storage requirements for the non-residential and residential portions of the project, respectively. **For all projects:** Short-term bicycle storage must be within 100 feet (30 meters) walking distance of any main entrance. Long-term bicycle storage must be within 100 feet (30 meters) walking distance of any functional entry. Bicycle storage capacity may not be double-counted: storage that is fully allocated to the occupants of non-project facilities cannot also serve project occupants. Core & Shell projects should refer to Appendix 2, Default Occupancy Counts, for occupancy count requirements and guidance.	1	d	Fong & Chan	
	1			LTc7	**Reduced parking footprint** (1) Do not exceed the minimum local code requirements for parking capacity. Provide parking capacity that is a percentage reduction below the base ratios recommended by the Parking Consultants Council, as shown in the Institute of Transportation Engineers' Transportation Planning Handbook, 3rd edition, Tables 18-2 through 18-4. **Case 1.** Baseline location Projects that have not earned points under LT Credit Surrounding Density and Diverse Uses or LT Credit Access to Quality Transit must achieve a 20% reduction from the base ratios. **Case 2.** Dense and/or transit-served location Projects earning 1 or more points under either LT Credit Surrounding Density and Diverse Uses or LT Credit Access to Quality Transit must achieve a 40% reduction from the base ratios. **For all projects:** The credit calculations must include all existing and new off-street parking spaces that are leased or owned by the project, including parking that is outside the project boundary but is used by the project. On-street parking in public rights-of-way is excluded from these calculations. **For projects that use pooled parking**, calculate compliance using the project's share of the pooled parking. Provide preferred parking for carpools for 5% of the total parking spaces after reductions are made from the base ratios. Preferred parking is not required if no off-street parking is provided. **Mixed-use projects** should determine the percentage reduction by first aggregating the parking amount of each use (as specified by the base ratios) and then determining the percentage reduction from the aggregated parking amount.. Do not count parking spaces for fleet and inventory vehicles unless these vehicles are regularly used by employees for commuting as well as business purposes.	1	d	Fong & Chan	Architect to confirm
1				LTc8	**Green vehicles** (1) Designate 5% of all parking spaces used by the project as preferred parking for green vehicles. These spaces must be clearly identified and enforced for sole use by these vehicles. If the parking is sectioned according to use (e.g. between short-term and long-term spaces), the preferred parking spaces must be proportionally distributed among the spaces. Green vehicles must achieve a minimum green score of 45 on the American Council for an Energy Efficient Economy (ACEEE) annual vehicle rating guide (or local equivalent for projects outside the U.S.) A discounted parking rate of at least 20% for green vehicles is an acceptable substitute for preferred parking. The discounted rate must be publicly posted at the entrance of the parking area and permanently available to every qualifying vehicle. In addition to preferred parking for green vehicles, meet one of the following two options for alternative-fuel fueling stations: **Option 1.** Electric vehicle recharging: Install electrical vehicle supply equipment (EVSE) in 2% of all parking spaces used by the project. Clearly identify and reserve these spaces for the sole u by plug-in electric vehicles. . Parking spaces that include EVSE must be provided separate from and in addition to preferred parking spaces for green vehicles. OR **Option 2.** Liquid, gas, or battery facilities: Install liquid or gas alternative fuel fueling facilities or a battery switching station capable of refueling a number of vehicles per day equal to at least 2% of all parking spaces.	1	d	Fong & Chan/Owner	Discuss with team at LEED kick-off

Yes	Maybe?+	Maybe?-	No			Points			
4	3	2	0		**Sustainable Sites (SS)** - 10 Points Available	9		Responsible Party	Status
Y				SSp1	**Construction Activity Pollution Prevention** (P) Create and implement an erosion and sedimentation control plan for all construction activities associated with the project. The plan must conform to the erosion and sedimentation requirements of the 2012 U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP) or local equivalent, whichever is more stringent. Projects must apply the CGP regardless of size. The plan must describe the measures implemented..	P	c	Contractor	
Y				SSp2	**Environmental Site Assessment** (P) Conduct a Phase I Environmental Site Assessment as described in ASTM E1527–05 (or a local equivalent) to determine whether environmental contamination exists at the site. If contamination is suspected, conduct a Phase II Environmental Site Assessment as described in ASTM E1903–11 (or a local equivalent). If a site is contaminated, remediate the site to meet local, state, or national environmental protection agency region residential (unrestricted) standards, whichever are most stringent.	P	d	Geotech/EnvEngr	
1				SSc1	**Site assessment** (1) Complete and document a site survey or assessment1 that includes the following information: Topography, Hydrology, Climate, Vegetation, Soils, Human use, Human health effects. The survey or assessment should demonstrate the relationships between the site features and topics listed above and how these features influenced the project design; give the reasons for not addressing any of those topics.	1	d	Geotech/EnvEngr	Please fill out form
	1			SSc2	**Site development - protect or restore habitat** (1) Preserve and protect from all development and construction activity 40% of the greenfield area on the site (if such areas exist). AND **Option 1. on-site restoration (1 point):** Using native or adapted vegetation, restore 30% (including the building footprint) of all portions of the site identified as previously developed. Projects that achieve a density of 1.5 floor-area ratio may include vegetated roof surfaces in this calculation if the plants are native or adapted, provide habitat, and promote biodiversity. Restore all disturbed or compacted soils that will be revegetated within the project's development footprint to meet the requirements. Project teams may exclude vegetated landscape areas that are constructed to accommodate rainwater infiltration from the vegetation and soils requirements, provided all such rainwater infiltration areas are treated consistently with SS Credit Rainwater Management. **OR** **Option 2. financial support (1 point)** Provide financial support equivalent to at least $0.40 per square foot (US$4 per square meter) for the total site area (including the building footprint).Financial support must be provided to a nationally or locally recognized land trust or conservation organization within the same EPA Level III ecoregion or the project's state (or within 100 miles of the project [160 kilometers] for projects outside the United States). For U.S. projects, the land trust must be accredited by the Land Trust Alliance	1	d	Landscape Architect/Owner	Confirm Option 1 is not planned. If so, Is there a budget for Option 2?

		1		SSc3	**Open space** (1) Provide outdoor space greater than or equal to 30% of the total site area (including building footprint). A minimum of 25% of that outdoor space must be vegetated (turf grass does not count as vegetation) or have overhead vegetated canopy. The outdoor space must be physically accessible and be one or more of the following: a pedestrian-oriented paving or turf area with physical s elements that accommodate outdoor social activities; a recreation-oriented paving or turf area with physical site elements that encourage physical activity; a garden space with a diversity of vegetation types and species that provide passive recreation opportunities and/or year-round visual interest; a garden space dedicated to community gardens or urban food production; preserved or created habitat that meets the criteria of SS Credit Site Development—Protect or Restore Habitat and also includes elements of human interaction. **For projects that achieve a density of 1.5 floor-area ratio (FAR), and are physically accessible,**extensive or intensive vegetated roofs can be used toward the minimum 25% vegetation requirement, and qualifying roof-based physically accessible paving areas can be used toward credit compliance. Wetlands or naturally designed ponds may count as open space if the side slope gradients average 1:4 (vertical: horizontal) or less and are vegetated. **For projects that are part of a multitenant complex only**: Open space can be either adjacent to the building or at another location in the site master plan. The open space may be at another master plan development site as long as it is protected from development. If the open space is not adjacent to the building, provide documentation showing that the requirements have been met and the land is in a natural state or has been returned to a natural state and conserved for the life of the building.	1	d	Landscape Architect	Confirm not feasible
1	1			SSc4	**Rainwater management** (2) **Option 1. Path 1. 95th percentile (2 points):** In a manner best replicating natural site hydrology processes, manage on site the runoff from the developed site for the 95th percentile of regional or local rainfall events using low-impact development (LID) and green infrastructure. Use daily rainfall data and the methodology in the U.S. Environmental Protection Agency (EPA) Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act to determine the 95th percentile amount. **OR** **Path 2. 98th percentile (2 points):** Achieve Path 1 but for the 98th percentile of regional or local rainfall events, using LID and green infrastructure. **OR** **Path 3. Zero lot line projects only (2 points):** The following requirement applies to zero lot line projects in urban areas with a minimum density of 1.5 FAR. In a manner best replicating natural site hydrology processes, manage on site the runoff from the developed site for the 85th percentile of regional or local rainfall events, using LID and green infrastructure. **OR** **Option 2. Natural land cover conditions (2 points):** Manage on site the annual increase in runoff volume from the natural land cover condition to the post-developed condition. **Projects that are part of a multitenant complex only:** The credit requirements may be met using a coordinated approach affecting the defined project site that is within the master plan boundary. Distributed techniques based on a watershed approach are then required.	2	d	Civil Engineer	Confirm with Civil; Regional Priority
1				SSc5	**Heat island reduction** (1) **Option 1. Non-roof and Roof (1 point):** Meet the minimum area of high reflectance roof, vegetated roof and non-roof paving as calculated in the reference guide. Alternatively, a weighted SRI average approach may be used to calculate compliance. High reflectance roof is considered low sloped roof with an initial SRI of 82 and a 3-year aged SRI of 64 or a steep sloped roof with an initial SRI of 39 and a 3-year aged SRI of 32. OR **Option 2. Parking under cover (1 point):** Place 75% of the parking under a high SRI roof, vegetated roof or energy generation system.	1	c	Landscape Architect/Civil Engineer	
1				SSc6	**Light pollution reduction** (1) Meet uplight and light trespass requirements, using either the backlight-uplight-glare (BUG) method (Option 1) or the calculation method (Option 2). Projects may use different options for uplight and light trespass. Meet these requirements for all exterior luminaires located inside the project boundary (except those listed under "Exemptions"), based on the following: -the photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and -the lighting zone of the project property (at the time construction begins). Classify the project under on lighting zone using the lighting zones definitions provided in the Illuminating Engineering Society and International Dark Sky Association (IES/IDA) Model Lighting Ordinance (MLO) User Guide. Additionally, meet the internally illuminated signage requirement. **Option 1. BUG Rating Method** Do not exceed the luminaire uplight ratings, based on the specific light source installed in the luminaire, as defined in IES TM-15-11, Addendum A. **OR** **Option 2. Calculation Method** Do not exceed the percentages of total lumens emitted above horizontal	1	d	Lighting Designer	Confirm if feasible? Fountain area lit? Included?
	1			SSc7	**Places of Respite** (1) - Provide places of respite that are accessible to patients and visitors, equal to 5% of the net usable program area of the building. - Provide additional dedicated places of respite for staff, equal to 2% of the net usable program area of the building. - Places of respite must be outdoors, or be located in interior atria, greenhouses, solaria, or conditioned spaces; such interior spaces may be used to meet up to 30% of the required area if 90% of each qualifying space's gross floor area achieves a direct line of sight to unobstructed views of nature. All areas must meet requirements as listed in credit library, and outdoor areas must meet additional requirements listed in the credit library	1	d	Fong & Chan	Roof area? For garden, etc.
		1		SSc8	**Direct Exterior Access** (1) - Provide direct access to an exterior courtyard, terrace, garden, or balcony. The space must be at least 5 square feet (0.5 square meters) per patient for 75% of all inpatients and 75% of qualifying outpatients whose clinical length of stay (LOS) exceeds four hours. - Patients whose length of stay exceeds four hours, and whose treatment makes them unable to move, such as emergency, stage 1 surgical recovery, and critical care patients, may be excluded. - Places of respite outside the building envelope that meet the requirements of SS Credit Places of Respite that are immediately adjacent to clinical areas or with direct access from inpatient units may be included. - Qualifying spaces must be designated as nonsmoking The spaces must also meet the requirements for outdoor air contaminant concentrations enumerated in EQ Credit Enhanced Indoor Air Quality Strategies, Option 2 and be located more than 100 feet (30 meters) from building exhaust air locations, loading docks, and roadways with idling vehicles.	1	d	Fong & Chan	

Yes	Maybe?+	Maybe?-	No			Points		
4	4	3	0	**Water Efficiency (WE) - 11 Points Available**		11		**Responsible Party**
Y				WEp1	**Outdoor water use reduction** (P) Reduce outdoor water use through one of the following options. Non-vegetated surfaces, such as permeable or impermeable pavement, should be excluded from landscape area calculations. Athletic fields and playgrounds (if vegetated) and food gardens may be included or excluded at the project team's discretion. Option 1. No irrigation required: Show that the landscape does not require a permanent irrigation system beyond a maximum two-year establishment period. **OR** **Option 2. Reduced irrigation:** Reduce the project's landscape water requirement by at least 30% from the calculated baseline for the site's peak watering month. Reductions must be achieved through plant species selection and irrigation system efficiency, as calculated by the Environmental Protection Agency (EPA) WaterSense Water Budget Tool.	P	d	Landscape Architect	

Y				WEp2	**Indoor water use reduction,** 20% (P) For the fixtures and fittings listed in Table 1, as applicable to the project scope, reduce aggregate water consumption by 20% from the baseline. Base calculations on the volumes and flow rates shown in Table 1. All newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling must be WaterSense labeled (or a local equivalent for projects outside the United States). Appliance and process water use: Install appliances, equipment, and processes within the project scope that meet the requirements listed in the tables below. Appliances and processes included in tables are: Residential clothes washers, commercial clothes washers, residential dishwashers, pre-rinse spray valves, ice machines, heat rejection and cooling, cooling towers and evaporative condensers	P	d	Mechanical Engineer/Fong & Chan/Owner	
Y				WEp3	**Building-level water metering** (P) Install permanent water meters that measure the total potable water use for the building and associated grounds. Meter data must be compiled into monthly and annual summaries; meter readings can be manual or automated. Commit to sharing with USGBC the resulting whole-project water usage data for a five-year period beginning on the date the project accepts LEED certification or typical occupancy, whichever comes first. This commitment must carry forward for five years or until the building changes ownership or lessee.	P	d	Owner	
				WEc1	**Outdoor water use reduction** (1) Reduce outdoor water use through one of the following options. Non-vegetated surfaces, such as permeable or impermeable pavement, should be excluded from landscape area calculations. Athletic fields and playgrounds (if vegetated) and food gardens may be included or excluded at the project team's discretion. **Option 1. No irrigation required (1 point):**Show that the landscape does not require a permanent irrigation system beyond a maximum two-year establishment period. **OR** **Option 2. Reduced irrigation (1 point):**Reduce the project's landscape water requirement (LWR) by at least 50% from the calculated baseline for the site's peak watering month. Reductions must first be achieved through plant species selection and irrigation system efficiency as calculated in the Environmental Protection Agency (EPA) WaterSense Water Budget Tool.	1	d	Landscape Architect	
				WEc2	**Indoor water use reduction** (1-5) Further reduce fixture and fitting water use from the calculated baseline in WE Prerequisite Indoor Water Use Reduction. Additional potable water savings can be earned above the prerequisite level using alternative water sources. Include fixtures and fittings necessary to meet the needs of the occupants. Some of these fittings and fixtures may be outside the tenant space (for Commercial Interiors) or project boundary (for New Construction). Points are awarded according to Table 1. Healthcare: 25%-1pt; 30%-2pts; 35%-3pts; 40%-4pts; 45%-5pts	7	d	Mechanical Engineer/Fong & Chan/Owner	
				WEc3	**Cooling tower water use** (1-2) For cooling towers and evaporative condensers, conduct a one-time potable water analysis, in order to optimize cooling tower cycles. Measure at least the five control parameters listed in Table 1: Maximum concentrations for parameters in condenser water- Ca (as CaCO3) - 1000ppm; Total alkalinity - 1000ppm; SiO2 - 100ppm; Cl - 250ppm; Conductivity - 2000µS/cm Calculate the number of cooling tower cycles by dividing the maximum allowed concentration level of each parameter by the actual concentration level of each parameter found in the potable makeup water. Limit cooling tower cycles to avoid exceeding maximum values for any of these parameters. Maximum number of cycles achieved without exceeding any filtration levels or affecting operation of condenser water system (up to maximum of 10 cycles)-1 pt. Achieve a minimum 10 cycles by increasing the level of treatment in condenser or make-up water OR Achieve the number of cycles for 1 point and use a minimum 20% recycled non-potable water - 2 pts.	2	d	n/a	Discuss with Mech Eng. Look at drift limits - manufacturer
				WEc3	**Water metering** (1) Install permanent water meters for two or more of the following water subsystems, as applicable to the project: -Irrigation. Meter water systems serving at least 80% of the irrigated landscaped area. Calculate the percentage of irrigated landscape area served as the total metered irrigated landscape area divided by the total irrigated landscape area. Landscape areas fully covered with xeriscaping or native vegetation that requires no routine irrigation may be excluded from the calculation. -Indoor plumbing fixtures and fittings. Meter water systems serving at least 80% of the indoor fixtures and fitting described in WE Prerequisite Indoor Water Use Reduction, either directly or by deducting all other measured water use from the measured total water consumption of the building and grounds. - Domestic hot water. Meter water use of at least 80% of the installed domestic hot water heating capacity (including both tanks and on-demand heaters). -Boiler with aggregate projected annual water use of 100,000 gallons (378 500 liters) or more, or boiler of more than 500,000 BtuH (150 kW). A single makeup meter may record flows for multiple boilers. -Reclaimed water. Meter reclaimed water, regardless of rate. A reclaimed water system with a makeup water connection must also be metered so that the true reclaimed water component can be determined. -Other process water. Meter at least 80% of expected daily water consumption for process end uses, such as humidification systems, dishwashers, clothes washers, pools, and other subsystems using process water.	1	d	Owner/Mechanical Engineer	Discuss with Mech Eng.

Yes	Maybe?+	Maybe?-	No
8	7	6	14

					Points			
				Energy & Atmosphere (EA) - 33 Points Available	**35**		**Responsible Party**	**Status**
Y				EAp1	**Fundamental commissioning and verification** (P) Complete the following commissioning (Cx) process activities for mechanical, electrical, plumbing, and renewable energy systems and assemblies, in accordance with ASHRAE Guideline 0-2005 and ASHRAE Guideline 1.1–2007 for HVAC&R Systems, as they relate to energy, water, indoor environmental quality, and durability. Requirements for exterior enclosures are limited to inclusion in the owner's project requirements (OPR) and basis of design (BOD), as well as the review of the OPR, BOD and project design. NIBS Guideline 3-2006 for Exterior Enclosures provides additional guidance. By the end of the design development phase, engage a commissioning authority with the appropriate qualifications. **Current Facilities Requirements and Operations and Maintenance Plan** Prepare and maintain a current facilities requirements and operations and maintenance plan that contains the information necessary to operate the building efficiently. The plan must include the following: a sequence of operations for the building; the building occupancy schedule; equipment run-time schedules; setpoints for all HVAC equipment; set lighting levels throughout the building; minimum outside air requirements; any changes in schedules or setpoints for different seasons, days of the week, and times of day; a systems narrative describing the mechanical and electrical systems and equipment; a preventive maintenance plan for building equipment described in the systems narrative; and a commissioning program that includes periodic commissioning requirements, ongoing commissioning tasks, and continuous tasks for critical facilities.	P	c	Owner	

Y				EAp2	**Minimum Energy Performance** (P) **Option 1. Whole-building energy simulation:**Demonstrate an improvement of 5% for new construction, 3% for major renovations, or 2% for core and shell projects in the proposed building performance rating compared with the baseline building performance rating. Calculate the baseline building performance according to ANSI/ASHRAE/IESNA Standard 90.1–2010, Appendix G with errata (or a USGBC-approved equivalent standard for projects outside the United States), using a simulation model. Projects must meet the minimum percentage savings before taking credit for renewable energy systems. **The proposed design must meet the following criteria:** - compliance with the mandatory provisions of ANSI/ASHRAE/IESNA Standard 90.1–2010, with errata (or a USGBC-approved equivalent standard for projects outside the United States); - inclusion of all energy consumption and costs within and associated with the building project; and - comparison against a baseline building that complies with Standard 90.1–2010, Appendix G, with errata (or a USGBC-approved equivalent standard for projects outside the United States). Document the energy modeling input assumptions for unregulated loads. Unregulated loads should be modeled accurately to reflect the actual expected energy consumption of the building. If unregulated loads are not identical for both the baseline and the proposed building performance rating, and the simulation program cannot accurately model the savings, follow the exceptional calculation method (ANSI/ASHRAE/IESNA Standard 90.1–2010, G2.5). Alternatively, use the COMNET Modeling Guidelines and Procedures to document measures that reduce unregulated loads.	P	d	Arup	
Y				EAp3	**Building-level energy metering** (P) Install new or use existing building-level energy meters, or submeters that can be aggregated to provide building-level data representing total building energy consumption (electricity, natural gas, chilled water, steam, fuel oil, propane, biomass, etc.). Utility-owned meters capable of aggregating building-level resource use are acceptable. Commit to sharing with USGBC the resulting energy consumption data and electrical demand data (if metered) for a five-year period beginning on the date the project accepts LEED certification or typical occupancy , whichever comes first. At a minimum, energy consumption must be tracked at one-month intervals. This commitment must carry forward for five years or until the building changes ownership or lessee	P	d	Owner/Electrical Engineer	
Y				EAp4	**Fundamental Refrigerant Management** (P) Do not use chlorofluorocarbon (CFC)-based refrigerants in new heating, ventilating, air-conditioning, and refrigeration (HVAC&R) systems. When reusing existing HVAC&R equipment, complete a comprehensive CFC phase-out conversion before project completion. Phase-out plans extending beyond the project completion date will be considered on their merits. Existing small HVAC&R units (defined as containing less than 0.5 pound (225 grams) of refrigerant) and other equipment, such as standard refrigerators, small water coolers, and any other equipment that contains less than 0.5 pound (225 grams) of refrigerant, are exempt	P	d	Mechanical Engineer	
3	1		2	EAc1	**Enhanced commissioning** (2-6) **Option 1. Enhanced systems commissioning (3-4 points)Path 1: Enhanced commissioning (3 points)**Complete the following commissioning process (CxP) activities for mechanical, electrical, plumbing, and renewable energy systems and assemblies in accordance with ASHRAE Guideline 0–2005 and ASHRAE Guideline 1.1–2007 for HVAC&R systems, as they relate to energy, water, indoor environmental quality, and durability. The commissioning authority must do the following: Review contractor submittals; Verify inclusion of systems manual requirements in construction documents; Verify inclusion of operator and occupant training requirements in construction documents; Verify systems manual updates and delivery; Verify operator and occupant training delivery and effectiveness; Verify seasonal testing; Review building operations 10 months after substantial completion; Develop an on-going commissioning plan; Include all enhanced commissioning tasks in the OPR and BOD. **OR** **Path 2: Enhanced and monitoring-based commissioning (4 points)** **Achieve Path 1. AND** Develop monitoring-based procedures and identify points to be measured and evaluated to assess performance of energy- and water-consuming systems. Include the procedures and measurement points in the commissioning plan. Address the following: roles and responsibilities; measurement requirements (meters, points, metering systems, da access); the points to be tracked, with frequency and duration for trend monitoring; the limits of acceptable values for tracked points and metered values (where appropriate, predictive algorithms may be used to compare ideal values with actual values); the elements used to evaluate performance, including conflict between systems, out-of-sequence operation of systems components, and energy and water usage profiles; an action plan for identifying and correcting operational errors and deficiencies; training to prevent errors; planning for repairs needed to maintain performance; and the frequency of analyses in the first year of occupancy (at least quarterly). Update the systems manual with any modifications or new settings, and give the reason for any modifications from the original design. **AND/OR** **Option 2. Envelope commissioning (2 points):**Fulfill the requirements in EA Prerequisite Fundamental Commissioning and Verification as they apply to the building's thermal envelope in addition to mechanical and electrical systems and assemblies. Complete the following commissioning process (CxP) activities for the building's thermal envelope in accordance with ASHRAE Guideline 0–2005 and the National Institute of Building Sciences (NIBS) Guideline 3–2006, Exterior Enclosure Technical Requirements for the Commissioning Process, as they relate to energy, water, indoor environmental quality, and durability. Commissioning authority must complete the following: Review contractor submittals; Verify inclusion of systems manual requirements in construction documents; Verify inclusion of operator and occupant training requirements in construction documents; Verify systems manual updates and delivery; Verify operator and occupant training delivery and effectiveness; Verify seasonal testing; Review building operations 10 months after substantial completion; Develop an on-going commissioning plan.	6	c	Owner	Recommended Possibility for monitoring-based
3	3	4	10	EAc2	**Optimize energy performance** (3-20) Establish an energy performance target no later than the schematic design phase. The target must be established as kBtu per square foot-year (kW per square meter-year) of source energy use. **Option 1. Whole-building energy simulation (1–20 points):**Analyze efficiency measures during the design process and account for the results in design decision making. Use energy simulation of efficiency opportunities, past energy simulation analyses for similar buildings, or published data (e.g., Advanced Energy Design Guides) from analyses for similar buildings. Analyze efficiency measures, focusing on load reduction and HVAC-related strategies (passive measures are acceptable) appropriate for the facility. Project potential energy savings and holistic project cost implications related to all affected systems. Project teams pursuing the Integrative Process credit must complete the basic energy analysis for that credit before conducting the energy simulation. Follow the criteria in EA Prerequisite Minimum Energy Performance to demonstrate a percentage improvement in the proposed building performance rating compared with the baseline. Points are awarded according to the following percentages (New Construction): 6%-3; 8%-4; 10%-5; 12%-6; 14%-7; 16%-8; 18%-9, 20%-10; 22%-11; 24%-12; 26%-13; 29%-14; 32%-15; 35%-16; 38%-17; 42%-18; 46%-19; 50%-20 **Option 2. Prescriptive compliance: ASHRAE Advanced Energy Design Guide**(1–6 points) ASHRAE 50% Advanced Energy Design Guide for Large Hospitals	20	d	Arup	Call with Arch/Mech Eng to discuss study, EEM options
1				EAc3	**Advanced energy metering** (1) Install advanced energy metering for the following: all whole-building energy sources used by the building; and any individual energy end uses that represent 10% or more of the total annual consumption of the building. The advanced energy metering must have the following characteristics: Meters must be permanently installed, record at intervals of one hour or less, and transmit data to a remote location; Electricity meters must record both consumption and demand. Whole-building electricity meters should record the power factor, if appropriate; The data collection system must use a local area network, building automation system, wireless network, or comparable communication infrastructure; The system must be capable of storing all meter data for at least 36 months; The data mus be remotely accessible; All meters in the system must be capable of reporting hourly, daily, monthly, and annual energy use.	1	d	Owner/Electrical Engineer	Recommended

			2	EAc4	**Demand response** (1-2) Design building and equipment for participation in demand response programs through load shedding or shifting. On-site electricity generation does not meet the intent of this credit. **Case 1. Demand response program available (2 points):** Participate in an existing demand response (DR) program and complete the following activities. Design a system with the capability for real-time, fully-automated DR based on external initiation by a DR Program Provider. Semi-automated DR may be utilized in practice. Enroll in a minimum one-year DR participation amount contractual commitment with a qualified DR program provider, with the intention of multiyear renewal, for at least 10% of the estimated peak electricity demand. Peak demand is determined under EA Prerequisite Minimum Energy Performance. Develop a comprehensive plan for meeting the contractual commitment during a Demand Response event. Include the DR processes in the scope of work for the commissioning authority, including participation in at least one full test of the DR plan. OR **Case 2. Demand response program not available (1 point):** Provide infrastructure to take advantage of future demand response programs or dynamic, real-time pricing programs and complete the following activities. Install interval recording meters with communications and ability for the building automation system to accept an external price or control signal. Develop a comprehensive plan for shedding at least 10% of building estimated peak electricity demand. Peak demand is determined under EA Prerequisite Minimum Energy Performance. Include the DR processes in the scope of work for the commissioning authority, including participation in at least one full test of the DR plan. Contact local utility representatives to discuss participation in future DR programs.	2	d	Owner/Arup	
	1	2		EAc5	**Renewable energy production** (1-3) Use renewable energy systems to offset building energy costs. Calculate the percentage of renewable energy with the following equation: % renewable energy =(Equivalent cost of usable energy produced by the renewable energy system/Total building annual energy cost). Credit is based on the percentage of ownership or percentage of use assigned in the lease agreement. Points are awarded according to Table 1. (New Construction) 1% - 1pt; 5%-2 pts; 10%-3pts.	3	d	Owner/tbd	Question for team
1				EAc6	**Enhanced Refrigerant Management** (1) **Option 1. No refrigerants or low-impact refrigerants (1 point):** Do not use refrigerants, or use only refrigerants (naturally occurring or synthetic) that have an ozone depletion potential (ODP) of zero and a global warming potential (GWP) of less than 50. **OR** **Option 2. Calculation of refrigerant impact (1 point):** Select refrigerants that are used in heating, ventilating, air-conditioning, and refrigeration (HVAC&R) equipment to minimize or eliminate the emission of compounds that contribute to ozone depletion and climate change. The combination of all new and existing base building and tenant HVAC&R equipment that serve the project must comply with the formula provided in the reference guide	1	d	Mechanical Engineer	Confirm/discuss with Mech. Eng.
	2			EAc7	**Green power and carbon offsets** (1-2) Engage in a contract for qualified resources that have come online since January 1, 2005, for a minimum of five years, to be delivered at least annually. The contract must specify the provision at least 50% or 100% of the project's energy from green power, carbon offsets, or renewable energy certificates (RECs). Green power and RECs must be Green-e Energy certified or the equivalent. RECs can only be used to mitigate the effects of Scope 2, electricity use. Carbon offsets may be used to mitigate Scope 1 or Scope 2 emissions on a metric ton of carbon dioxide–equivalent basis and must be Green-e Climate certified, or the equivalent. For U.S. projects, the offsets must be from greenhouse gas emissions reduction projects within the United States. Determine the percentage of green power or offsets based on the quantity of energy consumed, not the cost. Points are awarded according to the following: 50%- 1pt; 100% - 2pts	2	c	Owner	

Yes	Maybe?+	Maybe?-	No			Points			
9	4	4	2	**Materials & Resources (MR)** - 13 Points Available		19		Responsible Party	Status
Y				MRp1	**Storage & Collection of Recyclables** (P) Provide dedicated areas accessible to waste haulers and building occupants for the collection and storage of recyclable materials for the entire building. Collection and storage areas may be separate locations. Recyclable materials must include mixed paper, corrugated cardboard, glass, plastics, and metals. Take appropriate measures for the safe collection, storage, and disposal of two of the following: batteries, mercury-containing lamps, and electronic waste	P	d	Fong & Chan/Andaz	
Y				MRp2	**Construction and demolition waste management planning** (P) Develop and implement a construction and demolition waste management plan: Establish waste diversion goals for the project by identifying at least five materials (both structural and non-structural) targeted for diversion. approximate a percentage of the overall project waste that these materials represent. Specify whether materials will be separated or commingled and describe the diversion strategies planned for the project. Describe where the materials will be taken and how the recycling facility will process the material. Provide a final report detailing all major waste streams generated, including disposal and diversion rates. Alternative daily cover (ADC) does not qualify as material diverted from disposal. Land-clearing debris is not considered construction, demolition, or renovation waste that can contribute to was diversion	P	c	Contractor	
Y				MRp3	**PBT Source Reduction - Mercury** As part of the project's recycling collection system, identify the following: types of mercury-containing products and devices to be collected; criteria governing how they are to be handled by a recycling program; and disposal methods for captured mercury. Comply with the mercury elimination requirements outlined below, from the 2010 FGI Guidelines for Design and Construction of Health Care Facilities, Section A1.3- 4b, Mercury Elimination. - 4.2.1.1. New construction: healthcare facilities may not use mercury-containing equipment, including thermostats, switching devices, and other building system sources. Lamps are excluded. Do not specify or install preheat, T-9, T-10, or T-12 fluorescents or mercury vapor high-intensity discharge (HID) lamps in the project. Do not specify probe-start metal halide HID lamps in any interior spaces. Specify and install illuminated exit signs that do not contain mercury and use less than 5 watts of electricity. Fluorescent and high-pressure sodium lamps must meet the criteria in Table 1.	P	c		Discuss with lighting designer
1	2		2	MRc1	**Building life-cycle impact reduction** (2-5) Demonstrate reduced environmental effects during initial project decision-making by reusing existing building resources or demonstrating a reduction in materials use through life-cycle assessment. Achieve one of the following options:**Option 1. historic building reuse (5 points) OR Option 2. renovation of abandoned or blighted building (5 points) OR Option 3. building and material reuse** (25% - 2 points, 50% - 3 points, 75% - 4 points) **OR Option 4. whole-building life-cycle assessment (3 points)**	5	c	Fong & Chan/Arup	Included in Arup scope as LEED Platinum option

1		1		MRc2	**Building product disclosure and optimization - environmental product declarations** (1-2) Achieve one or more of the options below, for a maximum of 2 points.**Option 1. environmental product declaration (EPD) (1 point):** Use at least 20 different permanently installed products from at least 5 different manufacturers that meet one of the disclosure criteria: Product-specific declaration (1 whole product); Industry-wide (generic) EPD (1 whole product); Product-specific Type III EPD (1.5 whole products); USGBC approved program **AND/OR** **Option 2. Multi-attribute optimization (1 point):**Use products that meet at least one of the attributes below for 10%, by cost, of the total value of permanently install products in the project: **Life Cycle Impact Reduction Action Plan (value at 50% by cost or ½ product)** The manufacturer has produced a product specific LCA using EN 15804 or ISO 21930 for the product and has provided a publicly available action plan to mitigate or reduce life cycle impacts. The action plan must be product-specific using the specified PCR functional unit, be critically reviewed, and must include the following information: Description of the LCA conducted including the dataset, software or platform used by manufacturer to complete the analysis; Identification of the largest life cycle impact areas identified in the analysis and a narrative description of the impact areas targeted for reduction in the action plan; Description of specific steps anticipated in implementation of the action plan. Include proposed changes in formulation or manufacturing processes that are planned as part of impact reduction strategy; Specific dates and a full timeline for completion of all the steps described in the action plan. **Life Cycle Impact Reductions in Embodied Carbon.** Products that have demonstrated environmental impact reductions for the specified functional unit based on a current third-party EPD or verified LCA that conforms to the comparability requirements of ISO 14025 and ISO 21930: The comparative analysis must show impact reduction in the global warming potential (GWP) impact category and must include a narrative describing how reductions in impacts were achieved. The published comparisons must be third-party verified (value at 100% by cost or 1 product); The comparative analysis must show impact reduction(s) of at least 10% in the global warming potential (GWP) impact category and must include a narrative describing how the impact reductions were achieved. The published comparisons must be third-party verified (value at 150% by cost or 1.5 products); The comparative analysis must show impact reduction(s) of at least 20% in the global warming potential (GWP) impact category, and demonstrate at least 5% reduction in two additional impact categories. A narrative describing how the impact reductions were achieved is required. The published comparisons must be third-party verified (value at 200% by cost or 2 products).	2	C	Fong & Chan/Contractor	
1		1		MRc3	**Building product disclosure and optimization - sourcing of raw materials** (1-2) **Responsible Sourcing of Raw Materials (1-2 points):**Use products that meet at least one of the responsible extraction criteria below for at least 20% (1pt) or 40% (2pts), by cost, of the total value of permanently installed building products in the project: Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for extended producer responsibility. Products meeting extended producer responsibility criteria are valued at 50% of their cost for the purposes of credit achievement calculation.; Bio-based products must meet the Sustainable Agriculture Network's Sustainable Agriculture Standard; Wood products must be certified by the Forest Stewardship Council or USGBC-approve equivalent; Materials reuse; Recycled content; Other programs for other material types meeting leadership extraction criteria that become available will be evaluated and added as appropriate. For credit achievement calculation, products sourced (extracted, manufactured, purchased) within 100 miles of the project site are valued at twice their base contributing cost (or number of products), up to a maximum of 200% cost, or 2 products.	2	C	Fong & Chan/Contractor	
1		1		MRc4	**Building product disclosure and optimization - material ingredients** (1-2) **Option 1. material ingredient reporting (1 point):**Use at least 20 different permanently installed products from at least 5 different manufacturers that use any of the approved programs to demonstrate the chemical inventory of the product. Compliant products must have chemicals inventoried to at least 0.1% (1000 ppm). Products must be sourced from at least 5 different manufacturers **AND/OR** **Option 2: material ingredient optimization (1 point):**Use permanently installed products from at least three different manufacturers that document their material ingredient optimization using the paths below. Choose either 10 compliant products, or select products that constitute at least 10%, by cost, of the total value of permanently installed products in the project. **Material Ingredient Screening and Optimization Action Plan (value at 50% by cost or ½ product):**The manufacturer has screened the product to at least 1,000 ppm and has provided a publicly available inventory meeting the requirements of Option 1 and completed a detailed action plan to mitigate or reduce known hazards using the principles of green chemistry. The action plan must be product-specific (not company, manufacturer or brand. **Advanced Inventory & Assessment (value at 100% by cost or 1 product):**The end use product meets the requirements of any of the following:Manufacturer Inventory or Health Product Declaration: The product has demonstrated a chemical inventory to at least 0.01% by weight (100 ppm) with no GreenScreen LT-1 hazards or GHS Category 1 hazards. The HPD or Manufacturer Inventory must be third party verified. Manufacturer Inventory or HPD: The product has demonstrated a chemical inventory to at least 0.01% by weight (100ppm) and at least 75% by weight of product is assessed using GreenScreen Benchmark assessment. The remaining 25% by weight of product has been inventoried. The GreenScreen assessment must be publicly available. The HPD or Manufacturer Inventory must be third-party verified. Declare labels designated as Red List Free that are third-party verified. Cradle to Cradle. Product has Material Health Certificate or is Cradle to Cradle Certified™ under standard version 3 or later with a Material Health achievement level at the Bronze level or higher. **Material Ingredient Optimization (value at 150% by cost or 1.5 products):**The end use product has demonstrated a product inventory and assessment of ingredients using any of the following programs: Manufacturer Inventory or HPD: The product has demonstrated a chemical inventory to at least 0.01% by weight (100ppm) and at least 95% by weight of product is assessed using GreenScreen Benchmark assessment. No Benchmark 1 hazards (BM-1) are present in the end use product. The remaining 5% by weight of product not assessed has been inventoried and screened using GreenScreen List Translator and no GreenScreen LT-1 hazards are present in the end use product. The documents must be third party verified. Cradle to Cradle. Product has Material Health Certificate or is Cradle to Cradle Certified™ under standard version 3 or later with a Material Health achievement level at the Silver level or higher.	2	C	Fong & Chan/Contractor	
1					**PBT Source Reduction - Mercury** (1) Specify and install fluorescent lamps with both low mercury content (MR Prerequisite PBT Source Reduction—Mercury) and long lamp life, as listed in Table 1. Do not specify or install circular fluorescent lamps or probe start metal halide lamps.	1			Discuss with team at kick-off
2					**PBT Source Reduction - Lead, Cadmium, and Copper** (2) Specify substitutes for materials manufactured with lead and cadmium, as follows: Lead: - Meet requirements for plumbing pipes, pipe fittings, plumbing fittings, faucets, solder and flux for water for human consumption; lead-free roofing and flashing, electrical wire and cable with <300ppm lead content - No interior or exterior paints containing lead; for renovation projects - Ensure removal and appropriate disposal of wires with lead stabilizers with the 2002 National Electric Code requirements - Lead used for radiation shielding and copper used for MRI shielding are exempt Cadmium: specify no use of interior or exterior paints containing intentionally added cadmium. Copper: for copper pipe applications, reduce or eliminate joint-related sources of copper corrosion: use mechanically crimped copper joint systems; or specify that all solder joints comply with ASTM B828 2002, and specify and use ASTM B813 2010 for flux.	2			Discuss with team at kick-off
1		1			**Furniture and Medical Furnishings** (2) Use at least 30% (1 point) or 40% (2 points), by cost, of all freestanding furniture and medical furnishings (e.g., mattresses, foams, panel fabrics, cubicle curtains, window coverings, other textiles) that meet the criteria in one of the following three options: - Option 1: minimal chemical content - Option 2: testing and modeling of chemical content - Option 3: multi-attribute assessment of products	2			Discuss with team at kick-off
	1				**Design for Flexibility** (1) Increase building flexibility and ease of adaptive use over the life of the structure by employing at least three of the following strategies. - Use interstitial space - Provide programmed soft space equal to at least 5% of departmental gross area (DGA) - Provide shell space equal to at least 5% of DGA. Locate it such that it can be occupied without displacing occupied space. - Identify horizontal expansion capacity for diagnostic and treatment or other clinical space equal to at least 30% of existing floor area (excluding inpatient units) without demolition of occupied space (other than at the connection point). - Designate space for future above-grade parking structures equal to 50% of existing on-grade parking capacity, with direct access to the main hospital lobby or circulation. - Use demountable partitions for 50% of applicable areas. - Use movable or modular casework for at least 50% of casework and custom millwork. See credit library for additional details	1			Architect to review

1	1			MRc5	**Construction and demolition waste management** (1-2) Recycle and/or salvage non-hazardous construction and demolition materials. Calculations can be by weight or volume but must be consistent throughout.**Option 1. diversion (1-2 points):Path 1. divert 50% and three material streams (1 point):** Divert at least 50% of the total construction and demolition material; diverted materials must include at least three material streams. **OR** **Path 2. divert 75% and four material streams (2 points):**Divert at least 75% of the total construction and demolition material; diverted materials must include at least four material streams. OR **Option 2. reduction of total waste material (2 points):** Do not generate more than 2.5 pounds of construction waste per square foot (12.2 kilograms of waste per square meter) of the building's floor area	2	c	Contractor	Discuss with team - cost estimator if contractor not yet on board

Yes	Maybe?+	Maybe?-	No			Points			
11	1	4	0		**Indoor Environmental Quality (IEQ)** - 16 Points Available	16		Responsible Party	Status
Y				IEQp1	**Minimum IAQ Performance** (P) Meet the requirements for both ventilation and monitoring. **Ventilation** **Mechanically ventilated spaces:** For mechanically ventilated spaces (and for mixed-mode systems when the mechanical ventilation is activated), determine the minimum outdoor air intake flow for mechanical ventilation systems using the ventilation rate procedure from ASHRAE Standard 170–2008, Section 7; the requirements of the 2010 FGI Guidelines for Design and Construction of Health Care Facilities (Table 2.1–2); or a local equivalent, whichever is most stringent. For any area not covered in 170 or the FGI guidelines, follow ASHRAE 62.1 or a local equivalent, whichever is more stringent and meet the minimum requirements of ASHRAE Standard 170–2008, Sections 6–8, Ventilation of Health Care Facilities (with errata) or a USGBC-approved equivalent standard for projects outside the U.S. **Naturally Ventilated Spaces**: For naturally ventilated spaces (and for mixed-mode systems when the mechanical ventilation is inactivated), determine the minimum outdoor air opening and space configuration requirements using the natural ventilation procedure of ASHRAE Standard 62.1–2010 (with errata) or a local equivalent, whichever is more stringent. Confirm that natural ventilation is an effective strategy for the project by following the flow diagram in Figure 2.8 of the Chartered Institution of Building Services Engineers (CIBSE) Applications Manual AM10, March 2005, Natural Ventilation in Nondomestic Buildings. **Monitoring** **Mechanically ventilated spaces:** For mechanically ventilated spaces (and for mixed-mode systems when the mechanical ventilation is activated), provide a direct outdoor airflow measurement device capable of measuring the minimum outdoor air intake flow. This device must measure the minimum outdoor air intake flow with an accuracy of +/–10% of the design minimum outdoor airflow rate defined by the ventilation requirements above. An alarm must alert staff whenever the outdoor airflow value varies by 15% or more from the outdoor airflow setpoint. **Naturally ventilated spaces:** For naturally ventilated spaces (and for mixed-mode systems when the mechanical ventilation is inactivated), comply with at least one of the following strategies. - Provide a direct exhaust airflow measurement device capable of measuring the exhaust airflow. This device must measure the exhaust airflow with an accuracy of +/–10% of the design minimum exhaust airflow rate. An alarm must indicate when airflow values vary by 15% or more from the exhaust airflow setpoint. - Provide automatic indication devices on all natural ventilation openings intended to meet the minimum opening requirements. An alarm must indicate when any one of the openings is closed during occupied hours. - Monitor carbon dioxide (CO2) concentrations within each thermal zone. CO2 monitors must be between 3 and 6 feet (90 and 180 centimeters) above the floor and within the thermal zone. CO monitors must have an audible or visual indicator or alert the building automation system if the sensed CO2 concentration exceeds the setpoint by more than 10%. Calculate appropriate CO2 setpoints using the methods in ASHRAE 62.1–2010, Appendix C.	P	d	Mechanical Engineer	
Y				IEQp2	**Environmental Tobacco Smoke** (ETS) **Control** (P) Prohibit smoking inside the building. Prohibit smoking outside the building except in designated smoking areas located at least 25 feet (7.5 meters) from all entries, outdoor air intakes, and operable windows. Also prohibit smoking outside the property line in spaces used for business purposes. If the requirement to prohibit smoking within 25 feet (7.5 meters) cannot be implemented because of code, provide documentation of these regulations. Signage must be posted within 10 feet (3 meters) of all building entrances indicating the no-smoking policy. Residential only **Option 1.** No Smoking: Meet the requirements above. OR **Option 2.** Compartmentalization of Smoking Areas Prohibit smoking inside all common areas of the building. The prohibition must be communicated in building rental or lease agreements or condo or coop association covenants and restrictions. Make provisions for enforcement. Prohibit smoking outside the building except in designated smoking areas located at least 25 feet (7.5 meters) from all entries, outdoor air intakes, and operable windows. The no-smoking policy also applies to spaces outside the property line used for business purposes. If the requirement to prohibit smoking within 25 feet (7.5 meters) cannot be implemented because of code, provide documentation of these regulations. Signage must be posted within 10 feet (3 meters) of all building entrances indicating the no-smoking policy. Each unit must be compartmentalized to prevent excessive leakage between units	P	d	Owner	
2				IEQc1	**Enhanced indoor air quality strategies** (1-2) **Option 1. Enhanced IAQ strategies (1 point):**Comply with all the following requirements, as applicable: A. Entryway systems: Install permanent entryway systems at least 10 feet (3 meters) long in the primary direction of travel to capture dirt and particulates entering the building at high-volume exterior entrances. Acceptable entryway systems include permanently installed grates, grilles, slotted systems that allow for cleaning underneath, rollout mats, and any other materials manufactured as entryway systems with equivalent or better performance. Maintain all on a weekly basis. B. Interior cross-contamination prevention: Sufficiently exhaust each space where hazardous gases or chemicals may be present or used (e.g., garages, housekeeping and laundry areas, copying and printing rooms), using the exhaust rates determined in EQ Prerequisite Minimum Indoor Air Quality Performance or a minimum of 0.50 cfm per square foot, to create negative pressure with respect to adjacent spaces when the doors to the room are closed. For each of these spaces, provide self-closing doors and deck-to-deck partitions or a hard-lid ceiling. C. Filtration: Each ventilation system that supplies outdoor air to occupied spaces must have particle filters or air-cleaning devices that meet one of the following filtration media requirements: minimum efficiency reporting value (MERV) of 13 or higher, in accordance with ASHRAE Standard 52.2–2007; or Class F7 or higher as defined by CEN Standard EN 779–2002, Particulate Air Filters for General Ventilation, Determination of the Filtration Performance. Replace all air filtration media after completion of construction and before occupancy. D. Natural ventilation design calculations: Demonstrate that the system design for occupied spaces employs the appropriate strategies in Chartered Institution of Building Services Engineers (CIBSE) Applications Manual AM10, March 2005, Natural Ventilation in Non-Domestic Buildings, Section 2.4. **Option 2. Additional Enhanced IAQ strategies (1 point):**Comply with one of the following requirements, as applicable. A. Exterior contamination prevention: Design the project to minimize and control the entry of pollutants into the building. Ensure through the results of computational fluid dynamics modeling, Gaussian dispersion analyses, wind tunnel modeling, or tracer gas modeling that outdoor air contaminant concentrations at outdoor air intakes are below the thresholds listed in Table 1 (projects outside the United States must follow the EPA guideline or local equivalent, whichever is more stringent). B. Increased ventilation: Increase breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates as determined in EQ Prerequisite Minimum Indoor Air Quality Performance. C. Carbon dioxide monitoring: Monitor CO2 concentrations within all densely occupied spaces. CO2 monitors must be between 3 and 6 feet (90 and 180 centimeters) above the floor. CO2 monitors must have an audible or visual indicator or alert the building automation system if the sensed CO2 concentration exceeds the setpoint by more than 10%. Calculate appropriate CO2 setpoints using methods in ASHRAE 62.1–2010, Appendix C. D. Additional source control and monitoring: For spaces where air contaminants are likely, evaluate potential sources of additional air contaminants besides CO2. Develop and implement a materials-handling plan to reduce the likelihood of contaminant release. Install monitoring systems with sensors designed to detect the specific contaminants. An alarm must indicate any unusual or unsafe conditions. E. Natural ventilation room-by-room calculations: Follow CIBSE AM10, Section 4, Design Calculations, to predict that room-by-room airflows will provide effective natural ventilation.	2	d	Fong & Chan/Mechanical Engineer	

3				IEQc2	**Low-Emitting Materials (1-3)** This credit includes requirements for product manufacturing as well as project teams. It covers volatile organic compound (VOC) emissions into indoor air and the VOC content of materials, as well as the testing methods by which indoor VOC emissions are determined. Different materials must meet different requirements to be considered compliant for this credit. The building interior and exterior are organized in seven categories, each with different thresholds of compliance. The building interior is defined as everything within the waterproofing membrane. The building exterior is defined as everything outside and inclusive of the primary and secondary weatherproofing system, such as waterproofing membranes and air- and water-resistive barrier materials. **Option 1. Product Category Calculations:** Achieve the threshold level of compliance with emissions and content standards for the number of product categories listed in Table 2. Table 2 includes: paints, coatings, sealants, adhesives, flooring, composite wood, ceilings, walls, thermal and acoustic insulation and furniture. For NC projects without furniture achieving 2 category awards 1 point, 4 categories awards 2 points, and 5 categories awards 3 points. **Option 2. Budget Calculation Method:** If some products in a category do not meet the criteria, project teams may use the budget calculation method (Table 3)≥ 50% and < 70%=1 point; ≥ 70% and < 90%=2 points; ≥ 90%= 3 points The budget method organizes the building interior into six assemblies: flooring; ceilings; walls; thermal and acoustic insulation; furniture Include furniture in the calculations if it is part of the scope of work. Walls, ceilings, and flooring are defined as building interior products; each layer of the assembly, including paints, coatings, adhesives, and sealants, must be evaluated for compliance. Insulation is tracked separately.	3	c	Fong & Chan/Contractor	
1				IEQc3	**Construction IAQ Management Plan** (1) Develop and implement an indoor air quality (IAQ) management plan for the construction and preoccupancy phases of the building. The plan must address all of the following: - *Moisture* - Protect absorptive materials stored on-site and installed from moisture damage. Particulates - Use MERV 8 filters, minimum, if operating permanently installed air-handling equipment during construction. Immediately before occupancy, replace all filtration media with the final design filtration media, installed in accordance with the manufacturer's recommendations. - *VOCs* - Schedule construction procedures to minimize exposure of absorbent materials to VOC emissions. - Outdoor emissions - For renovation projects involving waterproofing, repairing asphalt roofing, sealing parking lots, or other outdoor activities that generate high VOC emissions, develop a plan to manage fumes and avoid infiltration to occupied spaces. Comply with the procedures established by NIOSH, Asphalt Fume Exposures during the Application of Hot Asphalt to Roofs (Publication 2003–112). - *Tobacco* - Prohibit the use of tobacco products inside the building and within 25 feet (8 meters) of the building entrance during construction. - *Noise and Vibration* - Develop a plan based on the British Standard (BS 5228) to reduce noise emissions and vibrations from construction equipment and other nonroad engines by specifying low-noise emission design or the lowest decibel level available that meets performance requirements in the British Standard. Construction crews must wear ear protection in areas where sound levels exceed 85 dB for extended periods. - *Infection Control* - For renovations and additions adjacent to occupied facilities or phased occupancy in new construction, follow the FGI 2010 Guidelines for Design and Construction of Health Care Facilities and the Joint Commission on Standards to establish an integrative infection control team comprising the owner, designer, and contractor to evaluate infection control risk and document the required precautions in a project-specific plan. Use the infection control risk assessment standard published by the American Society of Healthcare Engineering and the U.S. Centers for Disease Control and Prevention (CDC) as a guideline to assess risk and to select mitigation procedures for construction activities	1	c	Contractor	
2				IEQc4	**Indoor Air Quality Assessment** (1-2) **Option 1. Flush-out (1 point):** **Path 1. Before occupancy:** Install new filtration media and perform a building flush-out by supplying a total air volume of 14,000 cubic feet of outdoor air per square foot (4270 cubic meters of outdoor air per square meter) of gross floor area while maintaining an internal temperature of at least 60°F (15°C) and no higher than 80°F (27°C) and relative humidity no higher than 60%.**OR** **Path 2. During occupancy:** If occupancy is desired before the flush-out is completed, the space may be occupied only after delivery of a minimum of 3,500 cubic feet of outdoor air per square foot (1065 cubic meters of outdoor air per square meter) of gross floor area while maintaining an internal temperature of at least 60°F (15°C) and no higher than 80°F (27°C) and relative humidity no higher than 60%. Once the space is occupied, it must be ventilated at a minimum rate of 0.30 cubic foot per minute (cfm) per square foot of outdoor air (1.5 liters of outside air per second per square meter) or the design minimum outdoor air rate determined in EQ Prerequisite Minimum Indoor Air Quality Performance, whichever is greater. During each day of the flush-out period, ventilation must begin at least three hours before occupancy and continue during occupancy. These conditions must be maintained until a total of 14,000 cubic feet per square foot of outdoor air (4270 cubic meters of outdoor air per square meter) has been delivered to the space. **OR** **Option 2. Air testing (2 points):**After construction ends and before occupancy, but under ventilation conditions typical for occupancy, conduct baseline IAQ testing using protocols consistent with the methods listed in Table 1 for all occupied spaces. Use current versions of ASTM standard methods, EPA compendium methods, or ISO methods, as indicated. Laboratories that conduct the tests for chemical analysis of formaldehyde and volatile organic compounds must be accredited under ISO/IEC 17025 for the test methods they use. Retail projects may conduct the testing within 14 days of occupancy. Conduct all measurements before occupancy but during normal occupied hours, with the building ventilation system started at the normal daily start time and operated at the minimum outdoor airflow rate for the occupied mode throughout the test. For each sampling point where the concentration exceeds the limit, take corrective action and retest for the noncompliant contaminants at the same sampling points. Repeat until all requirements are met.	2	c	Contractor/Mechanical Engineer	Discuss with team
1				IEQc5	**Thermal comfort** (1) Meet the requirements for both thermal comfort design and thermal comfort control. Thermal comfort design **Option 1. ASHRAE Standard 55-2010:** Design heating, ventilating, and air-conditioning (HVAC) systems and the building envelope to meet the requirements of ASHRAE Standard 55–2010, Thermal Comfort Conditions for Human Occupancy, with errata or a local equivalent. Demonstrate design compliance in accordance with Section 6.2, Documentation. For natatoriums, demonstrate compliance with ASHRAE HVAC Applications Handbook, 2011 edition, Chapter 5, Places of Assembly, Typical Natatorium Design Conditions, with errata. **OR** **Option 2. ISO and CEN Standards:** Design HVAC systems and the building envelope to meet the requirements of the following two standards: ISO 7730, Ergonomics of the Thermal Environment, Analytical Determination and Interpretation of Thermal Comfort, using calculation of the PMV and PPD indices and local thermal comfort criteria; and CEN Standard EN 15251, Indoor Environmental Input Parameters for Design and Assessment of Energy Performance of Buildings, addressing indoor air quality, thermal environment, lighting, and acoustics. **Thermal comfort control** Provide individual thermal comfort controls for at least 50% of individual occupant spaces. Provide group thermal comfort controls for all shared multi-occupant spaces, and for any individual occupant spaces without individual controls. Thermal comfort controls allow occupants, whether in individual spaces or shared multi-occupant spaces, to adjust at least one of the following in their local environment: air temperature, radiant temperature, air speed, and humidity. **Guest rooms are assumed to provide adequate thermal comfort controls and therefore are not included in the credit calculations.**	1	d	Mechanical Engineer	
1				IEQc6	**Interior lighting** (1) Provide individual lighting controls for at least 90% of individual occupant spaces in staff areas. For at least 90% of patient positions, provide lighting controls that are readily accessible from the patient's bed. In multioccupant patient spaces, the controls must be individual lighting controls. In private rooms, also provide exterior window shades, blinds, or curtain controls that are readily accessible from the patient's bed. Exceptions include in-patient critical care, pediatric, and psychiatric patient rooms. For all shared multioccupant spaces, provide multizone control systems that enable occupants to adjust the lighting to meet group needs and preferences, with at least three lighting levels or scenes (on, off, midlevel). Midlevel is 30% to 70% of the maximum illumination level (not including daylight contributions).	1	d	Lighting Designer	

		2		IEQc7	**Daylight** (1-2) Provide manual or automatic (with manual override) glare-control devices for all regularly occupied spaces. Select one of the following three options: **Option 1. Simulation: Spatial Daylight Autonomy (2–3 points):**Demonstrate through annual computer simulations that spatial daylight autonomy 300/50% (sDA300/50%) of at least 55%, 75%, or 90% is achieved. Use regularly occupied floor area. Healthcare projects should use the perimeter area determined under EQ Credit Quality Views. Points are awarded according to percentage: 55%=2 points, 75%=3 points **AND** Demonstrate through annual computer simulations that annual sunlight exposure1000,250 (ASE1000,250) of no more than 10% is achieved. Use the regularly occupied floor area that is daylit per the sDA300/50% simulations. The sDA and ASE calculation grids should be no more than 2 feet (60 cm) square and laid out across the regularly occupied area at a work plane height of 30 inches (76 cm) above finished floor (unless otherwise defined). Use an hourly time-step analysis based on typical meteorological year data, or an equivalent, for the nearest available weather station. Include any permanent interior obstructions. Movable furniture and partitions may be excluded. **Option 2. Simulation: Illuminance Calculations (1–2 points):**Demonstrate through computer modeling that illuminance levels will be between 300 lux and 3,000 lux for 9 a.m. and 3 p.m., both on a clear-sky day at the equinox, for the floor area indicated in Table 2 (75%=1 point, 90%=2 points) Use regularly occupied floor area. Healthcare projects should use the perimeter area determined under EQ Credit Quality Views. **Option 3. Measurement (2-3 points):** Achieve illuminance levels between 300 lux and 3,000 lux. Points are awarded according to percentage: 75%=2 points, 90%=3 poir	2	d	Lighting Designer/Fong & Chan	
		2		IEQc8	**Quality views** (2) Achieve a direct line of sight to the outdoors via vision glazing for 75% of all regularly occupied floor area. View glazing in the contributing area must provide a clear image of the exterior, not obstructed by frits, fibers, patterned glazing, or added tints that distort color balance. Additionally, 75% of all regularly occupied floor area must have at least two of the following four kinds of views: multiple lines of sight to vision glazing in different directions at least 90 degrees apart; views that include at least two of the following: (1) flora, fauna, or sky; (2) movement; and (3) objects at least 25 feet from the exterior of the glazing; unobstructed views located within the distance of three times the head height of the vision glazing; and views with a view factor of 3 or greater, as defined in "Windows and Offices; A Study of Office Worker Performance and the Indoor Environment. "Include in the calculations any permanent interior obstructions (e.g., lab hoods, fixed partitions, demountable opaque full- or partial-height partitions). Movable furniture and partitions may be excluded. Views into interior atria may be used to meet up to 30% of the required area. - For inpatient units (IPUs), meet the requirements above (1 point). - For other areas, configure the building floor plates such that the floor area within 15 feet (4.5 meters) of the perimeter exceeds the perimeter area requirement (Table 1), and meet the requirements above for the perimeter area (1 point).	2	d	Fong & Chan	
1	1			IEQc9	**Acoustic performance** (2) Design the facility to meet or exceed the sound and vibration criteria outlined below, which are adapted from the 2010 FGI Guidelines for Design and Construction of Health Care Facilities ("20 FGI Guidelines") and the reference document on which it is based, Sound and Vibration Design Guidelines for Health Care Facilities ("2010 SV Guidelines"). **Option 1. Speech Privacy, Sound Isolation, and Background Noise**(1 point) **Speech Privacy and Sound Isolation** Design the facility to meet the criteria outlined in the sections of Table 1.2-3, Design Criteria for Minimum Sound Isolation Performance between Enclosed Rooms, and Table 1.2-4 Speech Privacy for Enclosed Room and Open-Plan Spaces (in the 2010 FGI Guidelines and 2010 SV Guidelines). Calculate or measure sound isolation and speech privacy descriptors achieved for representative adjacencies as necessary to confirm compliance with the criteria in the 2010 FGI Guidelines, Sections1.2-6.1.5 and 1.2-6.1.6, and the 2010 SV Guidelines (including the appendix). **Background Noise:** Design the facility to meet the 2010 FGI Guidelines, Table 1.2-2 Minimum-Maximum Design Criteria for Noise in representative interior rooms and spaces. Calculate or measure sound levels in representative rooms and spaces of each type to confirm compliance with criteria in the above-referenced table using a sound level meter that conforms to ANSI S1.4 for type 1 (precision) or type 2 (general purpose) sound measurement instrumentation. For spaces not listed in Table 1.2-2, refer to ASHRAE 2011 Handbook, Chapter 48, Sound and Vibration Control, Table 1. **Option 2. Acoustical Finishes and Site Exterior Noise**(1 point) **Acoustical Finishes** Specify materials, products systems installation details, and other design features to meet the 2010 FGI Guidelines, Table 1.2-1, Design Room Sound Absorption Coefficients (including associated sections of the appendix) and the 2010 SV Guidelines. Calculate or measure the average sound absorption coefficients for representative unoccupied rooms of each type in the building to confirm conformance with the requirements. **Site Exterior Noise**: Comply with the 2010 FGI Guidelines as specifie	2	d	Fong & Chan	Discuss with team at kick-off

Yes	Maybe?+	Maybe?-	No			Points		Responsible Party	Status
6	**0**	**0**	**0**	**Innovation & Design Process (ID)** - **6 Points Available**		**6**			
1				IDc1.1	**Innovation in Design: Green Building Education Program**	1	d/c	Arup/Owner	
1				IDc1.2	**Innovation in Design: Low Mercury Lighting**	1	d/c	Arup/Lighting Designer/Owner	
1				IDc1.3	**Innovation in Design: tbd**	1	d/c	Arup/tbd	
1				IDc1.4	**Innovation in Design: tbd**	1	d/c	Arup/tbd	
1				IDc1.5	**Pilot credit: tbd**	1	d/c	Arup/tbd	
1				IDc2	**LEED® Accredited Professional** (1) At least one principal participant of the project team must be a LEED Accredited Professional (AP) with a specialty appropriate for the project	1	d/c	Arup	

Yes	Maybe?+	Maybe?-	No			Points		Responsible Party	Status
3	**1**	**0**	**0**	**Regional Priority (RP)** - **4 Points Available**		**4**			
1				RPc1.1	**Regional Priority**: MRc3 BPDO - Sourcing of Raw Materials must achieve 1 point	1	d/c	see above	
1				RPc1,2	**Regional Priority**: SSc4 Rainwater Management must achieve 3 points	1	d/c	see above	
1				RPc1.3	**Regional Priority**: WEc1 Outdoor Water Use Reduction must achieve 1 points	1	d/c	see above	
	1			RPc1.4	**Regional Priority**: WEc2 Indoor Water Use Reduction must achieve 4 points	1	d/c	see above	
				Alt.	**Regional Priority**: EAc2 Optimize Energy Performance must achieve 10 points	0	d/c	see above	
				Alt.	**Regional Priority**: LTc5 Access to Quality Transit must achieve 2 points	0	d/c	see above	

LEED v4 for BD+C: Healthcare

Project Checklist

Project Name: California Northstate University Hospital, Elk Grove, CA
Date: 6/18/2019

Y	?	N			
Y			Prereq	Integrative Project Planning and Design	Required
1			Credit	Integrative Process	1

4	1	4	Location and Transportation		9
		9	Credit	LEED for Neighborhood Development Location	9
1			Credit	Sensitive Land Protection	1
		2	Credit	High Priority Site	2
1			Credit	Surrounding Density and Diverse Uses	1
		2	Credit	Access to Quality Transit	2
1			Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

4	5		Sustainable Sites		9
Y			Prereq	Construction Activity Pollution Prevention	Required
Y			Prereq	Environmental Site Assessment	Required
1			Credit	Site Assessment	1
	1		Credit	Site Development - Protect or Restore Habitat	1
	1		Credit	Open Space	1
1	1		Credit	Rainwater Management	2
1			Credit	Heat Island Reduction	1
1			Credit	Light Pollution Reduction	1
	1		Credit	Places of Respite	1
	1		Credit	Direct Exterior Access	1

4	7		Water Efficiency		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1			Credit	Outdoor Water Use Reduction	1
2	5		Credit	Indoor Water Use Reduction	7
	2		Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

8	13	14	Energy and Atmosphere		35
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
3	1	2	Credit	Enhanced Commissioning	6
3	7	10	Credit	Optimize Energy Performance	20
1			Credit	Advanced Energy Metering	1
		2	Credit	Demand Response	2
	3		Credit	Renewable Energy Production	3
1			Credit	Enhanced Refrigerant Management	1
	2		Credit	Green Power and Carbon Offsets	2

9	8	2	Materials and Resources		19
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
Y			Prereq	PBT Source Reduction- Mercury	Required
1	2	2	Credit	Building Life-Cycle Impact Reduction	5
1	1		Credit	BPDO - Environmental Product Declarations	2
1	1		Credit	BPDO - Sourcing of Raw Materials	2
1	1		Credit	BPDO - Material Ingredients	2
1			Credit	PBT Source Reduction- Mercury	1
2			Credit	PBT Source Reduction- Lead, Cadmium, and Copper	2
1	1		Credit	Furniture and Medical Furnishings	2
	1		Credit	Design for Flexibility	1
1	1		Credit	Construction and Demolition Waste Management	2

11	5		Indoor Environmental Quality		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
2			Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1			Credit	Interior Lighting	1
	2		Credit	Daylight	2
	2		Credit	Quality Views	2
1	1		Credit	Acoustic Performance	2

6			Innovation		6
5			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

3	1		Regional Priority		4
1			Credit	Regional Priority: BPDO - Sourcing of Raw Materials (1)	1
1			Credit	Regional Priority: Rainwater Management (3)	1
1			Credit	Regional Priority: Outdoor Water Use Reduction (1)	1
	1		Credit	Regional Priority: Indoor Water Use Reduction (4)	1
				Alternate: Optimize Energy Performance (10)	
				Alternate: Access to Quality Transit (2)	

50	40	20	TOTALS	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

Attachment B

Construction Emissions Modeling

Summary of Construction GHG Emissions

Construction

Phase	Year	Off-Road Equipment	On-Road Travel	MTCO2e
1	2020	607	453	1,267
1	2021	417	1,394	1,810
1	2022	30	1,215	1,245
2A	2023	36	7	43
2A	2024	297	223	520
2B	2024	164	615	779
2B	2025	56	112	168
2C	2023	35	7	43
2C	2024	247	429	676
2C	2025	14	335	349
2D	2025	223	49	271
3A	2026	39	8	47
3A	2027	214	195	409
3B	2027	76	15	91
3B	2028	141	180	321
3C	2029	134	98	232
Total		**2,732**	**5,334**	**8,273**

Total by Year				
	Year	Off-Road Equipment	On-Road Travel	MTCO2e
	2020	607	453	1,267
	2021	417	1,394	1,810
	2022	30	1,215	1,245
	2023	71	15	86
	2024	709	1,267	1,976
	2025	292	495	787
	2026	39	8	47
	2027	290	210	500
	2028	141	180	321
	2029	134	98	232
Total				**8,273**

Construction Modeling Inputs

Phase 1 - Hospital	CalEEMod Land Use	Land Use Size	Unit
Hospital	Hospital	596,790	sq ft
		250	beds
Hospital Parking Garage	Enclosed Parking Garage with Elevator	230	spaces
		33,290	sq ft
Central Plant	General Light Industry	22,850	sq ft
Central Plant Parking Garage	Enclosed Parking Garage with Elevator	80	spaces
		14,650	sq ft
Mechanical Yard	Parking Lot	15,500	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation/Demolition	5/1/2020	12/31/2020	20	8	37,199	-	Demolition of State Farm/CNU Psychology College, Dreaming Dog Brewery, Stone Bake Oven/PK Pizza/++, Flaming Grill/Miyabi/Marie's
Excavation	7/1/2020	10/15/2020	30	25	0	45,000	
Foundation	10/16/2020	2/28/2021	75	125	0	-	
Structural Framing	12/1/2020	6/30/2021	50	30	0	-	
Exterior Enclosure/Arch Coating	5/1/2021	10/31/2021	35	20	0	-	
Hospital Interior	5/1/2021	11/30/2022	450	100	0	-	

Phase 2A - Retail/Parking Garage 1	CalEEMod Land Use	Land Use Size	Unit
Parking Garage 1	Unenclosed Parking Garage with Elevator	205,600	sq ft
		1,500	spaces
Retail	Strip Mall	51400	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation/Demolition	12/1/2023	1/15/2024	20	8	83,201		Demolition of All-Data building and Stonelake Animal Hospital/Results Transformation
Excavation	1/31/2024	3/15/2024	20	15	0	22,844	51,400 SF – 12 Ft deep
Foundation	3/16/2024	5/15/2024	50	30	0	0	
Structural Framing	5/16/2024	7/15/2024	30	20	0	0	
Exterior Enclosure/Arch Coating	7/16/2024	9/15/2024	20	20	0	0	
Interior	9/16/2024	12/31/2024	100	20	0	0	

Phase 2B - Patient Tower 2	CalEEMod Land Use	Land Use Size	Unit
Hospital	Hospital	103,210	sq ft
		150	beds

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	7/1/2024	8/15/2024	20	8	0	0	
Structural Framing	8/16/2024	1/15/2025	45	30	0	0	
Exterior Enclosure/Arch Coating	1/16/2025	3/31/2025	30	20	0	0	
Interior	4/1/2024	1/31/2025	100	60	0	0	

Phase 2C - MOB/Out-Patient Clinic	CalEEMod Land Use	Land Use Size	Unit
Medical Office Building	Medical Office Building	100,000	sq ft
Out-Patient Clinic	Hospital	134,800	sq ft
Parking Garage	Enclosed Parking Garage with Elevator	170	spaces
		33,700	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	12/1/2023	1/15/2024	20	8	0	0	
Excavation	1/16/2024	2/15/2024	20	15	0	21,219	33,700 SF – 17 Ft deep
Foundation	2/16/2024	4/15/2024	50	30	0	0	
Structural Framing	4/16/2024	7/15/2024	30	20	0	0	
Exterior Enclosure/Arch Coating	7/16/2024	10/15/2024	30	20	0	0	
Interior	10/16/2024	5/30/2025	80	20	0	0	

Phase 2D - Central Quad Landscape Area	CalEEMod Land Use	Land Use Size	Unit
Landscape Area	City Park	140,000	sq ft
		3.2139	acre

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	5/1/2025	10/31/2025	30	8	0	0	

Phase 3A - Retail/Parking Garage 2	CalEEMod Land Use	Land Use Size	Unit
Parking Garage 2	Unenclosed Parking Garage with Elevator	165,600	sq ft
		1,000	spaces
Retail	Strip Mall	41,400	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation/Demolition	12/1/2026	1/15/2027	20	8	14,546	0	
Excavation	1/16/2027	2/15/2027	20	15	0	18,400	41,400 SF – 12 Ft deep
Foundation	2/16/2027	4/15/2027	50	30	0	0	
Structural Framing	4/16/2027	6/15/2027	30	20	0	0	
Exterior Enclosure/Arch Coating	6/16/2027	8/15/2027	20	20	0	0	
Interior	8/16/2027	11/30/2027	30	20	0	0	

Phase 3B - Dormitory/Admin Support Building	CalEEMod Land Use	Land Use Size	Unit
Dormitory	Apartments Mid-Rise	96,000	sq ft
		150	dwelling units
Admin Support	General Office Building	24,000	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	11/1/2027	1/15/2028	20	8	0	0	
Foundation	1/16/2028	2/15/2028	50	30	0	0	
Structural Framing	2/16/2028	3/31/2028	30	20	0	0	
Exterior Enclosure/Arch Coating	6/1/2028	8/15/2028	20	20	0	0	
Interior	8/16/2028	12/31/2028	60	20	0	0	

Phase 3C - Parking /Sport Building	CalEEMod Land Use	Land Use Size	Unit
Parking Structure	Enclosed Parking Garage with Elevator	70,000	sq ft
		200	spaces

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	1/1/2029	2/15/2029	20	10	0	0	
Excavation	2/16/2029	4/15/2029	20	10	0	15,556	35,000 SF – 12 Ft deep
Foundation	4/16/2029	6/15/2029	30	20	0	0	
Structural Framing	6/16/2029	7/15/2029	20	20	0	0	
Exterior Enclosure/Arch Coating	7/16/2029	9/15/2029	20	5	0	0	
Interior	9/16/2029	10/31/2029	20	5	0	0	

Vegetation Change Calculation

	Number of trees	MTCO2e
Trees Removed for Construction	292	207

Notes

Assumed all trees removed are fully mature

Assumed new planted trees are miscellaneous mix of species

Source: CalEEMod 2016.3.2

Proposed Project Phasing and Land Uses

PHASE	ADDRESS	APN	PARCEL SIZE (Sq Ft)	EXISTING						DEMOLISH	PROPOSED					
				USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)		USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)
Phase 1	2501 West Taron Court	132-2480-004	39,890	Dreaming Dog Brewery	6,449	6,449	1	0	1	Y	CNU Med Center (Hospital Podium/West Tower w/Helistop)	85,000	596,790	13	1	14
	2505 West Taron Court	132-2480-001	52,238	Stone Bake Oven/PK Pizza/++	13,598	13,598	1	0	1	Y						
	No Address	132-2480-005	95,323	Parking Lot	-	-	0	0	0	Y						
	2509/2513 West Taron Court	132-2480-002	50,825	Flaming Grill/Miyabi/Marie's	12,000	12,000	1	0	1	Y						
	2521 West Taron Court	132-2480-008	26,040	Stonelake Animal Hospital/Results Transformation	7,201	7,201	1	0	1	N	Stonelake Animal Hospital/Results Transformation	7,201	7,201	1	0	1
	2525 West Taron Court	132-2480-003	27,606	State Farm/CNU Psychology College	5,152	5,152	1	0	1	Y	Surface Parking Lot	0	0	0	0	0
	2615 West Taron Court	132-2480-011	28,886	Vacant Bldg	7,354	7,354	1	0	1	N	Dreaming Dog Brewery	7,354	7,354	1	0	1
	2619 West Taron Court	132-2480-010	29,083	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1	N	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1
	No Address	132-2160-002	35,511	Vacant Land	-	-	0	0	0	N	Vacant Land	0	0	0	0	0
	9650 West Taron Drive	132-2160-001	374,256	All-Data	76,000	76,000	1	0	1	N	All-Data	76,000	76,000	1	0	1
					14,650	22,000	2	0	2	N	Central Plant	14,650	37,500	2	1	3
					15,500	15,500	1	0	1	N	Mechanical Yard	15,500	15,500	1	0	1
	9700 West Taron Drive	132-0460-076	303,200	CNU School	54,900	109,800	2	0	2	N	CNU School	54,900	109,800	2	0	2

Proposed Project Phasing and Land Uses

PHASE	ADDRESS	APN	PARCEL SIZE (Sq Ft)	EXISTING						DEMOLISH	PROPOSED					
				USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)		USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)
Phase 2	2501 West Taron Court	132-2480-004	39,890	CNU Med Center (Hospital Podium/West Tower w/Helistop)	85,000	566,500	13	1	14	N	CNU Med Center (Hospital Podium/West Tower w/Helistop/East Tower)	85,000	733,290	13	1	14
	2505 West Taron Court	132-2480-001	52,238													
	No Address	132-2480-005	95,323													
	2509/2513 West Taron Court	132-2480-002	50,825													
	2521 West Taron Court	132-2480-008	26,040	Stonelake Animal Hospital/Results Transformation	7,201	7,201	1	0	1	Y	Surface Parking Lot	0	0	0	0	0
	2525 West Taron Court	132-2480-003	27,606	Surface Parking Lot	-	-	0	0	0	Y	Out-Patient Clinic	33,700	168,500	4	1	5
	2615 West Taron Court	132-2480-011	28,886	Dreaming Dog Brewery	7,354	7,354	1	0	1	N	Dreaming Dog Brewery	7,354	7,354	1	0	1
	2619 West Taron Court	132-2480-010	29,083	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1	N	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1
	9650 West Taron Drive	132-2160-001	374256	Central Plant	14,650	22,000	2	0	2	N	Central Plant	14,650	37,500	2	1	3
				Mechanical Yard	15,500	15,500	1	0	1	N	Mechanical Yard	15,500	15,500	1	0	1
				All-Data	76,000	76,000	1	0	1	Y	Medical Office Building	20,000	100,000	5	0	5
											Open Space	0	0	0	0	0
											Parking Garage/Retail South	51,400	257,000	4	1	5
	9700 West Taron Drive	132-0460-076	303,200	CNU School	54,900	109,800	2	0	2	N	CNU School	54,900	109,800	2	0	2

Proposed Project Phasing and Land Uses

PHASE	ADDRESS	APN	PARCEL SIZE (Sq Ft)	EXISTING						DEMOLISH	PROPOSED					
				USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)		USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)
Phase 3	2501 West Taron Court	132-2480-004	39,890	CNU Med Center (Hospital Podium/West Tower w/Helistop/East Tower)	85,000	733,290	13	1	14	N	CNU Med Center (Hospital Podium/West Tower w/Helistop/East Tower)	85,000	733,290	13	1	14
	2505 West Taron Court	132-2480-001	52,238													
	No Address	132-2480-005	95,323													
	2509/2513 West Taron Court	132-2480-002	50,825													
	2521 West Taron Court	132-2480-008	26,040	Surface Parking Lot	-	-	0	0	0	N	Surface Parking Lot	0	0	0	0	0
	2525 West Taron Court	132-2480-003	27,606	Out-Patient Clinic	33,700	168,500	4	1	5	N	Out-Patient Clinic	33,700	168,500	4	1	5
	2615 West Taron Court	132-2480-011	28,886	Dreaming Dog Brewery	7,354	7,354	1	0	1	Y	Parking Garage/Retail North	41,400	207,000	4	1	5
	2619 West Taron Court	132-2480-010	29,083	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1	Y						
	9650 West Taron Drive	132-2160-001	374,256	Medical Office Building/Open Space	20,000	100,000	5	0	5	N	Medical Office Building/Open Space	20,000	100,000	5	0	5
				Open Space	-	-	0	0	0	N	Open Space	0	0	0	0	0
				Central Plant	14,650	22,000	2	0	2	N	Central Plant	14,650	37,500	2	1	3
				Mechanical Yard	15,500	15,500	1	0	1	N	Mechanical Yard	15,500	15,500	1	0	1
	9700 West Taron Drive	132-0460-076	303,200	CNU School	54,900	109,800	2	0	2	N	CNU School	54,900	109,800	2	0	2
				CNU School Surface Parking	-	-	0	0	0	Y	Dormitory/Admin Support	24,000	120,000	5	0	5
											Student Parking/Sport Courts	35,000	70,000	2*	1	2

* = 1 STORY WITH ROOFTOP SPORT COURTS

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	596.79	1000sqft	13.70	596,790.00	0
General Light Industry	22.85	1000sqft	0.52	22,850.00	0
Enclosed Parking with Elevator	230.00	Space	2.07	33,290.00	0
Enclosed Parking with Elevator	80.00	Space	0.72	14,650.00	0
Parking Lot	15.50	1000sqft	0.36	15,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2022
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading - 45,000 CY exported under excavation phase

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	309820	0
tblAreaCoating	Area_Nonresidential_Interior	929460	0
tblAreaCoating	Area_Parking	3806	0
tblConstructionPhase	NumDays	20.00	175.00
tblConstructionPhase	NumDays	10.00	77.00
tblConstructionPhase	NumDays	30.00	96.00
tblConstructionPhase	NumDays	300.00	152.00
tblConstructionPhase	NumDays	20.00	130.00
tblConstructionPhase	NumDays	20.00	413.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	4.57	0.00
tblEnergyUse	LightingElect	4.98	0.00

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tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	7.20	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24NG	12.42	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	3.41	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24NG	23.39	0.00
tblEnergyUse	T24NG	57.91	0.00
tblGrading	AcresOfGrading	240.00	75.00
tblGrading	MaterialExported	0.00	45,000.00
tblLandUse	LandUseSquareFeet	92,000.00	33,290.00
tblLandUse	LandUseSquareFeet	32,000.00	14,650.00
tblSolidWaste	SolidWasteGenerationRate	28.33	0.00
tblSolidWaste	SolidWasteGenerationRate	6,445.33	0.00
tblTripsAndVMT	HaulingTripNumber	169.00	0.00
tblTripsAndVMT	HaulingTripNumber	5,625.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	25.00

tblTripsAndVMT	VendorTripNumber	0.00	125.00
tblTripsAndVMT	VendorTripNumber	112.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	100.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblTripsAndVMT	WorkerTripNumber	20.00	75.00
tblTripsAndVMT	WorkerTripNumber	227.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	35.00
tblTripsAndVMT	WorkerTripNumber	45.00	450.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblWater	IndoorWaterUseRate	5,284,062.50	0.00
tblWater	IndoorWaterUseRate	74,885,530.01	0.00
tblWater	OutdoorWaterUseRate	14,263,910.48	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2020	0.6560	7.7177	4.3112	0.0116	1.0572	0.3083	1.3655	0.5173	0.2855	0.8028	0.0000	1,055.3404	1,055.3404	0.2058	0.0000	1,060.4854
2021	1.7948	6.9927	4.8657	0.0193	0.7495	0.1704	0.9198	0.2302	0.1591	0.3893	0.0000	1,805.4865	1,805.4865	0.1869	0.0000	1,810.1598
2022	1.9372	3.1536	2.1487	0.0131	0.5940	0.0217	0.6156	0.1597	0.0210	0.1807	0.0000	1,243.9729	1,243.9729	0.0609	0.0000	1,245.4960
Maximum	**1.9372**	**7.7177**	**4.8657**	**0.0193**	**1.0572**	**0.3083**	**1.3655**	**0.5173**	**0.2855**	**0.8028**	**0.0000**	**1,805.4865**	**1,805.4865**	**0.2058**	**0.0000**	**1,810.1598**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2020	0.6560	7.7177	4.3112	0.0116	1.0572	0.3083	1.3655	0.5173	0.2855	0.8028	0.0000	1,055.3397	1,055.3397	0.2058	0.0000	1,060.4847
2021	1.7948	6.9927	4.8657	0.0193	0.7495	0.1704	0.9198	0.2302	0.1591	0.3893	0.0000	1,805.4860	1,805.4860	0.1869	0.0000	1,810.1593
2022	1.9372	3.1536	2.1487	0.0131	0.5940	0.0217	0.6156	0.1597	0.0210	0.1807	0.0000	1,243.9729	1,243.9729	0.0609	0.0000	1,245.4959
Maximum	**1.9372**	**7.7177**	**4.8657**	**0.0193**	**1.0572**	**0.3083**	**1.3655**	**0.5173**	**0.2855**	**0.8028**	**0.0000**	**1,805.4860**	**1,805.4860**	**0.2058**	**0.0000**	**1,810.1593**

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	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2020**	**7-31-2020**	1.8748	1.8748
2	**8-1-2020**	**10-31-2020**	3.2695	3.2695
3	**11-1-2020**	**1-31-2021**	4.4478	4.4478
4	**2-1-2021**	**4-30-2021**	1.6709	1.6709
5	**5-1-2021**	**7-31-2021**	2.7114	2.7114
6	**8-1-2021**	**10-31-2021**	2.1123	2.1123
7	**11-1-2021**	**1-31-2022**	1.4733	1.4733
8	**2-1-2022**	**4-30-2022**	1.3596	1.3596
9	**5-1-2022**	**7-31-2022**	1.3851	1.3851
10	**8-1-2022**	**9-30-2022**	0.9184	0.9184
		Highest	4.4478	4.4478

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	2.4252	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.4252**	**1.1000e-004**	**0.0121**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0235**	**0.0235**	**6.0000e-005**	**0.0000**	**0.0250**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	2.4252	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.4252**	**1.1000e-004**	**0.0121**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0235**	**0.0235**	**6.0000e-005**	**0.0000**	**0.0250**

	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	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

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2020	12/31/2020	5	175	
2	Excavation	Site Preparation	7/1/2020	10/15/2020	5	77	
3	Foundation	Grading	10/16/2020	2/26/2021	5	96	
4	Structural Framing	Building Construction	12/1/2020	6/30/2021	5	152	
5	Exterior Enclosure	Paving	5/1/2021	10/29/2021	5	130	
6	Hospital Interior	Architectural Coating	5/1/2021	11/30/2022	5	413	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.15

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 929,460; Non-Residential Outdoor: 309,820; Striped Parking Area: 3,806 (Architectural Coating – sqft)

OffRoad Equipment

Phase 1 Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Excavation	Rubber Tired Dozers	3	8.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Foundation	Excavators	2	8.00	158	0.38
Foundation	Graders	1	8.00	187	0.41
Foundation	Rubber Tired Dozers	1	8.00	247	0.40
Foundation	Scrapers	2	8.00	367	0.48
Foundation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structural Framing	Welders	1	8.00	46	0.45
Exterior Enclosure	Pavers	2	8.00	130	0.42
Exterior Enclosure	Paving Equipment	2	8.00	132	0.36
Exterior Enclosure	Rollers	2	8.00	80	0.38
Hospital Interior	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase 1 Construction - Sacramento County, Annual

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
Demolition	6	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	7	30.00	25.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	8	75.00	125.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	50.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosure	6	35.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Hospital Interior	1	450.00	100.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

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	tons/yr										MT/yr					
Fugitive Dust					0.0191	0.0000	0.0191	2.8900e-003	0.0000	2.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2898	2.9051	1.9034	3.4000e-003		0.1451	0.1451		0.1349	0.1349	0.0000	297.4878	297.4878	0.0840	0.0000	299.5873
Total	**0.2898**	**2.9051**	**1.9034**	**3.4000e-003**	**0.0191**	**0.1451**	**0.1642**	**2.8900e-003**	**0.1349**	**0.1378**	**0.0000**	**297.4878**	**297.4878**	**0.0840**	**0.0000**	**299.5873**

3.2 Demolition - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.3800e-003	0.2011	0.0455	5.5000e-004	0.0118	7.2000e-004	0.0125	3.2400e-003	6.9000e-004	3.9300e-003	0.0000	53.5587	53.5587	3.1100e-003	0.0000	53.6366
Worker	6.5100e-003	4.4200e-003	0.0484	1.3000e-004	0.0129	9.0000e-005	0.0130	3.4200e-003	9.0000e-005	3.5000e-003	0.0000	11.3879	11.3879	3.2000e-004	0.0000	11.3959
Total	**0.0119**	**0.2055**	**0.0939**	**6.8000e-004**	**0.0247**	**8.1000e-004**	**0.0255**	**6.6600e-003**	**7.8000e-004**	**7.4300e-003**	**0.0000**	**64.9466**	**64.9466**	**3.4300e-003**	**0.0000**	**65.0325**

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	tons/yr										MT/yr					
Fugitive Dust					0.0191	0.0000	0.0191	2.8900e-003	0.0000	2.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2898	2.9051	1.9034	3.4000e-003		0.1451	0.1451		0.1349	0.1349	0.0000	297.4875	297.4875	0.0840	0.0000	299.5869
Total	**0.2898**	**2.9051**	**1.9034**	**3.4000e-003**	**0.0191**	**0.1451**	**0.1642**	**2.8900e-003**	**0.1349**	**0.1378**	**0.0000**	**297.4875**	**297.4875**	**0.0840**	**0.0000**	**299.5869**

3.2 Demolition - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.3800e-003	0.2011	0.0455	5.5000e-004	0.0118	7.2000e-004	0.0125	3.2400e-003	6.9000e-004	3.9300e-003	0.0000	53.5587	53.5587	3.1100e-003	0.0000	53.6366
Worker	6.5100e-003	4.4200e-003	0.0484	1.3000e-004	0.0129	9.0000e-005	0.0130	3.4200e-003	9.0000e-005	3.5000e-003	0.0000	11.3879	11.3879	3.2000e-004	0.0000	11.3959
Total	**0.0119**	**0.2055**	**0.0939**	**6.8000e-004**	**0.0247**	**8.1000e-004**	**0.0255**	**6.6600e-003**	**7.8000e-004**	**7.4300e-003**	**0.0000**	**64.9466**	**64.9466**	**3.4300e-003**	**0.0000**	**65.0325**

3.3 Excavation - 2020

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	tons/yr										MT/yr					
Fugitive Dust					0.7002	0.0000	0.7002	0.3830	0.0000	0.3830	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1569	1.6331	0.8283	1.4600e-003		0.0846	0.0846		0.0778	0.0778	0.0000	128.7081	128.7081	0.0416	0.0000	129.7488
Total	**0.1569**	**1.6331**	**0.8283**	**1.4600e-003**	**0.7002**	**0.0846**	**0.7848**	**0.3830**	**0.0778**	**0.4609**	**0.0000**	**128.7081**	**128.7081**	**0.0416**	**0.0000**	**129.7488**

3.3 Excavation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.4000e-003	0.2766	0.0625	7.6000e-004	0.0162	9.9000e-004	0.0172	4.4600e-003	9.5000e-004	5.4100e-003	0.0000	73.6433	73.6433	4.2800e-003	0.0000	73.7503
Worker	4.3000e-003	2.9200e-003	0.0320	8.0000e-005	8.4800e-003	6.0000e-005	8.5400e-003	2.2600e-003	6.0000e-005	2.3100e-003	0.0000	7.5160	7.5160	2.1000e-004	0.0000	7.5213
Total	**0.0117**	**0.2795**	**0.0945**	**8.4000e-004**	**0.0247**	**1.0500e-003**	**0.0258**	**6.7200e-003**	**1.0100e-003**	**7.7200e-003**	**0.0000**	**81.1593**	**81.1593**	**4.4900e-003**	**0.0000**	**81.2716**

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	tons/yr										MT/yr					
Fugitive Dust					0.7002	0.0000	0.7002	0.3830	0.0000	0.3830	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1569	1.6331	0.8283	1.4600e-003		0.0846	0.0846		0.0778	0.0778	0.0000	128.7080	128.7080	0.0416	0.0000	129.7486
Total	**0.1569**	**1.6331**	**0.8283**	**1.4600e-003**	**0.7002**	**0.0846**	**0.7848**	**0.3830**	**0.0778**	**0.4609**	**0.0000**	**128.7080**	**128.7080**	**0.0416**	**0.0000**	**129.7486**

3.3 Excavation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.4000e-003	0.2766	0.0625	7.6000e-004	0.0162	9.9000e-004	0.0172	4.4600e-003	9.5000e-004	5.4100e-003	0.0000	73.6433	73.6433	4.2800e-003	0.0000	73.7503
Worker	4.3000e-003	2.9200e-003	0.0320	8.0000e-005	8.4800e-003	6.0000e-005	8.5400e-003	2.2600e-003	6.0000e-005	2.3100e-003	0.0000	7.5160	7.5160	2.1000e-004	0.0000	7.5213
Total	**0.0117**	**0.2795**	**0.0945**	**8.4000e-004**	**0.0247**	**1.0500e-003**	**0.0258**	**6.7200e-003**	**1.0100e-003**	**7.7200e-003**	**0.0000**	**81.1593**	**81.1593**	**4.4900e-003**	**0.0000**	**81.2716**

3.4 Foundation - 2020

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	tons/yr										MT/yr					
Fugitive Dust					0.2054	0.0000	0.2054	0.0953	0.0000	0.0953	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1224	1.3804	0.8789	1.7100e-003		0.0598	0.0598		0.0550	0.0550	0.0000	149.8318	149.8318	0.0485	0.0000	151.0433
Total	**0.1224**	**1.3804**	**0.8789**	**1.7100e-003**	**0.2054**	**0.0598**	**0.2652**	**0.0953**	**0.0550**	**0.1503**	**0.0000**	**149.8318**	**149.8318**	**0.0485**	**0.0000**	**151.0433**

3.4 Foundation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0264	0.9877	0.2232	2.7100e-003	0.0580	3.5300e-003	0.0615	0.0159	3.3800e-003	0.0193	0.0000	263.0117	263.0117	0.0153	0.0000	263.3939
Worker	7.6800e-003	5.2100e-003	0.0571	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003	0.0000	13.4214	13.4214	3.8000e-004	0.0000	13.4309
Total	**0.0341**	**0.9929**	**0.2803**	**2.8600e-003**	**0.0732**	**3.6400e-003**	**0.0768**	**0.0200**	**3.4800e-003**	**0.0234**	**0.0000**	**276.4331**	**276.4331**	**0.0157**	**0.0000**	**276.8248**

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	tons/yr										MT/yr					
Fugitive Dust					0.2054	0.0000	0.2054	0.0953	0.0000	0.0953	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1224	1.3804	0.8789	1.7100e-003		0.0598	0.0598		0.0550	0.0550	0.0000	149.8316	149.8316	0.0485	0.0000	151.0431
Total	**0.1224**	**1.3804**	**0.8789**	**1.7100e-003**	**0.2054**	**0.0598**	**0.2652**	**0.0953**	**0.0550**	**0.1503**	**0.0000**	**149.8316**	**149.8316**	**0.0485**	**0.0000**	**151.0431**

3.4 Foundation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0264	0.9877	0.2232	2.7100e-003	0.0580	3.5300e-003	0.0615	0.0159	3.3800e-003	0.0193	0.0000	263.0117	263.0117	0.0153	0.0000	263.3939
Worker	7.6800e-003	5.2100e-003	0.0571	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003	0.0000	13.4214	13.4214	3.8000e-004	0.0000	13.4309
Total	**0.0341**	**0.9929**	**0.2803**	**2.8600e-003**	**0.0732**	**3.6400e-003**	**0.0768**	**0.0200**	**3.4800e-003**	**0.0234**	**0.0000**	**276.4331**	**276.4331**	**0.0157**	**0.0000**	**276.8248**

3.4 Foundation - 2021

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	tons/yr										MT/yr					
Fugitive Dust					0.1632	0.0000	0.1632	0.0722	0.0000	0.0722	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0859	0.9512	0.6330	1.2700e-003		0.0407	0.0407		0.0374	0.0374	0.0000	111.7147	111.7147	0.0361	0.0000	112.6180
Total	**0.0859**	**0.9512**	**0.6330**	**1.2700e-003**	**0.1632**	**0.0407**	**0.2039**	**0.0722**	**0.0374**	**0.1096**	**0.0000**	**111.7147**	**111.7147**	**0.0361**	**0.0000**	**112.6180**

3.4 Foundation - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0183	0.6762	0.1546	1.9900e-003	0.0432	2.3200e-003	0.0455	0.0119	2.2200e-003	0.0141	0.0000	193.7852	193.7852	0.0112	0.0000	194.0647
Worker	5.3200e-003	3.4800e-003	0.0389	1.1000e-004	0.0113	8.0000e-005	0.0114	3.0000e-003	7.0000e-005	3.0800e-003	0.0000	9.6644	9.6644	2.5000e-004	0.0000	9.6707
Total	**0.0236**	**0.6797**	**0.1935**	**2.1000e-003**	**0.0545**	**2.4000e-003**	**0.0569**	**0.0149**	**2.2900e-003**	**0.0172**	**0.0000**	**203.4496**	**203.4496**	**0.0114**	**0.0000**	**203.7355**

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	tons/yr										MT/yr					
Fugitive Dust					0.1632	0.0000	0.1632	0.0722	0.0000	0.0722	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0859	0.9512	0.6330	1.2700e-003		0.0407	0.0407		0.0374	0.0374	0.0000	111.7146	111.7146	0.0361	0.0000	112.6179
Total	**0.0859**	**0.9512**	**0.6330**	**1.2700e-003**	**0.1632**	**0.0407**	**0.2039**	**0.0722**	**0.0374**	**0.1096**	**0.0000**	**111.7146**	**111.7146**	**0.0361**	**0.0000**	**112.6179**

3.4 Foundation - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0183	0.6762	0.1546	1.9900e-003	0.0432	2.3200e-003	0.0455	0.0119	2.2200e-003	0.0141	0.0000	193.7852	193.7852	0.0112	0.0000	194.0647
Worker	5.3200e-003	3.4800e-003	0.0389	1.1000e-004	0.0113	8.0000e-005	0.0114	3.0000e-003	7.0000e-005	3.0800e-003	0.0000	9.6644	9.6644	2.5000e-004	0.0000	9.6707
Total	**0.0236**	**0.6797**	**0.1935**	**2.1000e-003**	**0.0545**	**2.4000e-003**	**0.0569**	**0.0149**	**2.2900e-003**	**0.0172**	**0.0000**	**203.4496**	**203.4496**	**0.0114**	**0.0000**	**203.7355**

3.5 Structural Framing - 2020

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	tons/yr										MT/yr					
Off-Road	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6352	26.6352	6.5000e-003	0.0000	26.7976
Total	**0.0244**	**0.2206**	**0.1938**	**3.1000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**26.6352**	**26.6352**	**6.5000e-003**	**0.0000**	**26.7976**

3.5 Structural Framing - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.6500e-003	0.0991	0.0224	2.7000e-004	5.8200e-003	3.5000e-004	6.1800e-003	1.6000e-003	3.4000e-004	1.9400e-003	0.0000	26.3968	26.3968	1.5300e-003	0.0000	26.4352
Worker	2.1400e-003	1.4500e-003	0.0159	4.0000e-005	4.2200e-003	3.0000e-005	4.2500e-003	1.1200e-003	3.0000e-005	1.1500e-003	0.0000	3.7417	3.7417	1.1000e-004	0.0000	3.7444
Total	**4.7900e-003**	**0.1006**	**0.0383**	**3.1000e-004**	**0.0100**	**3.8000e-004**	**0.0104**	**2.7200e-003**	**3.7000e-004**	**3.0900e-003**	**0.0000**	**30.1385**	**30.1385**	**1.6400e-003**	**0.0000**	**30.1796**

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	tons/yr										MT/yr					
Off-Road	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6351	26.6351	6.5000e-003	0.0000	26.7976
Total	**0.0244**	**0.2206**	**0.1938**	**3.1000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**26.6351**	**26.6351**	**6.5000e-003**	**0.0000**	**26.7976**

3.5 Structural Framing - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.6500e-003	0.0991	0.0224	2.7000e-004	5.8200e-003	3.5000e-004	6.1800e-003	1.6000e-003	3.4000e-004	1.9400e-003	0.0000	26.3968	26.3968	1.5300e-003	0.0000	26.4352
Worker	2.1400e-003	1.4500e-003	0.0159	4.0000e-005	4.2200e-003	3.0000e-005	4.2500e-003	1.1200e-003	3.0000e-005	1.1500e-003	0.0000	3.7417	3.7417	1.1000e-004	0.0000	3.7444
Total	**4.7900e-003**	**0.1006**	**0.0383**	**3.1000e-004**	**0.0100**	**3.8000e-004**	**0.0104**	**2.7200e-003**	**3.7000e-004**	**3.0900e-003**	**0.0000**	**30.1385**	**30.1385**	**1.6400e-003**	**0.0000**	**30.1796**

3.5 Structural Framing - 2021

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	tons/yr										MT/yr					
Off-Road	0.1226	1.1244	1.0691	1.7400e-003		0.0618	0.0618		0.0581	0.0581	0.0000	149.4060	149.4060	0.0361	0.0000	150.3072
Total	**0.1226**	**1.1244**	**1.0691**	**1.7400e-003**		**0.0618**	**0.0618**		**0.0581**	**0.0581**	**0.0000**	**149.4060**	**149.4060**	**0.0361**	**0.0000**	**150.3072**

3.5 Structural Framing - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0138	0.5106	0.1167	1.5000e-003	0.0326	1.7500e-003	0.0344	8.9600e-003	1.6700e-003	0.0106	0.0000	146.3315	146.3315	8.4400e-003	0.0000	146.5426
Worker	0.0112	7.3000e-003	0.0816	2.2000e-004	0.0237	1.7000e-004	0.0239	6.3000e-003	1.5000e-004	6.4500e-003	0.0000	20.2717	20.2717	5.3000e-004	0.0000	20.2850
Total	**0.0250**	**0.5179**	**0.1983**	**1.7200e-003**	**0.0563**	**1.9200e-003**	**0.0582**	**0.0153**	**1.8200e-003**	**0.0171**	**0.0000**	**166.6032**	**166.6032**	**8.9700e-003**	**0.0000**	**166.8275**

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	tons/yr										MT/yr					
Off-Road	0.1226	1.1244	1.0691	1.7400e-003		0.0618	0.0618		0.0581	0.0581	0.0000	149.4059	149.4059	0.0361	0.0000	150.3070
Total	**0.1226**	**1.1244**	**1.0691**	**1.7400e-003**		**0.0618**	**0.0618**		**0.0581**	**0.0581**	**0.0000**	**149.4059**	**149.4059**	**0.0361**	**0.0000**	**150.3070**

3.5 Structural Framing - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0138	0.5106	0.1167	1.5000e-003	0.0326	1.7500e-003	0.0344	8.9600e-003	1.6700e-003	0.0106	0.0000	146.3315	146.3315	8.4400e-003	0.0000	146.5426
Worker	0.0112	7.3000e-003	0.0816	2.2000e-004	0.0237	1.7000e-004	0.0239	6.3000e-003	1.5000e-004	6.4500e-003	0.0000	20.2717	20.2717	5.3000e-004	0.0000	20.2850
Total	**0.0250**	**0.5179**	**0.1983**	**1.7200e-003**	**0.0563**	**1.9200e-003**	**0.0582**	**0.0153**	**1.8200e-003**	**0.0171**	**0.0000**	**166.6032**	**166.6032**	**8.9700e-003**	**0.0000**	**166.8275**

3.6 Exterior Enclosure - 2021

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	tons/yr										MT/yr					
Off-Road	0.0816	0.8397	0.9525	1.4800e-003		0.0441	0.0441		0.0405	0.0405	0.0000	130.1526	130.1526	0.0421	0.0000	131.2050
Paving	4.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0821**	**0.8397**	**0.9525**	**1.4800e-003**		**0.0441**	**0.0441**		**0.0405**	**0.0405**	**0.0000**	**130.1526**	**130.1526**	**0.0421**	**0.0000**	**131.2050**

3.6 Exterior Enclosure - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.2600e-003	0.3430	0.0784	1.0100e-003	0.0219	1.1800e-003	0.0231	6.0200e-003	1.1200e-003	7.1400e-003	0.0000	98.3106	98.3106	5.6700e-003	0.0000	98.4524
Worker	7.8800e-003	5.1500e-003	0.0576	1.6000e-004	0.0167	1.2000e-004	0.0168	4.4400e-003	1.1000e-004	4.5500e-003	0.0000	14.3002	14.3002	3.8000e-004	0.0000	14.3096
Total	**0.0171**	**0.3482**	**0.1360**	**1.1700e-003**	**0.0386**	**1.3000e-003**	**0.0399**	**0.0105**	**1.2300e-003**	**0.0117**	**0.0000**	**112.6107**	**112.6107**	**6.0500e-003**	**0.0000**	**112.7619**

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	tons/yr										MT/yr					
Off-Road	0.0816	0.8397	0.9525	1.4800e-003		0.0441	0.0441		0.0405	0.0405	0.0000	130.1525	130.1525	0.0421	0.0000	131.2048
Paving	4.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0821**	**0.8397**	**0.9525**	**1.4800e-003**		**0.0441**	**0.0441**		**0.0405**	**0.0405**	**0.0000**	**130.1525**	**130.1525**	**0.0421**	**0.0000**	**131.2048**

3.6 Exterior Enclosure - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.2600e-003	0.3430	0.0784	1.0100e-003	0.0219	1.1800e-003	0.0231	6.0200e-003	1.1200e-003	7.1400e-003	0.0000	98.3106	98.3106	5.6700e-003	0.0000	98.4524
Worker	7.8800e-003	5.1500e-003	0.0576	1.6000e-004	0.0167	1.2000e-004	0.0168	4.4400e-003	1.1000e-004	4.5500e-003	0.0000	14.3002	14.3002	3.8000e-004	0.0000	14.3096
Total	**0.0171**	**0.3482**	**0.1360**	**1.1700e-003**	**0.0386**	**1.3000e-003**	**0.0399**	**0.0105**	**1.2300e-003**	**0.0117**	**0.0000**	**112.6107**	**112.6107**	**6.0500e-003**	**0.0000**	**112.7619**

3.7 Hospital Interior - 2021

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	tons/yr										MT/yr					
Archit. Coating	1.2207					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.1336	0.1590	2.6000e-004		8.2300e-003	8.2300e-003		8.2300e-003	8.2300e-003	0.0000	22.3410	22.3410	1.5300e-003	0.0000	22.3793
Total	**1.2399**	**0.1336**	**0.1590**	**2.6000e-004**		**8.2300e-003**	**8.2300e-003**		**8.2300e-003**	**8.2300e-003**	**0.0000**	**22.3410**	**22.3410**	**1.5300e-003**	**0.0000**	**22.3793**

3.7 Hospital Interior - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0623	2.3089	0.5277	6.8000e-003	0.1476	7.9100e-003	0.1555	0.0405	7.5700e-003	0.0481	0.0000	661.7057	661.7057	0.0382	0.0000	662.6601
Worker	0.1364	0.0891	0.9966	2.7400e-003	0.2892	2.0200e-003	0.2912	0.0769	1.8600e-003	0.0788	0.0000	247.5030	247.5030	6.5000e-003	0.0000	247.6654
Total	**0.1987**	**2.3980**	**1.5243**	**9.5400e-003**	**0.4368**	**9.9300e-003**	**0.4467**	**0.1174**	**9.4300e-003**	**0.1269**	**0.0000**	**909.2087**	**909.2087**	**0.0447**	**0.0000**	**910.3255**

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	tons/yr										MT/yr					
Archit. Coating	1.2207					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.1336	0.1590	2.6000e-004		8.2300e-003	8.2300e-003		8.2300e-003	8.2300e-003	0.0000	22.3409	22.3409	1.5300e-003	0.0000	22.3793
Total	**1.2399**	**0.1336**	**0.1590**	**2.6000e-004**		**8.2300e-003**	**8.2300e-003**		**8.2300e-003**	**8.2300e-003**	**0.0000**	**22.3409**	**22.3409**	**1.5300e-003**	**0.0000**	**22.3793**

3.7 Hospital Interior - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0623	2.3089	0.5277	6.8000e-003	0.1476	7.9100e-003	0.1555	0.0405	7.5700e-003	0.0481	0.0000	661.7057	661.7057	0.0382	0.0000	662.6601
Worker	0.1364	0.0891	0.9966	2.7400e-003	0.2892	2.0200e-003	0.2912	0.0769	1.8600e-003	0.0788	0.0000	247.5030	247.5030	6.5000e-003	0.0000	247.6654
Total	**0.1987**	**2.3980**	**1.5243**	**9.5400e-003**	**0.4368**	**9.9300e-003**	**0.4467**	**0.1174**	**9.4300e-003**	**0.1269**	**0.0000**	**909.2087**	**909.2087**	**0.0447**	**0.0000**	**910.3255**

3.7 Hospital Interior - 2022

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	tons/yr										MT/yr					
Archit. Coating	1.6602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.1676	0.2158	3.5000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003	0.0000	30.3837	30.3837	1.9800e-003	0.0000	30.4332
Total	**1.6845**	**0.1676**	**0.2158**	**3.5000e-004**		**9.7200e-003**	**9.7200e-003**		**9.7200e-003**	**9.7200e-003**	**0.0000**	**30.3837**	**30.3837**	**1.9800e-003**	**0.0000**	**30.4332**

3.7 Hospital Interior - 2022

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0795	2.8771	0.6874	9.1300e-003	0.2007	9.2500e-003	0.2099	0.0551	8.8500e-003	0.0639	0.0000	889.0418	889.0418	0.0510	0.0000	890.3169
Worker	0.1733	0.1090	1.2455	3.5900e-003	0.3933	2.6800e-003	0.3960	0.1046	2.4700e-003	0.1071	0.0000	324.5474	324.5474	7.9400e-003	0.0000	324.7459
Total	**0.2527**	**2.9860**	**1.9329**	**0.0127**	**0.5940**	**0.0119**	**0.6059**	**0.1597**	**0.0113**	**0.1710**	**0.0000**	**1,213.5892**	**1,213.5892**	**0.0589**	**0.0000**	**1,215.0628**

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	tons/yr										MT/yr					
Archit. Coating	1.6602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.1676	0.2158	3.5000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003	0.0000	30.3837	30.3837	1.9800e-003	0.0000	30.4331
Total	**1.6845**	**0.1676**	**0.2158**	**3.5000e-004**		**9.7200e-003**	**9.7200e-003**		**9.7200e-003**	**9.7200e-003**	**0.0000**	**30.3837**	**30.3837**	**1.9800e-003**	**0.0000**	**30.4331**

3.7 Hospital Interior - 2022

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0795	2.8771	0.6874	9.1300e-003	0.2007	9.2500e-003	0.2099	0.0551	8.8500e-003	0.0639	0.0000	889.0418	889.0418	0.0510	0.0000	890.3169
Worker	0.1733	0.1090	1.2455	3.5900e-003	0.3933	2.6800e-003	0.3960	0.1046	2.4700e-003	0.1071	0.0000	324.5474	324.5474	7.9400e-003	0.0000	324.7459
Total	**0.2527**	**2.9860**	**1.9329**	**0.0127**	**0.5940**	**0.0119**	**0.6059**	**0.1597**	**0.0113**	**0.1710**	**0.0000**	**1,213.5892**	**1,213.5892**	**0.0589**	**0.0000**	**1,215.0628**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
General Light Industry	10.00	5.00	6.50	59.00	28.00	13.00	92	5	3
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865
General Light Industry	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865
Hospital	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865
Parking Lot	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
General Light Industry	0	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
Hospital	0	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
Parking Lot	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
General Light Industry	0	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
Hospital	0	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
Parking Lot	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	2.4252	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Unmitigated	2.4252	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Total	**2.4252**	**1.1000e-004**	**0.0121**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0235**	**0.0235**	**6.0000e-005**	**0.0000**	**0.0250**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Total	**2.4252**	**1.1000e-004**	**0.0121**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0235**	**0.0235**	**6.0000e-005**	**0.0000**	**0.0250**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2A Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	1,500.00	Space	13.50	205,600.00	0
Strip Mall	51.40	1000sqft	1.18	51,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2025
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Phase 2A Construction - Sacramento County, Annual

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading - 22,844 CY exported under excavation phase

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	25700	0
tblAreaCoating	Area_Nonresidential_Interior	77100	0
tblAreaCoating	Area_Parking	12336	0
tblConstructionPhase	NumDays	20.00	32.00
tblConstructionPhase	NumDays	10.00	33.00
tblConstructionPhase	NumDays	30.00	43.00
tblConstructionPhase	NumDays	300.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	77.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	5.33	0.00
tblEnergyUse	NT24E	0.19	0.00

Phase 2A Construction - Sacramento County, Annual

tblEnergyUse	NT24E	2.98	0.00
tblEnergyUse	NT24NG	0.93	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	3.26	0.00
tblEnergyUse	T24NG	4.49	0.00
tblGrading	AcresOfGrading	107.50	75.00
tblGrading	MaterialExported	0.00	22,844.00
tblLandUse	LandUseSquareFeet	600,000.00	205,600.00
tblSolidWaste	SolidWasteGenerationRate	53.97	0.00
tblTripsAndVMT	HaulingTripNumber	378.00	0.00
tblTripsAndVMT	HaulingTripNumber	2,856.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	15.00
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	42.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT

tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	50.00
tblTripsAndVMT	WorkerTripNumber	103.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	21.00	100.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	3,807,327.60	0.00
tblWater	OutdoorWaterUseRate	2,333,523.37	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2023	0.0249	0.2417	0.2151	4.8000e-004	0.0310	0.0105	0.0415	5.0400e-003	9.7900e-003	0.0148	0.0000	43.0397	43.0397	0.0104	0.0000	43.2987
2024	0.4838	2.2799	2.0054	5.6900e-003	0.5752	0.0815	0.6566	0.2664	0.0755	0.3419	0.0000	517.6400	517.6400	0.0986	0.0000	520.1058
Maximum	**0.4838**	**2.2799**	**2.0054**	**5.6900e-003**	**0.5752**	**0.0815**	**0.6566**	**0.2664**	**0.0755**	**0.3419**	**0.0000**	**517.6400**	**517.6400**	**0.0986**	**0.0000**	**520.1058**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2023	0.0249	0.2417	0.2151	4.8000e-004	0.0310	0.0105	0.0415	5.0400e-003	9.7900e-003	0.0148	0.0000	43.0397	43.0397	0.0104	0.0000	43.2987
2024	0.4838	2.2799	2.0054	5.6900e-003	0.5752	0.0815	0.6566	0.2664	0.0755	0.3419	0.0000	517.6396	517.6396	0.0986	0.0000	520.1054
Maximum	**0.4838**	**2.2799**	**2.0054**	**5.6900e-003**	**0.5752**	**0.0815**	**0.6566**	**0.2664**	**0.0755**	**0.3419**	**0.0000**	**517.6396**	**517.6396**	**0.0986**	**0.0000**	**520.1054**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2023	2-29-2024	0.7641	0.7641
2	3-1-2024	5-31-2024	1.1815	1.1815
3	6-1-2024	8-31-2024	0.5386	0.5386
4	9-1-2024	9-30-2024	0.1427	0.1427
		Highest	1.1815	1.1815

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.2159	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2159**	**1.8000e-004**	**0.0198**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0385**	**0.0385**	**1.0000e-004**	**0.0000**	**0.0410**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.2159	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2159**	**1.8000e-004**	**0.0198**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0385**	**0.0385**	**1.0000e-004**	**0.0000**	**0.0410**

	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	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 2A Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/1/2023	1/15/2024	5	32	
2	Excavation	Site Preparation	1/31/2024	3/15/2024	5	33	
3	Foundation	Grading	3/16/2024	5/15/2024	5	43	
4	Structural Framing	Building Construction	5/16/2024	7/15/2024	5	43	
5	Exterior Enclosure	Paving	7/16/2024	9/15/2024	5	44	
6	Interior	Architectural Coating	9/16/2024	12/31/2024	5	77	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 13.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 77,100; Non-Residential Outdoor: 25,700; Striped Parking Area: 12,336 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2A Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Excavation	Rubber Tired Dozers	3	8.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Foundation	Excavators	2	8.00	158	0.38
Foundation	Graders	1	8.00	187	0.41
Foundation	Rubber Tired Dozers	1	8.00	247	0.40
Foundation	Scrapers	2	8.00	367	0.48
Foundation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structural Framing	Welders	1	8.00	46	0.45
Exterior Enclosure	Pavers	2	8.00	130	0.42
Exterior Enclosure	Paving Equipment	2	8.00	132	0.36
Exterior Enclosure	Rollers	2	8.00	80	0.38
Interior	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase 2A Construction - Sacramento County, Annual

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
Demolition	6	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	7	20.00	15.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	8	50.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosure	6	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Interior	1	100.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 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	tons/yr										MT/yr					
Fugitive Dust					0.0280	0.0000	0.0280	4.2400e-003	0.0000	4.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0238	0.2256	0.2063	4.1000e-004		0.0105	0.0105		9.7400e-003	9.7400e-003	0.0000	35.6917	35.6917	0.0100	0.0000	35.9416
Total	**0.0238**	**0.2256**	**0.2063**	**4.1000e-004**	**0.0280**	**0.0105**	**0.0385**	**4.2400e-003**	**9.7400e-003**	**0.0140**	**0.0000**	**35.6917**	**35.6917**	**0.0100**	**0.0000**	**35.9416**

3.2 Demolition - 2023

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.3000e-004	0.0157	4.4000e-003	6.0000e-005	1.4200e-003	4.0000e-005	1.4500e-003	3.9000e-004	3.0000e-005	4.2000e-004	0.0000	6.1231	6.1231	3.4000e-004	0.0000	6.1315
Worker	6.4000e-004	3.8000e-004	4.4900e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2249	1.2249	3.0000e-005	0.0000	1.2256
Total	**1.0700e-003**	**0.0161**	**8.8900e-003**	**7.0000e-005**	**2.9600e-003**	**5.0000e-005**	**3.0000e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**7.3481**	**7.3481**	**3.7000e-004**	**0.0000**	**7.3572**

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	tons/yr										MT/yr					
Fugitive Dust					0.0280	0.0000	0.0280	4.2400e-003	0.0000	4.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0238	0.2256	0.2063	4.1000e-004		0.0105	0.0105		9.7400e-003	9.7400e-003	0.0000	35.6916	35.6916	0.0100	0.0000	35.9415
Total	**0.0238**	**0.2256**	**0.2063**	**4.1000e-004**	**0.0280**	**0.0105**	**0.0385**	**4.2400e-003**	**9.7400e-003**	**0.0140**	**0.0000**	**35.6916**	**35.6916**	**0.0100**	**0.0000**	**35.9415**

3.2 Demolition - 2023

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.3000e-004	0.0157	4.4000e-003	6.0000e-005	1.4200e-003	4.0000e-005	1.4500e-003	3.9000e-004	3.0000e-005	4.2000e-004	0.0000	6.1231	6.1231	3.4000e-004	0.0000	6.1315
Worker	6.4000e-004	3.8000e-004	4.4900e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2249	1.2249	3.0000e-005	0.0000	1.2256
Total	**1.0700e-003**	**0.0161**	**8.8900e-003**	**7.0000e-005**	**2.9600e-003**	**5.0000e-005**	**3.0000e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**7.3481**	**7.3481**	**3.7000e-004**	**0.0000**	**7.3572**

3.2 Demolition - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0147	0.0000	0.0147	2.2200e-003	0.0000	2.2200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1148	0.1084	2.1000e-004		5.2800e-003	5.2800e-003		4.9100e-003	4.9100e-003	0.0000	18.6978	18.6978	5.2300e-003	0.0000	18.8286
Total	**0.0123**	**0.1148**	**0.1084**	**2.1000e-004**	**0.0147**	**5.2800e-003**	**0.0200**	**2.2200e-003**	**4.9100e-003**	**7.1300e-003**	**0.0000**	**18.6978**	**18.6978**	**5.2300e-003**	**0.0000**	**18.8286**

3.2 Demolition - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.2000e-004	7.9300e-003	2.2500e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	3.1871	3.1871	1.8000e-004	0.0000	3.1915
Worker	3.1000e-004	1.8000e-004	2.1800e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6167	0.6167	1.0000e-005	0.0000	0.6170
Total	**5.3000e-004**	**8.1100e-003**	**4.4300e-003**	**4.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5700e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**3.8038**	**3.8038**	**1.9000e-004**	**0.0000**	**3.8085**

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	tons/yr										MT/yr					
Fugitive Dust					0.0147	0.0000	0.0147	2.2200e-003	0.0000	2.2200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1148	0.1084	2.1000e-004		5.2800e-003	5.2800e-003		4.9100e-003	4.9100e-003	0.0000	18.6978	18.6978	5.2300e-003	0.0000	18.8286
Total	**0.0123**	**0.1148**	**0.1084**	**2.1000e-004**	**0.0147**	**5.2800e-003**	**0.0200**	**2.2200e-003**	**4.9100e-003**	**7.1300e-003**	**0.0000**	**18.6978**	**18.6978**	**5.2300e-003**	**0.0000**	**18.8286**

3.2 Demolition - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.2000e-004	7.9300e-003	2.2500e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	3.1871	3.1871	1.8000e-004	0.0000	3.1915
Worker	3.1000e-004	1.8000e-004	2.1800e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6167	0.6167	1.0000e-005	0.0000	0.6170
Total	**5.3000e-004**	**8.1100e-003**	**4.4300e-003**	**4.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5700e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**3.8038**	**3.8038**	**1.9000e-004**	**0.0000**	**3.8085**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.3005	0.0000	0.3005	0.1642	0.0000	0.1642	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0439	0.4484	0.3025	6.3000e-004		0.0203	0.0203		0.0187	0.0187	0.0000	55.2042	55.2042	0.0179	0.0000	55.6505
Total	**0.0439**	**0.4484**	**0.3025**	**6.3000e-004**	**0.3005**	**0.0203**	**0.3207**	**0.1642**	**0.0187**	**0.1829**	**0.0000**	**55.2042**	**55.2042**	**0.0179**	**0.0000**	**55.6505**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.2300e-003	0.0446	0.0127	1.8000e-004	4.1700e-003	1.0000e-004	4.2700e-003	1.1400e-003	9.0000e-005	1.2400e-003	0.0000	17.9272	17.9272	9.9000e-004	0.0000	17.9519
Worker	9.4000e-004	5.5000e-004	6.5300e-003	2.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	1.8501	1.8501	4.0000e-005	0.0000	1.8511
Total	**2.1700e-003**	**0.0452**	**0.0192**	**2.0000e-004**	**6.5900e-003**	**1.2000e-004**	**6.7100e-003**	**1.7800e-003**	**1.0000e-004**	**1.9000e-003**	**0.0000**	**19.7773**	**19.7773**	**1.0300e-003**	**0.0000**	**19.8030**

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	tons/yr										MT/yr					
Fugitive Dust					0.3005	0.0000	0.3005	0.1642	0.0000	0.1642	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0439	0.4484	0.3025	6.3000e-004		0.0203	0.0203		0.0187	0.0187	0.0000	55.2041	55.2041	0.0179	0.0000	55.6504
Total	**0.0439**	**0.4484**	**0.3025**	**6.3000e-004**	**0.3005**	**0.0203**	**0.3207**	**0.1642**	**0.0187**	**0.1829**	**0.0000**	**55.2041**	**55.2041**	**0.0179**	**0.0000**	**55.6504**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.2300e-003	0.0446	0.0127	1.8000e-004	4.1700e-003	1.0000e-004	4.2700e-003	1.1400e-003	9.0000e-005	1.2400e-003	0.0000	17.9272	17.9272	9.9000e-004	0.0000	17.9519
Worker	9.4000e-004	5.5000e-004	6.5300e-003	2.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	1.8501	1.8501	4.0000e-005	0.0000	1.8511
Total	**2.1700e-003**	**0.0452**	**0.0192**	**2.0000e-004**	**6.5900e-003**	**1.2000e-004**	**6.7100e-003**	**1.7800e-003**	**1.0000e-004**	**1.9000e-003**	**0.0000**	**19.7773**	**19.7773**	**1.0300e-003**	**0.0000**	**19.8030**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.1692	0.0000	0.1692	0.0755	0.0000	0.0755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0692	0.6961	0.5960	1.3300e-003		0.0287	0.0287		0.0264	0.0264	0.0000	117.2170	117.2170	0.0379	0.0000	118.1647
Total	**0.0692**	**0.6961**	**0.5960**	**1.3300e-003**	**0.1692**	**0.0287**	**0.1980**	**0.0755**	**0.0264**	**0.1019**	**0.0000**	**117.2170**	**117.2170**	**0.0379**	**0.0000**	**118.1647**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.2200e-003	0.1163	0.0330	4.8000e-004	0.0109	2.6000e-004	0.0111	2.9800e-003	2.5000e-004	3.2300e-003	0.0000	46.7195	46.7195	2.5700e-003	0.0000	46.7838
Worker	3.0600e-003	1.7800e-003	0.0213	7.0000e-005	7.9000e-003	5.0000e-005	7.9500e-003	2.1000e-003	5.0000e-005	2.1500e-003	0.0000	6.0268	6.0268	1.3000e-004	0.0000	6.0300
Total	**6.2800e-003**	**0.1180**	**0.0543**	**5.5000e-004**	**0.0188**	**3.1000e-004**	**0.0191**	**5.0800e-003**	**3.0000e-004**	**5.3800e-003**	**0.0000**	**52.7463**	**52.7463**	**2.7000e-003**	**0.0000**	**52.8138**

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	tons/yr										MT/yr					
Fugitive Dust					0.1692	0.0000	0.1692	0.0755	0.0000	0.0755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0692	0.6961	0.5960	1.3300e-003		0.0287	0.0287		0.0264	0.0264	0.0000	117.2168	117.2168	0.0379	0.0000	118.1646
Total	**0.0692**	**0.6961**	**0.5960**	**1.3300e-003**	**0.1692**	**0.0287**	**0.1980**	**0.0755**	**0.0264**	**0.1019**	**0.0000**	**117.2168**	**117.2168**	**0.0379**	**0.0000**	**118.1646**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.2200e-003	0.1163	0.0330	4.8000e-004	0.0109	2.6000e-004	0.0111	2.9800e-003	2.5000e-004	3.2300e-003	0.0000	46.7195	46.7195	2.5700e-003	0.0000	46.7838
Worker	3.0600e-003	1.7800e-003	0.0213	7.0000e-005	7.9000e-003	5.0000e-005	7.9500e-003	2.1000e-003	5.0000e-005	2.1500e-003	0.0000	6.0268	6.0268	1.3000e-004	0.0000	6.0300
Total	**6.2800e-003**	**0.1180**	**0.0543**	**5.5000e-004**	**0.0188**	**3.1000e-004**	**0.0191**	**5.0800e-003**	**3.0000e-004**	**5.3800e-003**	**0.0000**	**52.7463**	**52.7463**	**2.7000e-003**	**0.0000**	**52.8138**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Off-Road	0.0316	0.2890	0.3476	5.8000e-004		0.0132	0.0132		0.0124	0.0124	0.0000	49.8476	49.8476	0.0118	0.0000	50.1423
Total	**0.0316**	**0.2890**	**0.3476**	**5.8000e-004**		**0.0132**	**0.0132**		**0.0124**	**0.0124**	**0.0000**	**49.8476**	**49.8476**	**0.0118**	**0.0000**	**50.1423**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1400e-003	0.0775	0.0220	3.2000e-004	7.2500e-003	1.7000e-004	7.4200e-003	1.9900e-003	1.6000e-004	2.1500e-003	0.0000	31.1463	31.1463	1.7100e-003	0.0000	31.1892
Worker	1.8400e-003	1.0700e-003	0.0128	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.6161	3.6161	8.0000e-005	0.0000	3.6180
Total	**3.9800e-003**	**0.0786**	**0.0348**	**3.6000e-004**	**0.0120**	**2.0000e-004**	**0.0122**	**3.2500e-003**	**1.9000e-004**	**3.4400e-003**	**0.0000**	**34.7624**	**34.7624**	**1.7900e-003**	**0.0000**	**34.8072**

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	tons/yr										MT/yr					
Off-Road	0.0316	0.2890	0.3476	5.8000e-004		0.0132	0.0132		0.0124	0.0124	0.0000	49.8475	49.8475	0.0118	0.0000	50.1422
Total	**0.0316**	**0.2890**	**0.3476**	**5.8000e-004**		**0.0132**	**0.0132**		**0.0124**	**0.0124**	**0.0000**	**49.8475**	**49.8475**	**0.0118**	**0.0000**	**50.1422**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1400e-003	0.0775	0.0220	3.2000e-004	7.2500e-003	1.7000e-004	7.4200e-003	1.9900e-003	1.6000e-004	2.1500e-003	0.0000	31.1463	31.1463	1.7100e-003	0.0000	31.1892
Worker	1.8400e-003	1.0700e-003	0.0128	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.6161	3.6161	8.0000e-005	0.0000	3.6180
Total	**3.9800e-003**	**0.0786**	**0.0348**	**3.6000e-004**	**0.0120**	**2.0000e-004**	**0.0122**	**3.2500e-003**	**1.9000e-004**	**3.4400e-003**	**0.0000**	**34.7624**	**34.7624**	**1.7900e-003**	**0.0000**	**34.8072**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Off-Road	0.0217	0.2095	0.3218	5.0000e-004		0.0103	0.0103		9.4800e-003	9.4800e-003	0.0000	44.0584	44.0584	0.0143	0.0000	44.4146
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0217**	**0.2095**	**0.3218**	**5.0000e-004**		**0.0103**	**0.0103**		**9.4800e-003**	**9.4800e-003**	**0.0000**	**44.0584**	**44.0584**	**0.0143**	**0.0000**	**44.4146**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1900e-003	0.0793	0.0225	3.3000e-004	7.4200e-003	1.8000e-004	7.5900e-003	2.0400e-003	1.7000e-004	2.2000e-003	0.0000	31.8707	31.8707	1.7500e-003	0.0000	31.9145
Worker	1.2500e-003	7.3000e-004	8.7000e-003	3.0000e-005	3.2300e-003	2.0000e-005	3.2500e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.4668	2.4668	5.0000e-005	0.0000	2.4681
Total	**3.4400e-003**	**0.0800**	**0.0312**	**3.6000e-004**	**0.0107**	**2.0000e-004**	**0.0108**	**2.9000e-003**	**1.9000e-004**	**3.0800e-003**	**0.0000**	**34.3374**	**34.3374**	**1.8000e-003**	**0.0000**	**34.3826**

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	tons/yr										MT/yr					
Off-Road	0.0217	0.2095	0.3218	5.0000e-004		0.0103	0.0103		9.4800e-003	9.4800e-003	0.0000	44.0583	44.0583	0.0143	0.0000	44.4146
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0217**	**0.2095**	**0.3218**	**5.0000e-004**		**0.0103**	**0.0103**		**9.4800e-003**	**9.4800e-003**	**0.0000**	**44.0583**	**44.0583**	**0.0143**	**0.0000**	**44.4146**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1900e-003	0.0793	0.0225	3.3000e-004	7.4200e-003	1.8000e-004	7.5900e-003	2.0400e-003	1.7000e-004	2.2000e-003	0.0000	31.8707	31.8707	1.7500e-003	0.0000	31.9145
Worker	1.2500e-003	7.3000e-004	8.7000e-003	3.0000e-005	3.2300e-003	2.0000e-005	3.2500e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.4668	2.4668	5.0000e-005	0.0000	2.4681
Total	**3.4400e-003**	**0.0800**	**0.0312**	**3.6000e-004**	**0.0107**	**2.0000e-004**	**0.0108**	**2.9000e-003**	**1.9000e-004**	**3.0800e-003**	**0.0000**	**34.3374**	**34.3374**	**1.8000e-003**	**0.0000**	**34.3826**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Archit. Coating	0.2668					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9600e-003	0.0469	0.0697	1.1000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	9.8300	9.8300	5.5000e-004	0.0000	9.8439
Total	**0.2738**	**0.0469**	**0.0697**	**1.1000e-004**		**2.3500e-003**	**2.3500e-003**		**2.3500e-003**	**2.3500e-003**	**0.0000**	**9.8300**	**9.8300**	**5.5000e-004**	**0.0000**	**9.8439**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.8400e-003	0.1388	0.0394	5.7000e-004	0.0130	3.1000e-004	0.0133	3.5600e-003	2.9000e-004	3.8600e-003	0.0000	55.7736	55.7736	3.0700e-003	0.0000	55.8504
Worker	0.0110	6.3700e-003	0.0762	2.4000e-004	0.0283	1.8000e-004	0.0285	7.5200e-003	1.7000e-004	7.6900e-003	0.0000	21.5843	21.5843	4.6000e-004	0.0000	21.5958
Total	**0.0148**	**0.1452**	**0.1156**	**8.1000e-004**	**0.0413**	**4.9000e-004**	**0.0418**	**0.0111**	**4.6000e-004**	**0.0116**	**0.0000**	**77.3579**	**77.3579**	**3.5300e-003**	**0.0000**	**77.4462**

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	tons/yr										MT/yr					
Archit. Coating	0.2668					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9600e-003	0.0469	0.0697	1.1000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	9.8300	9.8300	5.5000e-004	0.0000	9.8439
Total	**0.2738**	**0.0469**	**0.0697**	**1.1000e-004**		**2.3500e-003**	**2.3500e-003**		**2.3500e-003**	**2.3500e-003**	**0.0000**	**9.8300**	**9.8300**	**5.5000e-004**	**0.0000**	**9.8439**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.8400e-003	0.1388	0.0394	5.7000e-004	0.0130	3.1000e-004	0.0133	3.5600e-003	2.9000e-004	3.8600e-003	0.0000	55.7736	55.7736	3.0700e-003	0.0000	55.8504
Worker	0.0110	6.3700e-003	0.0762	2.4000e-004	0.0283	1.8000e-004	0.0285	7.5200e-003	1.7000e-004	7.6900e-003	0.0000	21.5843	21.5843	4.6000e-004	0.0000	21.5958
Total	**0.0148**	**0.1452**	**0.1156**	**8.1000e-004**	**0.0413**	**4.9000e-004**	**0.0418**	**0.0111**	**4.6000e-004**	**0.0116**	**0.0000**	**77.3579**	**77.3579**	**3.5300e-003**	**0.0000**	**77.4462**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.568817	0.036545	0.209097	0.111572	0.015710	0.004830	0.018344	0.024276	0.001951	0.001803	0.005698	0.000617	0.000741
Strip Mall	0.568817	0.036545	0.209097	0.111572	0.015710	0.004830	0.018344	0.024276	0.001951	0.001803	0.005698	0.000617	0.000741

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Strip Mall	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Strip Mall	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.2159	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Unmitigated	0.2159	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8200e-003	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Total	**0.2159**	**1.8000e-004**	**0.0198**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0385**	**0.0385**	**1.0000e-004**	**0.0000**	**0.0410**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8200e-003	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Total	**0.2159**	**1.8000e-004**	**0.0198**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0385**	**0.0385**	**1.0000e-004**	**0.0000**	**0.0410**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2B Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	103.21	1000sqft	2.37	103,210.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Phase 2B Construction - Sacramento County, Annual

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading - No grading or excavating

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	51605	0
tblAreaCoating	Area_Nonresidential_Interior	154815	0
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	220.00	109.00
tblConstructionPhase	NumDays	10.00	53.00
tblConstructionPhase	NumDays	3.00	34.00
tblEnergyUse	LightingElect	4.98	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24NG	57.91	0.00
tblGrading	AcresOfGrading	51.00	0.00

tblSolidWaste	SolidWasteGenerationRate	1,114.67	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	60.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	17.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	7.00	100.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00
tblTripsAndVMT	WorkerTripNumber	33.00	45.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblWater	IndoorWaterUseRate	12,950,846.28	0.00
tblWater	OutdoorWaterUseRate	2,466,827.86	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2024	0.6183	2.3467	1.6617	8.2900e-003	0.2177	0.0444	0.2621	0.0590	0.0425	0.1014	0.0000	777.4350	777.4350	0.0637	0.0000	779.0266
2025	0.0936	0.5209	0.5169	1.8000e-003	0.0394	0.0131	0.0525	0.0107	0.0122	0.0229	0.0000	166.9998	166.9998	0.0210	0.0000	167.5254
Maximum	**0.6183**	**2.3467**	**1.6617**	**8.2900e-003**	**0.2177**	**0.0444**	**0.2621**	**0.0590**	**0.0425**	**0.1014**	**0.0000**	**777.4350**	**777.4350**	**0.0637**	**0.0000**	**779.0266**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2024	0.6183	2.3467	1.6617	8.2900e-003	0.2177	0.0444	0.2621	0.0590	0.0425	0.1014	0.0000	777.4348	777.4348	0.0637	0.0000	779.0264
2025	0.0936	0.5209	0.5169	1.8000e-003	0.0394	0.0131	0.0525	0.0107	0.0122	0.0229	0.0000	166.9997	166.9997	0.0210	0.0000	167.5253
Maximum	**0.6183**	**2.3467**	**1.6617**	**8.2900e-003**	**0.2177**	**0.0444**	**0.2621**	**0.0590**	**0.0425**	**0.1014**	**0.0000**	**777.4348**	**777.4348**	**0.0637**	**0.0000**	**779.0264**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2024	6-30-2024	0.5542	0.5542
2	7-1-2024	9-30-2024	1.1508	1.1508
3	10-1-2024	12-31-2024	1.2350	1.2350
4	1-1-2025	3-31-2025	0.6093	0.6093
		Highest	1.2350	1.2350

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.4032	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.4032**	**1.0000e-005**	**1.3100e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.5600e-003**	**2.5600e-003**	**1.0000e-005**	**0.0000**	**2.7300e-003**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.4032	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.4032**	**1.0000e-005**	**1.3100e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.5600e-003**	**2.5600e-003**	**1.0000e-005**	**0.0000**	**2.7300e-003**

	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	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 2B Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Interior	Architectural Coating	4/1/2024	1/31/2025	5	220	
2	Site Preparation	Site Preparation	7/1/2024	8/15/2024	5	34	
3	Structural Framing	Building Construction	8/16/2024	1/15/2025	5	109	
4	Exterior Enclosure	Paving	1/16/2025	3/31/2025	5	53	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 154,815; Non-Residential Outdoor: 51,605; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2B Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Structural Framing	Cranes	1	8.00	231	0.29
Structural Framing	Forklifts	2	7.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Structural Framing	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Structural Framing	Welders	3	8.00	46	0.45
Exterior Enclosure	Cement and Mortar Mixers	1	8.00	9	0.56
Exterior Enclosure	Pavers	1	8.00	130	0.42
Exterior Enclosure	Paving Equipment	1	8.00	132	0.36
Exterior Enclosure	Rollers	2	8.00	80	0.38
Exterior Enclosure	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Interior	Air Compressors	1	6.00	78	0.48

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
Site Preparation	3	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	8	45.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosure	6	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Interior	1	100.00	60.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Interior - 2024

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	tons/yr										MT/yr					
Archit. Coating	0.4284					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0178	0.1201	0.1783	2.9000e-004		6.0000e-003	6.0000e-003		6.0000e-003	6.0000e-003	0.0000	25.1496	25.1496	1.4200e-003	0.0000	25.1850
Total	**0.4462**	**0.1201**	**0.1783**	**2.9000e-004**		**6.0000e-003**	**6.0000e-003**		**6.0000e-003**	**6.0000e-003**	**0.0000**	**25.1496**	**25.1496**	**1.4200e-003**	**0.0000**	**25.1850**

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0295	1.0653	0.3023	4.3900e-003	0.0996	2.3700e-003	0.1020	0.0273	2.2600e-003	0.0296	0.0000	428.0808	428.0808	0.0236	0.0000	428.6698
Worker	0.0281	0.0163	0.1948	6.1000e-004	0.0723	4.7000e-004	0.0728	0.0192	4.3000e-004	0.0197	0.0000	55.2221	55.2221	1.1800e-003	0.0000	55.2517
Total	**0.0575**	**1.0816**	**0.4972**	**5.0000e-003**	**0.1720**	**2.8400e-003**	**0.1748**	**0.0466**	**2.6900e-003**	**0.0493**	**0.0000**	**483.3029**	**483.3029**	**0.0247**	**0.0000**	**483.9215**

3.2 Interior - 2024

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	tons/yr										MT/yr					
Archit. Coating	0.4284					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0178	0.1201	0.1783	2.9000e-004		6.0000e-003	6.0000e-003		6.0000e-003	6.0000e-003	0.0000	25.1495	25.1495	1.4200e-003	0.0000	25.1849
Total	**0.4462**	**0.1201**	**0.1783**	**2.9000e-004**		**6.0000e-003**	**6.0000e-003**		**6.0000e-003**	**6.0000e-003**	**0.0000**	**25.1495**	**25.1495**	**1.4200e-003**	**0.0000**	**25.1849**

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0295	1.0653	0.3023	4.3900e-003	0.0996	2.3700e-003	0.1020	0.0273	2.2600e-003	0.0296	0.0000	428.0808	428.0808	0.0236	0.0000	428.6698
Worker	0.0281	0.0163	0.1948	6.1000e-004	0.0723	4.7000e-004	0.0728	0.0192	4.3000e-004	0.0197	0.0000	55.2221	55.2221	1.1800e-003	0.0000	55.2517
Total	**0.0575**	**1.0816**	**0.4972**	**5.0000e-003**	**0.1720**	**2.8400e-003**	**0.1748**	**0.0466**	**2.6900e-003**	**0.0493**	**0.0000**	**483.3029**	**483.3029**	**0.0247**	**0.0000**	**483.9215**

3.2 Interior - 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	tons/yr										MT/yr					
Archit. Coating	0.0500					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9403
Total	**0.0520**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9403**

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.3700e-003	0.1202	0.0346	5.1000e-004	0.0116	2.6000e-004	0.0119	3.1900e-003	2.5000e-004	3.4400e-003	0.0000	49.6846	49.6846	2.7400e-003	0.0000	49.7531
Worker	3.0900e-003	1.7300e-003	0.0211	7.0000e-005	8.4500e-003	5.0000e-005	8.5000e-003	2.2500e-003	5.0000e-005	2.3000e-003	0.0000	6.1891	6.1891	1.2000e-004	0.0000	6.1923
Total	**6.4600e-003**	**0.1219**	**0.0557**	**5.8000e-004**	**0.0201**	**3.1000e-004**	**0.0204**	**5.4400e-003**	**3.0000e-004**	**5.7400e-003**	**0.0000**	**55.8737**	**55.8737**	**2.8600e-003**	**0.0000**	**55.9453**

3.2 Interior - 2025

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	tons/yr										MT/yr					
Archit. Coating	0.0500					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9402
Total	**0.0520**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9402**

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.3700e-003	0.1202	0.0346	5.1000e-004	0.0116	2.6000e-004	0.0119	3.1900e-003	2.5000e-004	3.4400e-003	0.0000	49.6846	49.6846	2.7400e-003	0.0000	49.7531
Worker	3.0900e-003	1.7300e-003	0.0211	7.0000e-005	8.4500e-003	5.0000e-005	8.5000e-003	2.2500e-003	5.0000e-005	2.3000e-003	0.0000	6.1891	6.1891	1.2000e-004	0.0000	6.1923
Total	**6.4600e-003**	**0.1219**	**0.0557**	**5.8000e-004**	**0.0201**	**3.1000e-004**	**0.0204**	**5.4400e-003**	**3.0000e-004**	**5.7400e-003**	**0.0000**	**55.8737**	**55.8737**	**2.8600e-003**	**0.0000**	**55.9453**

3.3 Site Preparation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0211	0.2230	0.1629	4.2000e-004		8.4500e-003	8.4500e-003		7.7700e-003	7.7700e-003	0.0000	36.6068	36.6068	0.0118	0.0000	36.9028
Total	**0.0211**	**0.2230**	**0.1629**	**4.2000e-004**	**0.0000**	**8.4500e-003**	**8.4500e-003**	**0.0000**	**7.7700e-003**	**7.7700e-003**	**0.0000**	**36.6068**	**36.6068**	**0.0118**	**0.0000**	**36.9028**

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	tons/yr										MT/yr					
Hauling	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
Vendor	6.8000e-004	0.0245	6.9600e-003	1.0000e-004	2.2900e-003	5.0000e-005	2.3500e-003	6.3000e-004	5.0000e-005	6.8000e-004	0.0000	9.8509	9.8509	5.4000e-004	0.0000	9.8645
Worker	9.7000e-004	5.6000e-004	6.7300e-003	2.0000e-005	2.5000e-003	2.0000e-005	2.5100e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	1.9061	1.9061	4.0000e-005	0.0000	1.9072
Total	**1.6500e-003**	**0.0251**	**0.0137**	**1.2000e-004**	**4.7900e-003**	**7.0000e-005**	**4.8600e-003**	**1.2900e-003**	**6.0000e-005**	**1.3600e-003**	**0.0000**	**11.7571**	**11.7571**	**5.8000e-004**	**0.0000**	**11.7716**

3.3 Site Preparation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0211	0.2230	0.1629	4.2000e-004		8.4500e-003	8.4500e-003		7.7700e-003	7.7700e-003	0.0000	36.6067	36.6067	0.0118	0.0000	36.9027
Total	**0.0211**	**0.2230**	**0.1629**	**4.2000e-004**	**0.0000**	**8.4500e-003**	**8.4500e-003**	**0.0000**	**7.7700e-003**	**7.7700e-003**	**0.0000**	**36.6067**	**36.6067**	**0.0118**	**0.0000**	**36.9027**

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	tons/yr										MT/yr					
Hauling	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
Vendor	6.8000e-004	0.0245	6.9600e-003	1.0000e-004	2.2900e-003	5.0000e-005	2.3500e-003	6.3000e-004	5.0000e-005	6.8000e-004	0.0000	9.8509	9.8509	5.4000e-004	0.0000	9.8645
Worker	9.7000e-004	5.6000e-004	6.7300e-003	2.0000e-005	2.5000e-003	2.0000e-005	2.5100e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	1.9061	1.9061	4.0000e-005	0.0000	1.9072
Total	**1.6500e-003**	**0.0251**	**0.0137**	**1.2000e-004**	**4.7900e-003**	**7.0000e-005**	**4.8600e-003**	**1.2900e-003**	**6.0000e-005**	**1.3600e-003**	**0.0000**	**11.7571**	**11.7571**	**5.8000e-004**	**0.0000**	**11.7716**

3.4 Structural Framing - 2024

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	tons/yr										MT/yr					
Off-Road	0.0783	0.6284	0.6909	1.2300e-003		0.0264	0.0264		0.0253	0.0253	0.0000	101.7798	101.7798	0.0190	0.0000	102.2537
Total	**0.0783**	**0.6284**	**0.6909**	**1.2300e-003**		**0.0264**	**0.0264**		**0.0253**	**0.0253**	**0.0000**	**101.7798**	**101.7798**	**0.0190**	**0.0000**	**102.2537**

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.3300e-003	0.2650	0.0752	1.0900e-003	0.0248	5.9000e-004	0.0254	6.8000e-003	5.6000e-004	7.3600e-003	0.0000	106.4770	106.4770	5.8600e-003	0.0000	106.6235
Worker	6.2800e-003	3.6500e-003	0.0436	1.4000e-004	0.0162	1.1000e-004	0.0163	4.3100e-003	1.0000e-004	4.4000e-003	0.0000	12.3619	12.3619	2.6000e-004	0.0000	12.3685
Total	**0.0136**	**0.2686**	**0.1188**	**1.2300e-003**	**0.0410**	**7.0000e-004**	**0.0417**	**0.0111**	**6.6000e-004**	**0.0118**	**0.0000**	**118.8389**	**118.8389**	**6.1200e-003**	**0.0000**	**118.9920**

3.4 Structural Framing - 2024

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	tons/yr										MT/yr					
Off-Road	0.0783	0.6284	0.6909	1.2300e-003		0.0264	0.0264		0.0253	0.0253	0.0000	101.7797	101.7797	0.0190	0.0000	102.2536
Total	**0.0783**	**0.6284**	**0.6909**	**1.2300e-003**		**0.0264**	**0.0264**		**0.0253**	**0.0253**	**0.0000**	**101.7797**	**101.7797**	**0.0190**	**0.0000**	**102.2536**

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.3300e-003	0.2650	0.0752	1.0900e-003	0.0248	5.9000e-004	0.0254	6.8000e-003	5.6000e-004	7.3600e-003	0.0000	106.4770	106.4770	5.8600e-003	0.0000	106.6235
Worker	6.2800e-003	3.6500e-003	0.0436	1.4000e-004	0.0162	1.1000e-004	0.0163	4.3100e-003	1.0000e-004	4.4000e-003	0.0000	12.3619	12.3619	2.6000e-004	0.0000	12.3685
Total	**0.0136**	**0.2686**	**0.1188**	**1.2300e-003**	**0.0410**	**7.0000e-004**	**0.0417**	**0.0111**	**6.6000e-004**	**0.0118**	**0.0000**	**118.8389**	**118.8389**	**6.1200e-003**	**0.0000**	**118.9920**

3.4 Structural Framing - 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	tons/yr										MT/yr					
Off-Road	8.1900e-003	0.0661	0.0770	1.4000e-004		2.5800e-003	2.5800e-003		2.4700e-003	2.4700e-003	0.0000	11.4254	11.4254	2.1000e-003	0.0000	11.4778
Total	**8.1900e-003**	**0.0661**	**0.0770**	**1.4000e-004**		**2.5800e-003**	**2.5800e-003**		**2.4700e-003**	**2.4700e-003**	**0.0000**	**11.4254**	**11.4254**	**2.1000e-003**	**0.0000**	**11.4778**

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	tons/yr										MT/yr					
Hauling	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
Vendor	8.1000e-004	0.0287	8.2800e-003	1.2000e-004	2.7800e-003	6.0000e-005	2.8400e-003	7.6000e-004	6.0000e-005	8.2000e-004	0.0000	11.8811	11.8811	6.6000e-004	0.0000	11.8975
Worker	6.7000e-004	3.7000e-004	4.5300e-003	1.0000e-005	1.8200e-003	1.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3327
Total	**1.4800e-003**	**0.0291**	**0.0128**	**1.3000e-004**	**4.6000e-003**	**7.0000e-005**	**4.6700e-003**	**1.2400e-003**	**7.0000e-005**	**1.3100e-003**	**0.0000**	**13.2131**	**13.2131**	**6.9000e-004**	**0.0000**	**13.2302**

3.4 Structural Framing - 2025

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	tons/yr										MT/yr					
Off-Road	8.1900e-003	0.0661	0.0770	1.4000e-004		2.5800e-003	2.5800e-003		2.4700e-003	2.4700e-003	0.0000	11.4254	11.4254	2.1000e-003	0.0000	11.4778
Total	**8.1900e-003**	**0.0661**	**0.0770**	**1.4000e-004**		**2.5800e-003**	**2.5800e-003**		**2.4700e-003**	**2.4700e-003**	**0.0000**	**11.4254**	**11.4254**	**2.1000e-003**	**0.0000**	**11.4778**

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	tons/yr										MT/yr					
Hauling	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
Vendor	8.1000e-004	0.0287	8.2800e-003	1.2000e-004	2.7800e-003	6.0000e-005	2.8400e-003	7.6000e-004	6.0000e-005	8.2000e-004	0.0000	11.8811	11.8811	6.6000e-004	0.0000	11.8975
Worker	6.7000e-004	3.7000e-004	4.5300e-003	1.0000e-005	1.8200e-003	1.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3327
Total	**1.4800e-003**	**0.0291**	**0.0128**	**1.3000e-004**	**4.6000e-003**	**7.0000e-005**	**4.6700e-003**	**1.2400e-003**	**7.0000e-005**	**1.3100e-003**	**0.0000**	**13.2131**	**13.2131**	**6.9000e-004**	**0.0000**	**13.2302**

3.5 Exterior Enclosure - 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	tons/yr										MT/yr					
Off-Road	0.0208	0.1971	0.3094	4.7000e-004		9.2800e-003	9.2800e-003		8.5700e-003	8.5700e-003	0.0000	41.1092	41.1092	0.0130	0.0000	41.4350
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0208**	**0.1971**	**0.3094**	**4.7000e-004**		**9.2800e-003**	**9.2800e-003**		**8.5700e-003**	**8.5700e-003**	**0.0000**	**41.1092**	**41.1092**	**0.0130**	**0.0000**	**41.4350**

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5900e-003	0.0923	0.0266	3.9000e-004	8.9300e-003	2.0000e-004	9.1300e-003	2.4500e-003	1.9000e-004	2.6400e-003	0.0000	38.1635	38.1635	2.1000e-003	0.0000	38.2161
Worker	2.1400e-003	1.1900e-003	0.0146	5.0000e-005	5.8400e-003	4.0000e-005	5.8800e-003	1.5500e-003	3.0000e-005	1.5900e-003	0.0000	4.2786	4.2786	9.0000e-005	0.0000	4.2807
Total	**4.7300e-003**	**0.0935**	**0.0412**	**4.4000e-004**	**0.0148**	**2.4000e-004**	**0.0150**	**4.0000e-003**	**2.2000e-004**	**4.2300e-003**	**0.0000**	**42.4421**	**42.4421**	**2.1900e-003**	**0.0000**	**42.4969**

3.5 Exterior Enclosure - 2025

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	tons/yr										MT/yr					
Off-Road	0.0208	0.1971	0.3094	4.7000e-004		9.2800e-003	9.2800e-003		8.5700e-003	8.5700e-003	0.0000	41.1092	41.1092	0.0130	0.0000	41.4349
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0208**	**0.1971**	**0.3094**	**4.7000e-004**		**9.2800e-003**	**9.2800e-003**		**8.5700e-003**	**8.5700e-003**	**0.0000**	**41.1092**	**41.1092**	**0.0130**	**0.0000**	**41.4349**

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5900e-003	0.0923	0.0266	3.9000e-004	8.9300e-003	2.0000e-004	9.1300e-003	2.4500e-003	1.9000e-004	2.6400e-003	0.0000	38.1635	38.1635	2.1000e-003	0.0000	38.2161
Worker	2.1400e-003	1.1900e-003	0.0146	5.0000e-005	5.8400e-003	4.0000e-005	5.8800e-003	1.5500e-003	3.0000e-005	1.5900e-003	0.0000	4.2786	4.2786	9.0000e-005	0.0000	4.2807
Total	**4.7300e-003**	**0.0935**	**0.0412**	**4.4000e-004**	**0.0148**	**2.4000e-004**	**0.0150**	**4.0000e-003**	**2.2000e-004**	**4.2300e-003**	**0.0000**	**42.4421**	**42.4421**	**2.1900e-003**	**0.0000**	**42.4969**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Hospital	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Hospital	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hospital	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hospital	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.4032	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Unmitigated	0.4032	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Total	**0.4032**	**1.0000e-005**	**1.3100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5600e-003**	**2.5600e-003**	**1.0000e-005**	**0.0000**	**2.7300e-003**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Total	**0.4032**	**1.0000e-005**	**1.3100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5600e-003**	**2.5600e-003**	**1.0000e-005**	**0.0000**	**2.7300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hospital	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hospital	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2C Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	134.80	1000sqft	3.09	134,800.00	0
Medical Office Building	100.00	1000sqft	2.30	100,000.00	0
Enclosed Parking with Elevator	170.00	Space	1.53	33,700.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Phase 2C Construction - Sacramento County, Annual

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading - 21,219 CY exported under excavation phase

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	117400	0
tblAreaCoating	Area_Nonresidential_Interior	352200	0
tblAreaCoating	Area_Parking	2022	0
tblConstructionPhase	NumDays	10.00	32.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	230.00	42.00
tblConstructionPhase	NumDays	230.00	65.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	20.00	163.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	4.98	0.00
tblEnergyUse	LightingElect	3.71	0.00

tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	NT24NG	0.68	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24E	4.98	0.00
tblEnergyUse	T24NG	57.91	0.00
tblEnergyUse	T24NG	12.42	0.00
tblGrading	MaterialExported	0.00	21,219.00
tblLandUse	LandUseSquareFeet	68,000.00	33,700.00
tblSolidWaste	SolidWasteGenerationRate	1,455.84	0.00
tblSolidWaste	SolidWasteGenerationRate	1,080.00	0.00
tblTripsAndVMT	HaulingTripNumber	2,652.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	44.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	80.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	44.00	50.00

tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	89.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	18.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	89.00	50.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblWater	IndoorWaterUseRate	16,914,776.46	0.00
tblWater	IndoorWaterUseRate	12,548,053.76	0.00
tblWater	OutdoorWaterUseRate	3,221,862.18	0.00
tblWater	OutdoorWaterUseRate	2,390,105.48	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2023	0.0290	0.3051	0.2005	4.8000e-004	0.1927	0.0133	0.2060	0.1051	0.0123	0.1173	0.0000	42.4713	42.4713	0.0117	0.0000	42.7644
2024	0.5620	2.4110	2.0586	7.2500e-003	0.3102	0.0675	0.3777	0.1299	0.0630	0.1929	0.0000	674.2526	674.2526	0.0893	0.0000	676.4850
2025	0.7661	0.8207	0.3937	3.6100e-003	0.1045	4.6300e-003	0.1092	0.0284	4.5500e-003	0.0330	0.0000	348.1058	348.1058	0.0184	0.0000	348.5652
Maximum	**0.7661**	**2.4110**	**2.0586**	**7.2500e-003**	**0.3102**	**0.0675**	**0.3777**	**0.1299**	**0.0630**	**0.1929**	**0.0000**	**674.2526**	**674.2526**	**0.0893**	**0.0000**	**676.4850**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2023	0.0290	0.3051	0.2005	4.8000e-004	0.1927	0.0133	0.2060	0.1051	0.0123	0.1173	0.0000	42.4712	42.4712	0.0117	0.0000	42.7643
2024	0.5620	2.4110	2.0586	7.2500e-003	0.3102	0.0675	0.3777	0.1299	0.0630	0.1929	0.0000	674.2523	674.2523	0.0893	0.0000	676.4847
2025	0.7661	0.8207	0.3937	3.6100e-003	0.1045	4.6300e-003	0.1092	0.0284	4.5500e-003	0.0330	0.0000	348.1058	348.1058	0.0184	0.0000	348.5652
Maximum	**0.7661**	**2.4110**	**2.0586**	**7.2500e-003**	**0.3102**	**0.0675**	**0.3777**	**0.1299**	**0.0630**	**0.1929**	**0.0000**	**674.2523**	**674.2523**	**0.0893**	**0.0000**	**676.4847**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**12-1-2023**	**2-29-2024**	0.8921	0.8921
2	**3-1-2024**	**5-31-2024**	0.7364	0.7364
3	**6-1-2024**	**8-31-2024**	0.5987	0.5987
4	**9-1-2024**	**11-30-2024**	0.7528	0.7528
5	**12-1-2024**	**2-28-2025**	0.9532	0.9532
6	**3-1-2025**	**5-31-2025**	0.9483	0.9483
		Highest	0.9532	0.9532

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.9197	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.9197**	**5.0000e-005**	**5.1500e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0107**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.9197	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.9197**	**5.0000e-005**	**5.1500e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0107**

	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	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 2C Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2023	1/15/2024	5	32	
2	Excavation	Grading	1/16/2024	2/15/2024	5	23	
3	Foundation	Building Construction	2/16/2024	4/15/2024	5	42	
4	Structural Framing	Building Construction	4/16/2024	7/15/2024	5	65	
5	Exterior Enclosure	Paving	7/16/2024	10/15/2024	5	66	
6	Interior	Architectural Coating	10/16/2024	5/30/2025	5	163	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.53

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 352,200; Non-Residential Outdoor: 117,400; Striped Parking Area: 2,022 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2C Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structural Framing	Welders	1	8.00	46	0.45
Exterior Enclosure	Pavers	2	8.00	130	0.42
Exterior Enclosure	Paving Equipment	2	8.00	132	0.36
Exterior Enclosure	Rollers	2	8.00	80	0.38
Interior	Air Compressors	1	6.00	78	0.48
Excavation	Excavators	1	8.00	158	0.38
Excavation	Graders	1	8.00	187	0.41
Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Foundation	Cranes	1	7.00	231	0.29
Foundation	Forklifts	3	8.00	89	0.20
Foundation	Generator Sets	1	8.00	84	0.74
Foundation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Foundation	Welders	1	8.00	46	0.45

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
Site Preparation	7	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	30.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosure	6	30.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Interior	1	80.00	80.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	6	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	9	50.00	50.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					0.1897	0.0000	0.1897	0.1043	0.0000	0.1043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.2890	0.1916	4.0000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	35.1232	35.1232	0.0114	0.0000	35.4072
Total	**0.0279**	**0.2890**	**0.1916**	**4.0000e-004**	**0.1897**	**0.0133**	**0.2030**	**0.1043**	**0.0122**	**0.1165**	**0.0000**	**35.1232**	**35.1232**	**0.0114**	**0.0000**	**35.4072**

3.2 Site Preparation - 2023

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.3000e-004	0.0157	4.4000e-003	6.0000e-005	1.4200e-003	4.0000e-005	1.4500e-003	3.9000e-004	3.0000e-005	4.2000e-004	0.0000	6.1231	6.1231	3.4000e-004	0.0000	6.1315
Worker	6.4000e-004	3.8000e-004	4.4900e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2249	1.2249	3.0000e-005	0.0000	1.2256
Total	**1.0700e-003**	**0.0161**	**8.8900e-003**	**7.0000e-005**	**2.9600e-003**	**5.0000e-005**	**3.0000e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**7.3481**	**7.3481**	**3.7000e-004**	**0.0000**	**7.3572**

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	tons/yr										MT/yr					
Fugitive Dust					0.1897	0.0000	0.1897	0.1043	0.0000	0.1043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.2890	0.1916	4.0000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	35.1232	35.1232	0.0114	0.0000	35.4072
Total	**0.0279**	**0.2890**	**0.1916**	**4.0000e-004**	**0.1897**	**0.0133**	**0.2030**	**0.1043**	**0.0122**	**0.1165**	**0.0000**	**35.1232**	**35.1232**	**0.0114**	**0.0000**	**35.4072**

3.2 Site Preparation - 2023

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.3000e-004	0.0157	4.4000e-003	6.0000e-005	1.4200e-003	4.0000e-005	1.4500e-003	3.9000e-004	3.0000e-005	4.2000e-004	0.0000	6.1231	6.1231	3.4000e-004	0.0000	6.1315
Worker	6.4000e-004	3.8000e-004	4.4900e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2249	1.2249	3.0000e-005	0.0000	1.2256
Total	**1.0700e-003**	**0.0161**	**8.8900e-003**	**7.0000e-005**	**2.9600e-003**	**5.0000e-005**	**3.0000e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**7.3481**	**7.3481**	**3.7000e-004**	**0.0000**	**7.3572**

3.2 Site Preparation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0546	0.0000	0.0546	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.1495	0.1009	2.1000e-004		6.7600e-003	6.7600e-003		6.2200e-003	6.2200e-003	0.0000	18.4014	18.4014	5.9500e-003	0.0000	18.5502
Total	**0.0146**	**0.1495**	**0.1009**	**2.1000e-004**	**0.0994**	**6.7600e-003**	**0.1061**	**0.0546**	**6.2200e-003**	**0.0608**	**0.0000**	**18.4014**	**18.4014**	**5.9500e-003**	**0.0000**	**18.5502**

3.2 Site Preparation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.2000e-004	7.9300e-003	2.2500e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	3.1871	3.1871	1.8000e-004	0.0000	3.1915
Worker	3.1000e-004	1.8000e-004	2.1800e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6167	0.6167	1.0000e-005	0.0000	0.6170
Total	**5.3000e-004**	**8.1100e-003**	**4.4300e-003**	**4.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5700e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**3.8038**	**3.8038**	**1.9000e-004**	**0.0000**	**3.8085**

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	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0546	0.0000	0.0546	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.1495	0.1009	2.1000e-004		6.7600e-003	6.7600e-003		6.2200e-003	6.2200e-003	0.0000	18.4014	18.4014	5.9500e-003	0.0000	18.5502
Total	**0.0146**	**0.1495**	**0.1009**	**2.1000e-004**	**0.0994**	**6.7600e-003**	**0.1061**	**0.0546**	**6.2200e-003**	**0.0608**	**0.0000**	**18.4014**	**18.4014**	**5.9500e-003**	**0.0000**	**18.5502**

3.2 Site Preparation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.2000e-004	7.9300e-003	2.2500e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	3.1871	3.1871	1.8000e-004	0.0000	3.1915
Worker	3.1000e-004	1.8000e-004	2.1800e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6167	0.6167	1.0000e-005	0.0000	0.6170
Total	**5.3000e-004**	**8.1100e-003**	**4.4300e-003**	**4.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5700e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**3.8038**	**3.8038**	**1.9000e-004**	**0.0000**	**3.8085**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0776	0.0000	0.0776	0.0391	0.0000	0.0391	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1959	0.1697	3.4000e-004		8.3300e-003	8.3300e-003		7.6600e-003	7.6600e-003	0.0000	29.9735	29.9735	9.6900e-003	0.0000	30.2159
Total	**0.0191**	**0.1959**	**0.1697**	**3.4000e-004**	**0.0776**	**8.3300e-003**	**0.0859**	**0.0391**	**7.6600e-003**	**0.0467**	**0.0000**	**29.9735**	**29.9735**	**9.6900e-003**	**0.0000**	**30.2159**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.1500e-003	0.0415	0.0118	1.7000e-004	3.8800e-003	9.0000e-005	3.9700e-003	1.0600e-003	9.0000e-005	1.1500e-003	0.0000	16.6597	16.6597	9.2000e-004	0.0000	16.6826
Worker	6.6000e-004	3.8000e-004	4.5500e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2895	1.2895	3.0000e-005	0.0000	1.2901
Total	**1.8100e-003**	**0.0418**	**0.0163**	**1.8000e-004**	**5.5700e-003**	**1.0000e-004**	**5.6700e-003**	**1.5100e-003**	**1.0000e-004**	**1.6100e-003**	**0.0000**	**17.9491**	**17.9491**	**9.5000e-004**	**0.0000**	**17.9727**

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	tons/yr										MT/yr					
Fugitive Dust					0.0776	0.0000	0.0776	0.0391	0.0000	0.0391	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1959	0.1697	3.4000e-004		8.3300e-003	8.3300e-003		7.6600e-003	7.6600e-003	0.0000	29.9735	29.9735	9.6900e-003	0.0000	30.2158
Total	**0.0191**	**0.1959**	**0.1697**	**3.4000e-004**	**0.0776**	**8.3300e-003**	**0.0859**	**0.0391**	**7.6600e-003**	**0.0467**	**0.0000**	**29.9735**	**29.9735**	**9.6900e-003**	**0.0000**	**30.2158**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.1500e-003	0.0415	0.0118	1.7000e-004	3.8800e-003	9.0000e-005	3.9700e-003	1.0600e-003	9.0000e-005	1.1500e-003	0.0000	16.6597	16.6597	9.2000e-004	0.0000	16.6826
Worker	6.6000e-004	3.8000e-004	4.5500e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2895	1.2895	3.0000e-005	0.0000	1.2901
Total	**1.8100e-003**	**0.0418**	**0.0163**	**1.8000e-004**	**5.5700e-003**	**1.0000e-004**	**5.6700e-003**	**1.5100e-003**	**1.0000e-004**	**1.6100e-003**	**0.0000**	**17.9491**	**17.9491**	**9.5000e-004**	**0.0000**	**17.9727**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Off-Road	0.0309	0.2823	0.3395	5.7000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	48.6883	48.6883	0.0115	0.0000	48.9762
Total	**0.0309**	**0.2823**	**0.3395**	**5.7000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**48.6883**	**48.6883**	**0.0115**	**0.0000**	**48.9762**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.2300e-003	0.1893	0.0537	7.8000e-004	0.0177	4.2000e-004	0.0181	4.8600e-003	4.0000e-004	5.2600e-003	0.0000	76.0550	76.0550	4.1900e-003	0.0000	76.1596
Worker	2.9900e-003	1.7400e-003	0.0208	7.0000e-005	7.7100e-003	5.0000e-005	7.7600e-003	2.0500e-003	5.0000e-005	2.1000e-003	0.0000	5.8866	5.8866	1.3000e-004	0.0000	5.8898
Total	**8.2200e-003**	**0.1910**	**0.0745**	**8.5000e-004**	**0.0254**	**4.7000e-004**	**0.0259**	**6.9100e-003**	**4.5000e-004**	**7.3600e-003**	**0.0000**	**81.9416**	**81.9416**	**4.3200e-003**	**0.0000**	**82.0494**

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	tons/yr										MT/yr					
Off-Road	0.0309	0.2823	0.3395	5.7000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	48.6883	48.6883	0.0115	0.0000	48.9761
Total	**0.0309**	**0.2823**	**0.3395**	**5.7000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**48.6883**	**48.6883**	**0.0115**	**0.0000**	**48.9761**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.2300e-003	0.1893	0.0537	7.8000e-004	0.0177	4.2000e-004	0.0181	4.8600e-003	4.0000e-004	5.2600e-003	0.0000	76.0550	76.0550	4.1900e-003	0.0000	76.1596
Worker	2.9900e-003	1.7400e-003	0.0208	7.0000e-005	7.7100e-003	5.0000e-005	7.7600e-003	2.0500e-003	5.0000e-005	2.1000e-003	0.0000	5.8866	5.8866	1.3000e-004	0.0000	5.8898
Total	**8.2200e-003**	**0.1910**	**0.0745**	**8.5000e-004**	**0.0254**	**4.7000e-004**	**0.0259**	**6.9100e-003**	**4.5000e-004**	**7.3600e-003**	**0.0000**	**81.9416**	**81.9416**	**4.3200e-003**	**0.0000**	**82.0494**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Off-Road	0.0478	0.4369	0.5254	8.8000e-004		0.0199	0.0199		0.0188	0.0188	0.0000	75.3510	75.3510	0.0178	0.0000	75.7964
Total	**0.0478**	**0.4369**	**0.5254**	**8.8000e-004**		**0.0199**	**0.0199**		**0.0188**	**0.0188**	**0.0000**	**75.3510**	**75.3510**	**0.0178**	**0.0000**	**75.7964**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.8600e-003	0.1757	0.0499	7.2000e-004	0.0164	3.9000e-004	0.0168	4.5100e-003	3.7000e-004	4.8800e-003	0.0000	70.6225	70.6225	3.8900e-003	0.0000	70.7196
Worker	2.7800e-003	1.6100e-003	0.0193	6.0000e-005	7.1600e-003	5.0000e-005	7.2100e-003	1.9000e-003	4.0000e-005	1.9500e-003	0.0000	5.4662	5.4662	1.2000e-004	0.0000	5.4691
Total	**7.6400e-003**	**0.1774**	**0.0692**	**7.8000e-004**	**0.0236**	**4.4000e-004**	**0.0240**	**6.4100e-003**	**4.1000e-004**	**6.8300e-003**	**0.0000**	**76.0886**	**76.0886**	**4.0100e-003**	**0.0000**	**76.1887**

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	tons/yr										MT/yr					
Off-Road	0.0478	0.4369	0.5254	8.8000e-004		0.0199	0.0199		0.0188	0.0188	0.0000	75.3509	75.3509	0.0178	0.0000	75.7963
Total	**0.0478**	**0.4369**	**0.5254**	**8.8000e-004**		**0.0199**	**0.0199**		**0.0188**	**0.0188**	**0.0000**	**75.3509**	**75.3509**	**0.0178**	**0.0000**	**75.7963**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.8600e-003	0.1757	0.0499	7.2000e-004	0.0164	3.9000e-004	0.0168	4.5100e-003	3.7000e-004	4.8800e-003	0.0000	70.6225	70.6225	3.8900e-003	0.0000	70.7196
Worker	2.7800e-003	1.6100e-003	0.0193	6.0000e-005	7.1600e-003	5.0000e-005	7.2100e-003	1.9000e-003	4.0000e-005	1.9500e-003	0.0000	5.4662	5.4662	1.2000e-004	0.0000	5.4691
Total	**7.6400e-003**	**0.1774**	**0.0692**	**7.8000e-004**	**0.0236**	**4.4000e-004**	**0.0240**	**6.4100e-003**	**4.1000e-004**	**6.8300e-003**	**0.0000**	**76.0886**	**76.0886**	**4.0100e-003**	**0.0000**	**76.1887**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Off-Road	0.0326	0.3143	0.4827	7.5000e-004		0.0155	0.0155		0.0142	0.0142	0.0000	66.0876	66.0876	0.0214	0.0000	66.6219
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0326**	**0.3143**	**0.4827**	**7.5000e-004**		**0.0155**	**0.0155**		**0.0142**	**0.0142**	**0.0000**	**66.0876**	**66.0876**	**0.0214**	**0.0000**	**66.6219**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.9400e-003	0.1784	0.0506	7.4000e-004	0.0167	4.0000e-004	0.0171	4.5800e-003	3.8000e-004	4.9600e-003	0.0000	71.7090	71.7090	3.9500e-003	0.0000	71.8076
Worker	2.8200e-003	1.6400e-003	0.0196	6.0000e-005	7.2700e-003	5.0000e-005	7.3200e-003	1.9300e-003	4.0000e-005	1.9800e-003	0.0000	5.5502	5.5502	1.2000e-004	0.0000	5.5532
Total	**7.7600e-003**	**0.1801**	**0.0702**	**8.0000e-004**	**0.0240**	**4.5000e-004**	**0.0244**	**6.5100e-003**	**4.2000e-004**	**6.9400e-003**	**0.0000**	**77.2592**	**77.2592**	**4.0700e-003**	**0.0000**	**77.3609**

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	tons/yr										MT/yr					
Off-Road	0.0326	0.3143	0.4827	7.5000e-004		0.0155	0.0155		0.0142	0.0142	0.0000	66.0875	66.0875	0.0214	0.0000	66.6218
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0326**	**0.3143**	**0.4827**	**7.5000e-004**		**0.0155**	**0.0155**		**0.0142**	**0.0142**	**0.0000**	**66.0875**	**66.0875**	**0.0214**	**0.0000**	**66.6218**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.9400e-003	0.1784	0.0506	7.4000e-004	0.0167	4.0000e-004	0.0171	4.5800e-003	3.8000e-004	4.9600e-003	0.0000	71.7090	71.7090	3.9500e-003	0.0000	71.8076
Worker	2.8200e-003	1.6400e-003	0.0196	6.0000e-005	7.2700e-003	5.0000e-005	7.3200e-003	1.9300e-003	4.0000e-005	1.9800e-003	0.0000	5.5502	5.5502	1.2000e-004	0.0000	5.5532
Total	**7.7600e-003**	**0.1801**	**0.0702**	**8.0000e-004**	**0.0240**	**4.5000e-004**	**0.0244**	**6.5100e-003**	**4.2000e-004**	**6.9400e-003**	**0.0000**	**77.2592**	**77.2592**	**4.0700e-003**	**0.0000**	**77.3609**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Archit. Coating	0.3688					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9700e-003	0.0335	0.0498	8.0000e-005		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	7.0215	7.0215	4.0000e-004	0.0000	7.0313
Total	**0.3738**	**0.0335**	**0.0498**	**8.0000e-005**		**1.6800e-003**	**1.6800e-003**		**1.6800e-003**	**1.6800e-003**	**0.0000**	**7.0215**	**7.0215**	**4.0000e-004**	**0.0000**	**7.0313**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0110	0.3965	0.1125	1.6300e-003	0.0371	8.8000e-004	0.0380	0.0102	8.4000e-004	0.0110	0.0000	159.3533	159.3533	8.7700e-003	0.0000	159.5725
Worker	6.2700e-003	3.6400e-003	0.0435	1.4000e-004	0.0162	1.0000e-004	0.0163	4.3000e-003	1.0000e-004	4.3900e-003	0.0000	12.3339	12.3339	2.6000e-004	0.0000	12.3405
Total	**0.0172**	**0.4002**	**0.1561**	**1.7700e-003**	**0.0532**	**9.8000e-004**	**0.0542**	**0.0145**	**9.4000e-004**	**0.0154**	**0.0000**	**171.6871**	**171.6871**	**9.0300e-003**	**0.0000**	**171.9130**

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	tons/yr										MT/yr					
Archit. Coating	0.3688					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9700e-003	0.0335	0.0498	8.0000e-005		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	7.0214	7.0214	4.0000e-004	0.0000	7.0313
Total	**0.3738**	**0.0335**	**0.0498**	**8.0000e-005**		**1.6800e-003**	**1.6800e-003**		**1.6800e-003**	**1.6800e-003**	**0.0000**	**7.0214**	**7.0214**	**4.0000e-004**	**0.0000**	**7.0313**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0110	0.3965	0.1125	1.6300e-003	0.0371	8.8000e-004	0.0380	0.0102	8.4000e-004	0.0110	0.0000	159.3533	159.3533	8.7700e-003	0.0000	159.5725
Worker	6.2700e-003	3.6400e-003	0.0435	1.4000e-004	0.0162	1.0000e-004	0.0163	4.3000e-003	1.0000e-004	4.3900e-003	0.0000	12.3339	12.3339	2.6000e-004	0.0000	12.3405
Total	**0.0172**	**0.4002**	**0.1561**	**1.7700e-003**	**0.0532**	**9.8000e-004**	**0.0542**	**0.0145**	**9.4000e-004**	**0.0154**	**0.0000**	**171.6871**	**171.6871**	**9.0300e-003**	**0.0000**	**171.9130**

3.7 Interior - 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	tons/yr										MT/yr					
Archit. Coating	0.7242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2300e-003	0.0619	0.0977	1.6000e-004		2.7800e-003	2.7800e-003		2.7800e-003	2.7800e-003	0.0000	13.7876	13.7876	7.5000e-004	0.0000	13.8064
Total	**0.7334**	**0.0619**	**0.0977**	**1.6000e-004**		**2.7800e-003**	**2.7800e-003**		**2.7800e-003**	**2.7800e-003**	**0.0000**	**13.7876**	**13.7876**	**7.5000e-004**	**0.0000**	**13.8064**

3.7 Interior - 2025

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0211	0.7523	0.2169	3.1900e-003	0.0728	1.6500e-003	0.0745	0.0200	1.5800e-003	0.0216	0.0000	311.0686	311.0686	0.0172	0.0000	311.4975
Worker	0.0116	6.4900e-003	0.0792	2.6000e-004	0.0317	2.0000e-004	0.0319	8.4400e-003	1.9000e-004	8.6200e-003	0.0000	23.2496	23.2496	4.7000e-004	0.0000	23.2613
Total	**0.0327**	**0.7588**	**0.2960**	**3.4500e-003**	**0.1045**	**1.8500e-003**	**0.1064**	**0.0284**	**1.7700e-003**	**0.0302**	**0.0000**	**334.3182**	**334.3182**	**0.0176**	**0.0000**	**334.7588**

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	tons/yr										MT/yr					
Archit. Coating	0.7242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2300e-003	0.0619	0.0977	1.6000e-004		2.7800e-003	2.7800e-003		2.7800e-003	2.7800e-003	0.0000	13.7876	13.7876	7.5000e-004	0.0000	13.8064
Total	**0.7334**	**0.0619**	**0.0977**	**1.6000e-004**		**2.7800e-003**	**2.7800e-003**		**2.7800e-003**	**2.7800e-003**	**0.0000**	**13.7876**	**13.7876**	**7.5000e-004**	**0.0000**	**13.8064**

3.7 Interior - 2025

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0211	0.7523	0.2169	3.1900e-003	0.0728	1.6500e-003	0.0745	0.0200	1.5800e-003	0.0216	0.0000	311.0686	311.0686	0.0172	0.0000	311.4975
Worker	0.0116	6.4900e-003	0.0792	2.6000e-004	0.0317	2.0000e-004	0.0319	8.4400e-003	1.9000e-004	8.6200e-003	0.0000	23.2496	23.2496	4.7000e-004	0.0000	23.2613
Total	**0.0327**	**0.7588**	**0.2960**	**3.4500e-003**	**0.1045**	**1.8500e-003**	**0.1064**	**0.0284**	**1.7700e-003**	**0.0302**	**0.0000**	**334.3182**	**334.3182**	**0.0176**	**0.0000**	**334.7588**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Medical Office Building	10.00	5.00	6.50	29.60	51.40	19.00	60	30	10

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Hospital	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Medical Office Building	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Hospital	0	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
Medical Office Building	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Hospital	0	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
Medical Office Building	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.9197	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Unmitigated	0.9197	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9192					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.7000e-004	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Total	**0.9197**	**5.0000e-005**	**5.1500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0107**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9192					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.7000e-004	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Total	**0.9197**	**5.0000e-005**	**5.1500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0107**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2D Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	3.21	Acre	3.21	139,997.48	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading -

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	132.00
tblLandUse	LandUseSquareFeet	139,827.60	139,997.48
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	OutdoorWaterUseRate	3,824,655.13	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2025	0.1711	1.7604	1.2450	3.0200e-003	1.2158	0.0720	1.2878	0.6617	0.0663	0.7280	0.0000	269.5577	269.5577	0.0738	0.0000	271.4014
Maximum	**0.1711**	**1.7604**	**1.2450**	**3.0200e-003**	**1.2158**	**0.0720**	**1.2878**	**0.6617**	**0.0663**	**0.7280**	**0.0000**	**269.5577**	**269.5577**	**0.0738**	**0.0000**	**271.4014**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2025	0.1711	1.7604	1.2450	3.0200e-003	1.2158	0.0720	1.2878	0.6617	0.0663	0.7280	0.0000	269.5574	269.5574	0.0738	0.0000	271.4011
Maximum	**0.1711**	**1.7604**	**1.2450**	**3.0200e-003**	**1.2158**	**0.0720**	**1.2878**	**0.6617**	**0.0663**	**0.7280**	**0.0000**	**269.5574**	**269.5574**	**0.0738**	**0.0000**	**271.4011**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2025**	**7-31-2025**	0.9606	0.9606
2	**8-1-2025**	**9-30-2025**	0.6369	0.6369
		Highest	0.9606	0.9606

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	1.3200e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3200e-003**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	1.3200e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3200e-003**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

	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	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	Site Preparation	Site Preparation	5/1/2025	10/31/2025	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

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
Site Preparation	7	30.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					1.1924	0.0000	1.1924	0.6554	0.0000	0.6554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1632	1.6654	1.1822	2.5100e-003		0.0717	0.0717		0.0660	0.0660	0.0000	220.8821	220.8821	0.0714	0.0000	222.6681
Total	**0.1632**	**1.6654**	**1.1822**	**2.5100e-003**	**1.1924**	**0.0717**	**1.2641**	**0.6554**	**0.0660**	**0.7214**	**0.0000**	**220.8821**	**220.8821**	**0.0714**	**0.0000**	**222.6681**

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5800e-003	0.0920	0.0265	3.9000e-004	8.9000e-003	2.0000e-004	9.1000e-003	2.4400e-003	1.9000e-004	2.6300e-003	0.0000	38.0195	38.0195	2.1000e-003	0.0000	38.0719
Worker	5.3300e-003	2.9700e-003	0.0363	1.2000e-004	0.0145	9.0000e-005	0.0146	3.8700e-003	9.0000e-005	3.9500e-003	0.0000	10.6561	10.6561	2.2000e-004	0.0000	10.6614
Total	**7.9100e-003**	**0.0949**	**0.0628**	**5.1000e-004**	**0.0234**	**2.9000e-004**	**0.0237**	**6.3100e-003**	**2.8000e-004**	**6.5800e-003**	**0.0000**	**48.6756**	**48.6756**	**2.3200e-003**	**0.0000**	**48.7334**

3.2 Site Preparation - 2025

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	tons/yr										MT/yr					
Fugitive Dust					1.1924	0.0000	1.1924	0.6554	0.0000	0.6554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1632	1.6654	1.1822	2.5100e-003		0.0717	0.0717		0.0660	0.0660	0.0000	220.8819	220.8819	0.0714	0.0000	222.6678
Total	**0.1632**	**1.6654**	**1.1822**	**2.5100e-003**	**1.1924**	**0.0717**	**1.2641**	**0.6554**	**0.0660**	**0.7214**	**0.0000**	**220.8819**	**220.8819**	**0.0714**	**0.0000**	**222.6678**

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5800e-003	0.0920	0.0265	3.9000e-004	8.9000e-003	2.0000e-004	9.1000e-003	2.4400e-003	1.9000e-004	2.6300e-003	0.0000	38.0195	38.0195	2.1000e-003	0.0000	38.0719
Worker	5.3300e-003	2.9700e-003	0.0363	1.2000e-004	0.0145	9.0000e-005	0.0146	3.8700e-003	9.0000e-005	3.9500e-003	0.0000	10.6561	10.6561	2.2000e-004	0.0000	10.6614
Total	**7.9100e-003**	**0.0949**	**0.0628**	**5.1000e-004**	**0.0234**	**2.9000e-004**	**0.0237**	**6.3100e-003**	**2.8000e-004**	**6.5800e-003**	**0.0000**	**48.6756**	**48.6756**	**2.3200e-003**	**0.0000**	**48.7334**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	10.00	5.00	6.50	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	1.3200e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Unmitigated	1.3200e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Total	**1.3200e-003**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Total	**1.3200e-003**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 3A Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	1,000.00	Space	9.00	165,600.00	0
Strip Mall	41.40	1000sqft	0.95	41,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2028
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Grading - 18,400 CY export under excavation phase

Demolition -

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	20700	0
tblAreaCoating	Area_Nonresidential_Interior	62100	0
tblAreaCoating	Area_Parking	9936	0
tblConstructionPhase	NumDays	20.00	77.00
tblConstructionPhase	NumDays	230.00	43.00
tblConstructionPhase	NumDays	20.00	34.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	PhaseEndDate	2/21/2028	11/30/2027
tblConstructionPhase	PhaseEndDate	12/27/2027	6/15/2027
tblConstructionPhase	PhaseEndDate	12/28/2026	1/15/2027

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tblConstructionPhase	PhaseEndDate	2/8/2027	4/15/2027
tblConstructionPhase	PhaseEndDate	1/24/2028	8/13/2027
tblConstructionPhase	PhaseEndDate	1/11/2027	2/15/2027
tblConstructionPhase	PhaseStartDate	1/25/2028	8/16/2027
tblConstructionPhase	PhaseStartDate	2/9/2027	4/16/2027
tblConstructionPhase	PhaseStartDate	1/12/2027	2/16/2027
tblConstructionPhase	PhaseStartDate	12/28/2027	6/16/2027
tblConstructionPhase	PhaseStartDate	12/29/2026	1/16/2027
tblEnergyUse	LightingElect	5.33	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	2.98	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	0.93	0.00
tblEnergyUse	T24E	3.26	0.00
tblEnergyUse	T24NG	4.49	0.00
tblGrading	AcresOfGrading	21.50	10.00
tblGrading	MaterialExported	0.00	18,400.00
tblLandUse	LandUseSquareFeet	400,000.00	165,600.00
tblSolidWaste	SolidWasteGenerationRate	43.47	0.00
tblTripsAndVMT	HaulingTripNumber	66.00	0.00
tblTripsAndVMT	HaulingTripNumber	2,300.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	34.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	15.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	17.00	30.00
tblTripsAndVMT	WorkerTripNumber	83.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	3,066,602.39	0.00
tblWater	OutdoorWaterUseRate	1,879,530.50	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2026	0.0251	0.2366	0.2318	5.3000e-004	8.2900e-003	9.8500e-003	0.0181	1.6400e-003	9.1500e-003	0.0108	0.0000	46.8775	46.8775	0.0113	0.0000	47.1600
2027	0.3612	1.6055	1.5147	4.4400e-003	0.3971	0.0529	0.4500	0.1952	0.0491	0.2443	0.0000	407.2055	407.2055	0.0709	0.0000	408.9791
Maximum	**0.3612**	**1.6055**	**1.5147**	**4.4400e-003**	**0.3971**	**0.0529**	**0.4500**	**0.1952**	**0.0491**	**0.2443**	**0.0000**	**407.2055**	**407.2055**	**0.0709**	**0.0000**	**408.9791**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2026	0.0251	0.2366	0.2318	5.3000e-004	8.2900e-003	9.8500e-003	0.0181	1.6400e-003	9.1500e-003	0.0108	0.0000	46.8774	46.8774	0.0113	0.0000	47.1600
2027	0.3612	1.6055	1.5147	4.4400e-003	0.3971	0.0529	0.4500	0.1952	0.0491	0.2443	0.0000	407.2052	407.2052	0.0709	0.0000	408.9788
Maximum	**0.3612**	**1.6055**	**1.5147**	**4.4400e-003**	**0.3971**	**0.0529**	**0.4500**	**0.1952**	**0.0491**	**0.2443**	**0.0000**	**407.2052**	**407.2052**	**0.0709**	**0.0000**	**408.9788**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2026	2-28-2027	0.8118	0.8118
2	3-1-2027	5-31-2027	0.6452	0.6452
3	6-1-2027	8-31-2027	0.4219	0.4219
4	9-1-2027	9-30-2027	0.1103	0.1103
		Highest	0.8118	0.8118

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.1736	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1736**	**1.2000e-004**	**0.0133**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0258**	**0.0258**	**7.0000e-005**	**0.0000**	**0.0275**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.1736	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1736**	**1.2000e-004**	**0.0133**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0258**	**0.0258**	**7.0000e-005**	**0.0000**	**0.0275**

	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	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 3A Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation/Demolition	Demolition	12/1/2026	1/15/2027	5	34	
2	Excavation	Site Preparation	1/16/2027	2/15/2027	5	21	
3	Foundation	Grading	2/16/2027	4/15/2027	5	43	
4	Structural Framing	Building Construction	4/16/2027	6/15/2027	5	43	
5	Exterior Enclosures/Arch Coating	Paving	6/16/2027	8/13/2027	5	43	
6	Interior	Architectural Coating	8/16/2027	11/30/2027	5	77	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 9

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 62,100; Non-Residential Outdoor: 20,700; Striped Parking Area: 9,936 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3A Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Interior	Air Compressors	1	6.00	78	0.48
Site Preparation/Demolition	Excavators	3	8.00	158	0.38
Site Preparation/Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Foundation	Excavators	1	8.00	158	0.38
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Exterior Enclosures/Arch Coating	Pavers	2	8.00	130	0.42
Exterior Enclosures/Arch Coating	Rollers	2	8.00	80	0.38
Site Preparation/Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Foundation	Rubber Tired Dozers	1	8.00	247	0.40
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Foundation	Graders	1	8.00	187	0.41
Foundation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Exterior Enclosures/Arch Coating	Paving Equipment	2	8.00	132	0.36
Excavation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Excavation	Rubber Tired Dozers	3	8.00	247	0.40
Structural Framing	Welders	1	8.00	46	0.45

Trips and VMT

Phase 3A Construction - Sacramento County, Annual

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
Interior	1	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Site Preparation/Demolitio	6	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	6	50.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosures/Arch Coati	6	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	7	20.00	15.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation/Demolition - 2026

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	tons/yr										MT/yr					
Fugitive Dust					5.0500e-003	0.0000	5.0500e-003	7.6000e-004	0.0000	7.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.2208	0.2233	4.5000e-004		9.8100e-003	9.8100e-003		9.1100e-003	9.1100e-003	0.0000	39.0973	39.0973	0.0109	0.0000	39.3702
Total	**0.0241**	**0.2208**	**0.2233**	**4.5000e-004**	**5.0500e-003**	**9.8100e-003**	**0.0149**	**7.6000e-004**	**9.1100e-003**	**9.8700e-003**	**0.0000**	**39.0973**	**39.0973**	**0.0109**	**0.0000**	**39.3702**

3.2 Site Preparation/Demolition - 2026

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.4000e-004	0.0155	4.5500e-003	7.0000e-005	1.5500e-003	3.0000e-005	1.5800e-003	4.3000e-004	3.0000e-005	4.6000e-004	0.0000	6.5883	6.5883	3.6000e-004	0.0000	6.5974
Worker	5.9000e-004	3.2000e-004	3.9200e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.1918	1.1918	2.0000e-005	0.0000	1.1924
Total	**1.0300e-003**	**0.0158**	**8.4700e-003**	**8.0000e-005**	**3.2400e-003**	**4.0000e-005**	**3.2800e-003**	**8.8000e-004**	**4.0000e-005**	**9.2000e-004**	**0.0000**	**7.7802**	**7.7802**	**3.8000e-004**	**0.0000**	**7.7898**

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	tons/yr										MT/yr					
Fugitive Dust					5.0500e-003	0.0000	5.0500e-003	7.6000e-004	0.0000	7.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.2208	0.2233	4.5000e-004		9.8100e-003	9.8100e-003		9.1100e-003	9.1100e-003	0.0000	39.0973	39.0973	0.0109	0.0000	39.3702
Total	**0.0241**	**0.2208**	**0.2233**	**4.5000e-004**	**5.0500e-003**	**9.8100e-003**	**0.0149**	**7.6000e-004**	**9.1100e-003**	**9.8700e-003**	**0.0000**	**39.0973**	**39.0973**	**0.0109**	**0.0000**	**39.3702**

3.2 Site Preparation/Demolition - 2026

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.4000e-004	0.0155	4.5500e-003	7.0000e-005	1.5500e-003	3.0000e-005	1.5800e-003	4.3000e-004	3.0000e-005	4.6000e-004	0.0000	6.5883	6.5883	3.6000e-004	0.0000	6.5974
Worker	5.9000e-004	3.2000e-004	3.9200e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.1918	1.1918	2.0000e-005	0.0000	1.1924
Total	**1.0300e-003**	**0.0158**	**8.4700e-003**	**8.0000e-005**	**3.2400e-003**	**4.0000e-005**	**3.2800e-003**	**8.8000e-004**	**4.0000e-005**	**9.2000e-004**	**0.0000**	**7.7802**	**7.7802**	**3.8000e-004**	**0.0000**	**7.7898**

3.2 Site Preparation/Demolition - 2027

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	tons/yr										MT/yr					
Fugitive Dust					2.4100e-003	0.0000	2.4100e-003	3.7000e-004	0.0000	3.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1056	0.1068	2.1000e-004		4.6900e-003	4.6900e-003		4.3600e-003	4.3600e-003	0.0000	18.6987	18.6987	5.2200e-003	0.0000	18.8292
Total	**0.0115**	**0.1056**	**0.1068**	**2.1000e-004**	**2.4100e-003**	**4.6900e-003**	**7.1000e-003**	**3.7000e-004**	**4.3600e-003**	**4.7300e-003**	**0.0000**	**18.6987**	**18.6987**	**5.2200e-003**	**0.0000**	**18.8292**

3.2 Site Preparation/Demolition - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1000e-004	7.1900e-003	2.1400e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	1.0000e-005	2.2000e-004	0.0000	3.1349	3.1349	1.7000e-004	0.0000	3.1393
Worker	2.7000e-004	1.4000e-004	1.7500e-003	1.0000e-005	8.1000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.5503	0.5503	1.0000e-005	0.0000	0.5506
Total	**4.8000e-004**	**7.3300e-003**	**3.8900e-003**	**4.0000e-005**	**1.5500e-003**	**2.0000e-005**	**1.5700e-003**	**4.1000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**3.6853**	**3.6853**	**1.8000e-004**	**0.0000**	**3.6898**

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	tons/yr										MT/yr					
Fugitive Dust					2.4100e-003	0.0000	2.4100e-003	3.7000e-004	0.0000	3.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1056	0.1068	2.1000e-004		4.6900e-003	4.6900e-003		4.3600e-003	4.3600e-003	0.0000	18.6987	18.6987	5.2200e-003	0.0000	18.8292
Total	**0.0115**	**0.1056**	**0.1068**	**2.1000e-004**	**2.4100e-003**	**4.6900e-003**	**7.1000e-003**	**3.7000e-004**	**4.3600e-003**	**4.7300e-003**	**0.0000**	**18.6987**	**18.6987**	**5.2200e-003**	**0.0000**	**18.8292**

3.2 Site Preparation/Demolition - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1000e-004	7.1900e-003	2.1400e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	1.0000e-005	2.2000e-004	0.0000	3.1349	3.1349	1.7000e-004	0.0000	3.1393
Worker	2.7000e-004	1.4000e-004	1.7500e-003	1.0000e-005	8.1000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.5503	0.5503	1.0000e-005	0.0000	0.5506
Total	**4.8000e-004**	**7.3300e-003**	**3.8900e-003**	**4.0000e-005**	**1.5500e-003**	**2.0000e-005**	**1.5700e-003**	**4.1000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**3.6853**	**3.6853**	**1.8000e-004**	**0.0000**	**3.6898**

3.3 Excavation - 2027

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	tons/yr										MT/yr					
Fugitive Dust					0.1916	0.0000	0.1916	0.1046	0.0000	0.1046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0260	0.2650	0.1881	4.0000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	35.1403	35.1403	0.0114	0.0000	35.4245
Total	**0.0260**	**0.2650**	**0.1881**	**4.0000e-004**	**0.1916**	**0.0114**	**0.2030**	**0.1046**	**0.0105**	**0.1151**	**0.0000**	**35.1403**	**35.1403**	**0.0114**	**0.0000**	**35.4245**

3.3 Excavation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.4000e-004	0.0257	7.6700e-003	1.1000e-004	2.6500e-003	5.0000e-005	2.7100e-003	7.3000e-004	5.0000e-005	7.8000e-004	0.0000	11.2216	11.2216	6.2000e-004	0.0000	11.2371
Worker	5.1000e-004	2.6000e-004	3.3400e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.0506	1.0506	2.0000e-005	0.0000	1.0511
Total	**1.2500e-003**	**0.0260**	**0.0110**	**1.2000e-004**	**4.1900e-003**	**6.0000e-005**	**4.2600e-003**	**1.1400e-003**	**6.0000e-005**	**1.2000e-003**	**0.0000**	**12.2722**	**12.2722**	**6.4000e-004**	**0.0000**	**12.2882**

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	tons/yr										MT/yr					
Fugitive Dust					0.1916	0.0000	0.1916	0.1046	0.0000	0.1046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0260	0.2650	0.1881	4.0000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	35.1403	35.1403	0.0114	0.0000	35.4244
Total	**0.0260**	**0.2650**	**0.1881**	**4.0000e-004**	**0.1916**	**0.0114**	**0.2030**	**0.1046**	**0.0105**	**0.1151**	**0.0000**	**35.1403**	**35.1403**	**0.0114**	**0.0000**	**35.4244**

3.3 Excavation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.4000e-004	0.0257	7.6700e-003	1.1000e-004	2.6500e-003	5.0000e-005	2.7100e-003	7.3000e-004	5.0000e-005	7.8000e-004	0.0000	11.2216	11.2216	6.2000e-004	0.0000	11.2371
Worker	5.1000e-004	2.6000e-004	3.3400e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.0506	1.0506	2.0000e-005	0.0000	1.0511
Total	**1.2500e-003**	**0.0260**	**0.0110**	**1.2000e-004**	**4.1900e-003**	**6.0000e-005**	**4.2600e-003**	**1.1400e-003**	**6.0000e-005**	**1.2000e-003**	**0.0000**	**12.2722**	**12.2722**	**6.4000e-004**	**0.0000**	**12.2882**

3.4 Foundation - 2027

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	tons/yr										MT/yr					
Fugitive Dust					0.1348	0.0000	0.1348	0.0717	0.0000	0.0717	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0327	0.3293	0.3126	6.4000e-004		0.0134	0.0134		0.0123	0.0123	0.0000	56.0501	56.0501	0.0181	0.0000	56.5033
Total	**0.0327**	**0.3293**	**0.3126**	**6.4000e-004**	**0.1348**	**0.0134**	**0.1482**	**0.0717**	**0.0123**	**0.0841**	**0.0000**	**56.0501**	**56.0501**	**0.0181**	**0.0000**	**56.5033**

3.4 Foundation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.0300e-003	0.1053	0.0314	4.7000e-004	0.0109	2.2000e-004	0.0111	2.9800e-003	2.1000e-004	3.2000e-003	0.0000	45.9552	45.9552	2.5300e-003	0.0000	46.0186
Worker	2.5900e-003	1.3500e-003	0.0171	6.0000e-005	7.9000e-003	5.0000e-005	7.9400e-003	2.1000e-003	4.0000e-005	2.1400e-003	0.0000	5.3781	5.3781	1.0000e-004	0.0000	5.3805
Total	**5.6200e-003**	**0.1067**	**0.0485**	**5.3000e-004**	**0.0188**	**2.7000e-004**	**0.0190**	**5.0800e-003**	**2.5000e-004**	**5.3400e-003**	**0.0000**	**51.3334**	**51.3334**	**2.6300e-003**	**0.0000**	**51.3991**

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	tons/yr										MT/yr					
Fugitive Dust					0.1348	0.0000	0.1348	0.0717	0.0000	0.0717	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0327	0.3293	0.3126	6.4000e-004		0.0134	0.0134		0.0123	0.0123	0.0000	56.0500	56.0500	0.0181	0.0000	56.5032
Total	**0.0327**	**0.3293**	**0.3126**	**6.4000e-004**	**0.1348**	**0.0134**	**0.1482**	**0.0717**	**0.0123**	**0.0841**	**0.0000**	**56.0500**	**56.0500**	**0.0181**	**0.0000**	**56.5032**

3.4 Foundation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.0300e-003	0.1053	0.0314	4.7000e-004	0.0109	2.2000e-004	0.0111	2.9800e-003	2.1000e-004	3.2000e-003	0.0000	45.9552	45.9552	2.5300e-003	0.0000	46.0186
Worker	2.5900e-003	1.3500e-003	0.0171	6.0000e-005	7.9000e-003	5.0000e-005	7.9400e-003	2.1000e-003	4.0000e-005	2.1400e-003	0.0000	5.3781	5.3781	1.0000e-004	0.0000	5.3805
Total	**5.6200e-003**	**0.1067**	**0.0485**	**5.3000e-004**	**0.0188**	**2.7000e-004**	**0.0190**	**5.0800e-003**	**2.5000e-004**	**5.3400e-003**	**0.0000**	**51.3334**	**51.3334**	**2.6300e-003**	**0.0000**	**51.3991**

3.5 Structural Framing - 2027

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	tons/yr										MT/yr					
Off-Road	0.0294	0.2681	0.3458	5.8000e-004		0.0113	0.0113		0.0107	0.0107	0.0000	49.8627	49.8627	0.0117	0.0000	50.1557
Total	**0.0294**	**0.2681**	**0.3458**	**5.8000e-004**		**0.0113**	**0.0113**		**0.0107**	**0.0107**	**0.0000**	**49.8627**	**49.8627**	**0.0117**	**0.0000**	**50.1557**

3.5 Structural Framing - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0200e-003	0.0702	0.0209	3.1000e-004	7.2400e-003	1.5000e-004	7.3900e-003	1.9900e-003	1.4000e-004	2.1300e-003	0.0000	30.6368	30.6368	1.6900e-003	0.0000	30.6790
Worker	1.5600e-003	8.1000e-004	0.0103	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.2269	3.2269	6.0000e-005	0.0000	3.2283
Total	**3.5800e-003**	**0.0710**	**0.0312**	**3.5000e-004**	**0.0120**	**1.8000e-004**	**0.0122**	**3.2500e-003**	**1.7000e-004**	**3.4200e-003**	**0.0000**	**33.8637**	**33.8637**	**1.7500e-003**	**0.0000**	**33.9074**

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	tons/yr										MT/yr					
Off-Road	0.0294	0.2681	0.3458	5.8000e-004		0.0113	0.0113		0.0107	0.0107	0.0000	49.8626	49.8626	0.0117	0.0000	50.1557
Total	**0.0294**	**0.2681**	**0.3458**	**5.8000e-004**		**0.0113**	**0.0113**		**0.0107**	**0.0107**	**0.0000**	**49.8626**	**49.8626**	**0.0117**	**0.0000**	**50.1557**

3.5 Structural Framing - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0200e-003	0.0702	0.0209	3.1000e-004	7.2400e-003	1.5000e-004	7.3900e-003	1.9900e-003	1.4000e-004	2.1300e-003	0.0000	30.6368	30.6368	1.6900e-003	0.0000	30.6790
Worker	1.5600e-003	8.1000e-004	0.0103	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.2269	3.2269	6.0000e-005	0.0000	3.2283
Total	**3.5800e-003**	**0.0710**	**0.0312**	**3.5000e-004**	**0.0120**	**1.8000e-004**	**0.0122**	**3.2500e-003**	**1.7000e-004**	**3.4200e-003**	**0.0000**	**33.8637**	**33.8637**	**1.7500e-003**	**0.0000**	**33.9074**

3.6 Exterior Enclosures/Arch Coating - 2027

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	tons/yr										MT/yr					
Off-Road	0.0197	0.1845	0.3134	4.9000e-004		9.0000e-003	9.0000e-003		8.2800e-003	8.2800e-003	0.0000	43.0414	43.0414	0.0139	0.0000	43.3894
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0197**	**0.1845**	**0.3134**	**4.9000e-004**		**9.0000e-003**	**9.0000e-003**		**8.2800e-003**	**8.2800e-003**	**0.0000**	**43.0414**	**43.0414**	**0.0139**	**0.0000**	**43.3894**

3.6 Exterior Enclosures/Arch Coating - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0200e-003	0.0702	0.0209	3.1000e-004	7.2400e-003	1.5000e-004	7.3900e-003	1.9900e-003	1.4000e-004	2.1300e-003	0.0000	30.6368	30.6368	1.6900e-003	0.0000	30.6790
Worker	1.0400e-003	5.4000e-004	6.8400e-003	2.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.1512	2.1512	4.0000e-005	0.0000	2.1522
Total	**3.0600e-003**	**0.0708**	**0.0278**	**3.3000e-004**	**0.0104**	**1.7000e-004**	**0.0106**	**2.8300e-003**	**1.6000e-004**	**2.9900e-003**	**0.0000**	**32.7881**	**32.7881**	**1.7300e-003**	**0.0000**	**32.8313**

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	tons/yr										MT/yr					
Off-Road	0.0197	0.1845	0.3134	4.9000e-004		9.0000e-003	9.0000e-003		8.2800e-003	8.2800e-003	0.0000	43.0414	43.0414	0.0139	0.0000	43.3894
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0197**	**0.1845**	**0.3134**	**4.9000e-004**		**9.0000e-003**	**9.0000e-003**		**8.2800e-003**	**8.2800e-003**	**0.0000**	**43.0414**	**43.0414**	**0.0139**	**0.0000**	**43.3894**

3.6 Exterior Enclosures/Arch Coating - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0200e-003	0.0702	0.0209	3.1000e-004	7.2400e-003	1.5000e-004	7.3900e-003	1.9900e-003	1.4000e-004	2.1300e-003	0.0000	30.6368	30.6368	1.6900e-003	0.0000	30.6790
Worker	1.0400e-003	5.4000e-004	6.8400e-003	2.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.1512	2.1512	4.0000e-005	0.0000	2.1522
Total	**3.0600e-003**	**0.0708**	**0.0278**	**3.3000e-004**	**0.0104**	**1.7000e-004**	**0.0106**	**2.8300e-003**	**1.6000e-004**	**2.9900e-003**	**0.0000**	**32.7881**	**32.7881**	**1.7300e-003**	**0.0000**	**32.8313**

3.7 Interior - 2027

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	tons/yr										MT/yr					
Archit. Coating	0.2149					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5800e-003	0.0441	0.0697	1.1000e-004		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	9.8300	9.8300	5.4000e-004	0.0000	9.8434
Total	**0.2215**	**0.0441**	**0.0697**	**1.1000e-004**		**1.9800e-003**	**1.9800e-003**		**1.9800e-003**	**1.9800e-003**	**0.0000**	**9.8300**	**9.8300**	**5.4000e-004**	**0.0000**	**9.8434**

3.7 Interior - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.6200e-003	0.1257	0.0375	5.6000e-004	0.0130	2.7000e-004	0.0132	3.5600e-003	2.6000e-004	3.8200e-003	0.0000	54.8613	54.8613	3.0200e-003	0.0000	54.9369
Worker	2.7900e-003	1.4500e-003	0.0184	6.0000e-005	8.4800e-003	5.0000e-005	8.5300e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	5.7783	5.7783	1.0000e-004	0.0000	5.7809
Total	**6.4100e-003**	**0.1272**	**0.0559**	**6.2000e-004**	**0.0215**	**3.2000e-004**	**0.0218**	**5.8200e-003**	**3.1000e-004**	**6.1200e-003**	**0.0000**	**60.6396**	**60.6396**	**3.1200e-003**	**0.0000**	**60.7178**

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	tons/yr										MT/yr					
Archit. Coating	0.2149					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5800e-003	0.0441	0.0697	1.1000e-004		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	9.8300	9.8300	5.4000e-004	0.0000	9.8434
Total	**0.2215**	**0.0441**	**0.0697**	**1.1000e-004**		**1.9800e-003**	**1.9800e-003**		**1.9800e-003**	**1.9800e-003**	**0.0000**	**9.8300**	**9.8300**	**5.4000e-004**	**0.0000**	**9.8434**

3.7 Interior - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.6200e-003	0.1257	0.0375	5.6000e-004	0.0130	2.7000e-004	0.0132	3.5600e-003	2.6000e-004	3.8200e-003	0.0000	54.8613	54.8613	3.0200e-003	0.0000	54.9369
Worker	2.7900e-003	1.4500e-003	0.0184	6.0000e-005	8.4800e-003	5.0000e-005	8.5300e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	5.7783	5.7783	1.0000e-004	0.0000	5.7809
Total	**6.4100e-003**	**0.1272**	**0.0559**	**6.2000e-004**	**0.0215**	**3.2000e-004**	**0.0218**	**5.8200e-003**	**3.1000e-004**	**6.1200e-003**	**0.0000**	**60.6396**	**60.6396**	**3.1200e-003**	**0.0000**	**60.7178**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.574521	0.035271	0.210873	0.107638	0.013399	0.004562	0.018333	0.025065	0.001898	0.001611	0.005555	0.000614	0.000658
Unenclosed Parking with Elevator	0.574521	0.035271	0.210873	0.107638	0.013399	0.004562	0.018333	0.025065	0.001898	0.001611	0.005555	0.000614	0.000658

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.1736	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Unmitigated	0.1736	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1724					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2200e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Total	**0.1736**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0258**	**0.0258**	**7.0000e-005**	**0.0000**	**0.0275**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1724					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2200e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Total	**0.1736**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0258**	**0.0258**	**7.0000e-005**	**0.0000**	**0.0275**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 3B Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	150.00	Dwelling Unit	3.95	96,000.00	401
General Office Building	24.00	1000sqft	0.55	24,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2029
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Phase 3B Construction - Sacramento County, Annual

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Grading - No material exported

Demolition -

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	12000	0
tblAreaCoating	Area_Nonresidential_Interior	36000	0
tblAreaCoating	Area_Residential_Exterior	64800	0
tblAreaCoating	Area_Residential_Interior	194400	0
tblConstructionPhase	NumDays	18.00	98.00
tblConstructionPhase	NumDays	230.00	33.00
tblConstructionPhase	NumDays	8.00	22.00
tblConstructionPhase	NumDays	18.00	54.00
tblConstructionPhase	NumDays	5.00	55.00
tblConstructionPhase	PhaseEndDate	12/21/2028	12/29/2028
tblConstructionPhase	PhaseEndDate	11/1/2028	3/31/2028
tblConstructionPhase	PhaseEndDate	12/15/2027	2/15/2028

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tblConstructionPhase	PhaseEndDate	11/27/2028	8/15/2028
tblConstructionPhase	PhaseEndDate	12/3/2027	1/14/2028
tblConstructionPhase	PhaseStartDate	11/28/2028	8/16/2028
tblConstructionPhase	PhaseStartDate	12/16/2027	2/16/2028
tblConstructionPhase	PhaseStartDate	12/4/2027	1/16/2028
tblConstructionPhase	PhaseStartDate	11/2/2028	6/1/2028
tblConstructionPhase	PhaseStartDate	11/27/2027	11/1/2027
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.71	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	NT24NG	0.68	0.00
tblEnergyUse	T24E	460.92	0.00
tblEnergyUse	T24E	4.98	0.00
tblEnergyUse	T24NG	7,061.10	0.00
tblEnergyUse	T24NG	12.42	0.00
tblGrading	AcresOfGrading	11.00	4.00
tblLandUse	LandUseSquareFeet	150,000.00	96,000.00
tblSolidWaste	SolidWasteGenerationRate	69.00	0.00
tblSolidWaste	SolidWasteGenerationRate	22.32	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00

tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	23.00	60.00
tblTripsAndVMT	WorkerTripNumber	116.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	50.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblWater	IndoorWaterUseRate	9,773,103.84	0.00
tblWater	IndoorWaterUseRate	4,265,609.95	0.00
tblWater	OutdoorWaterUseRate	6,161,304.60	0.00
tblWater	OutdoorWaterUseRate	2,614,406.10	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2027	0.0576	0.5977	0.4189	1.0100e-003	0.4128	0.0245	0.4374	0.2252	0.0226	0.2477	0.0000	90.3767	90.3767	0.0251	0.0000	91.0043
2028	0.8149	1.1181	1.1081	3.4800e-003	0.2301	0.0340	0.2640	0.1056	0.0317	0.1373	0.0000	320.3084	320.3084	0.0473	0.0000	321.4910
Maximum	**0.8149**	**1.1181**	**1.1081**	**3.4800e-003**	**0.4128**	**0.0340**	**0.4374**	**0.2252**	**0.0317**	**0.2477**	**0.0000**	**320.3084**	**320.3084**	**0.0473**	**0.0000**	**321.4910**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2027	0.0576	0.5977	0.4189	1.0100e-003	0.4128	0.0245	0.4374	0.2252	0.0226	0.2477	0.0000	90.3767	90.3767	0.0251	0.0000	91.0042
2028	0.8149	1.1181	1.1081	3.4800e-003	0.2301	0.0340	0.2640	0.1056	0.0317	0.1373	0.0000	320.3082	320.3082	0.0473	0.0000	321.4909
Maximum	**0.8149**	**1.1181**	**1.1081**	**3.4800e-003**	**0.4128**	**0.0340**	**0.4374**	**0.2252**	**0.0317**	**0.2477**	**0.0000**	**320.3082**	**320.3082**	**0.0473**	**0.0000**	**321.4909**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2027	1-31-2028	0.9055	0.9055
2	2-1-2028	4-30-2028	0.3944	0.3944
3	5-1-2028	7-31-2028	0.2531	0.2531
4	8-1-2028	9-30-2028	0.3786	0.3786
		Highest	0.9055	0.9055

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.5151	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.5151**	**0.0178**	**1.5457**	**8.0000e-005**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**0.0000**	**2.5274**	**2.5274**	**2.4200e-003**	**0.0000**	**2.5880**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.5151	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.5151**	**0.0178**	**1.5457**	**8.0000e-005**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**0.0000**	**2.5274**	**2.5274**	**2.4200e-003**	**0.0000**	**2.5880**

	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	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 3B Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2027	1/14/2028	5	55	
2	Foundation	Grading	1/16/2028	2/15/2028	5	22	
3	Structural Framing	Building Construction	2/16/2028	3/31/2028	5	33	
4	Exterior Enclosures/Arch Coating	Paving	6/1/2028	8/15/2028	5	54	
5	Interior	Architectural Coating	8/16/2028	12/29/2028	5	98	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 194,400; Residential Outdoor: 64,800; Non-Residential Indoor: 36,000; Non-Residential Outdoor: 12,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3B Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Interior	Air Compressors	1	6.00	78	0.48
Foundation	Excavators	1	8.00	158	0.38
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Exterior Enclosures/Arch Coating	Pavers	1	8.00	130	0.42
Exterior Enclosures/Arch Coating	Rollers	2	6.00	80	0.38
Foundation	Rubber Tired Dozers	1	8.00	247	0.40
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Foundation	Graders	1	8.00	187	0.41
Foundation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Exterior Enclosures/Arch Coating	Paving Equipment	2	6.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Structural Framing	Welders	1	8.00	46	0.45
Exterior Enclosures/Arch Coating	Cement and Mortar Mixers	2	6.00	9	0.56
Exterior Enclosures/Arch Coating	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Interior	1	60.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	6	50.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosures/Arch Coati	8	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Site Preparation	7	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2027

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	tons/yr										MT/yr					
Fugitive Dust					0.4065	0.0000	0.4065	0.2234	0.0000	0.2234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0556	0.5678	0.4030	8.6000e-004		0.0245	0.0245		0.0225	0.0225	0.0000	75.3007	75.3007	0.0244	0.0000	75.9096
Total	**0.0556**	**0.5678**	**0.4030**	**8.6000e-004**	**0.4065**	**0.0245**	**0.4309**	**0.2234**	**0.0225**	**0.2459**	**0.0000**	**75.3007**	**75.3007**	**0.0244**	**0.0000**	**75.9096**

3.2 Site Preparation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	8.5000e-004	0.0294	8.7700e-003	1.3000e-004	3.0300e-003	6.0000e-005	3.0900e-003	8.3000e-004	6.0000e-005	8.9000e-004	0.0000	12.8247	12.8247	7.1000e-004	0.0000	12.8424
Worker	1.0900e-003	5.7000e-004	7.1600e-003	2.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.2513	2.2513	4.0000e-005	0.0000	2.2523
Total	**1.9400e-003**	**0.0300**	**0.0159**	**1.5000e-004**	**6.3300e-003**	**8.0000e-005**	**6.4100e-003**	**1.7100e-003**	**8.0000e-005**	**1.7900e-003**	**0.0000**	**15.0760**	**15.0760**	**7.5000e-004**	**0.0000**	**15.0947**

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	tons/yr										MT/yr					
Fugitive Dust					0.4065	0.0000	0.4065	0.2234	0.0000	0.2234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0556	0.5678	0.4030	8.6000e-004		0.0245	0.0245		0.0225	0.0225	0.0000	75.3006	75.3006	0.0244	0.0000	75.9095
Total	**0.0556**	**0.5678**	**0.4030**	**8.6000e-004**	**0.4065**	**0.0245**	**0.4309**	**0.2234**	**0.0225**	**0.2459**	**0.0000**	**75.3006**	**75.3006**	**0.0244**	**0.0000**	**75.9095**

3.2 Site Preparation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	8.5000e-004	0.0294	8.7700e-003	1.3000e-004	3.0300e-003	6.0000e-005	3.0900e-003	8.3000e-004	6.0000e-005	8.9000e-004	0.0000	12.8247	12.8247	7.1000e-004	0.0000	12.8424
Worker	1.0900e-003	5.7000e-004	7.1600e-003	2.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.2513	2.2513	4.0000e-005	0.0000	2.2523
Total	**1.9400e-003**	**0.0300**	**0.0159**	**1.5000e-004**	**6.3300e-003**	**8.0000e-005**	**6.4100e-003**	**1.7100e-003**	**8.0000e-005**	**1.7900e-003**	**0.0000**	**15.0760**	**15.0760**	**7.5000e-004**	**0.0000**	**15.0947**

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	**0.0124**	**0.1262**	**0.0896**	**1.9000e-004**	**0.0903**	**5.4300e-003**	**0.0958**	**0.0497**	**5.0000e-003**	**0.0547**	**0.0000**	**16.7335**	**16.7335**	**5.4100e-003**	**0.0000**	**16.8688**

3.2 Site Preparation - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.9000e-004	6.3600e-003	1.9200e-003	3.0000e-005	6.7000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	2.0000e-004	0.0000	2.8378	2.8378	1.6000e-004	0.0000	2.8417
Worker	2.3000e-004	1.2000e-004	1.4900e-003	1.0000e-005	7.3000e-004	0.0000	7.4000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.4844	0.4844	1.0000e-005	0.0000	0.4846
Total	**4.2000e-004**	**6.4800e-003**	**3.4100e-003**	**4.0000e-005**	**1.4000e-003**	**1.0000e-005**	**1.4300e-003**	**3.8000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**3.3222**	**3.3222**	**1.7000e-004**	**0.0000**	**3.3263**

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	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	**0.0124**	**0.1262**	**0.0896**	**1.9000e-004**	**0.0903**	**5.4300e-003**	**0.0958**	**0.0497**	**5.0000e-003**	**0.0547**	**0.0000**	**16.7335**	**16.7335**	**5.4100e-003**	**0.0000**	**16.8688**

3.2 Site Preparation - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.9000e-004	6.3600e-003	1.9200e-003	3.0000e-005	6.7000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	2.0000e-004	0.0000	2.8378	2.8378	1.6000e-004	0.0000	2.8417
Worker	2.3000e-004	1.2000e-004	1.4900e-003	1.0000e-005	7.3000e-004	0.0000	7.4000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.4844	0.4844	1.0000e-005	0.0000	0.4846
Total	**4.2000e-004**	**6.4800e-003**	**3.4100e-003**	**4.0000e-005**	**1.4000e-003**	**1.0000e-005**	**1.4300e-003**	**3.8000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**3.3222**	**3.3222**	**1.7000e-004**	**0.0000**	**3.3263**

3.3 Foundation - 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	tons/yr										MT/yr					
Fugitive Dust					0.0684	0.0000	0.0684	0.0366	0.0000	0.0366	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.1685	0.1599	3.3000e-004		6.8600e-003	6.8600e-003		6.3100e-003	6.3100e-003	0.0000	28.6768	28.6768	9.2700e-003	0.0000	28.9087
Total	**0.0168**	**0.1685**	**0.1599**	**3.3000e-004**	**0.0684**	**6.8600e-003**	**0.0752**	**0.0366**	**6.3100e-003**	**0.0430**	**0.0000**	**28.6768**	**28.6768**	**9.2700e-003**	**0.0000**	**28.9087**

3.3 Foundation - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.5300e-003	0.0525	0.0159	2.4000e-004	5.5600e-003	1.1000e-004	5.6700e-003	1.5300e-003	1.1000e-004	1.6300e-003	0.0000	23.4115	23.4115	1.2900e-003	0.0000	23.4437
Worker	1.2500e-003	6.3000e-004	8.1900e-003	3.0000e-005	4.0400e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	2.6642	2.6642	5.0000e-005	0.0000	2.6653
Total	**2.7800e-003**	**0.0531**	**0.0241**	**2.7000e-004**	**9.6000e-003**	**1.3000e-004**	**9.7300e-003**	**2.6000e-003**	**1.3000e-004**	**2.7200e-003**	**0.0000**	**26.0757**	**26.0757**	**1.3400e-003**	**0.0000**	**26.1091**

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	tons/yr										MT/yr					
Fugitive Dust					0.0684	0.0000	0.0684	0.0366	0.0000	0.0366	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.1685	0.1599	3.3000e-004		6.8600e-003	6.8600e-003		6.3100e-003	6.3100e-003	0.0000	28.6768	28.6768	9.2700e-003	0.0000	28.9086
Total	**0.0168**	**0.1685**	**0.1599**	**3.3000e-004**	**0.0684**	**6.8600e-003**	**0.0752**	**0.0366**	**6.3100e-003**	**0.0430**	**0.0000**	**28.6768**	**28.6768**	**9.2700e-003**	**0.0000**	**28.9086**

3.3 Foundation - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.5300e-003	0.0525	0.0159	2.4000e-004	5.5600e-003	1.1000e-004	5.6700e-003	1.5300e-003	1.1000e-004	1.6300e-003	0.0000	23.4115	23.4115	1.2900e-003	0.0000	23.4437
Worker	1.2500e-003	6.3000e-004	8.1900e-003	3.0000e-005	4.0400e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	2.6642	2.6642	5.0000e-005	0.0000	2.6653
Total	**2.7800e-003**	**0.0531**	**0.0241**	**2.7000e-004**	**9.6000e-003**	**1.3000e-004**	**9.7300e-003**	**2.6000e-003**	**1.3000e-004**	**2.7200e-003**	**0.0000**	**26.0757**	**26.0757**	**1.3400e-003**	**0.0000**	**26.1091**

3.4 Structural Framing - 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	tons/yr										MT/yr					
Off-Road	0.0226	0.2058	0.2654	4.4000e-004		8.7000e-003	8.7000e-003		8.1900e-003	8.1900e-003	0.0000	38.2667	38.2667	9.0000e-003	0.0000	38.4916
Total	**0.0226**	**0.2058**	**0.2654**	**4.4000e-004**		**8.7000e-003**	**8.7000e-003**		**8.1900e-003**	**8.1900e-003**	**0.0000**	**38.2667**	**38.2667**	**9.0000e-003**	**0.0000**	**38.4916**

3.4 Structural Framing - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.5300e-003	0.0525	0.0159	2.4000e-004	5.5600e-003	1.1000e-004	5.6700e-003	1.5300e-003	1.1000e-004	1.6300e-003	0.0000	23.4115	23.4115	1.2900e-003	0.0000	23.4437
Worker	1.1200e-003	5.7000e-004	7.3700e-003	3.0000e-005	3.6400e-003	2.0000e-005	3.6600e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	2.3978	2.3978	4.0000e-005	0.0000	2.3988
Total	**2.6500e-003**	**0.0530**	**0.0233**	**2.7000e-004**	**9.2000e-003**	**1.3000e-004**	**9.3300e-003**	**2.5000e-003**	**1.3000e-004**	**2.6200e-003**	**0.0000**	**25.8093**	**25.8093**	**1.3300e-003**	**0.0000**	**25.8425**

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	tons/yr										MT/yr					
Off-Road	0.0226	0.2058	0.2654	4.4000e-004		8.7000e-003	8.7000e-003		8.1900e-003	8.1900e-003	0.0000	38.2667	38.2667	9.0000e-003	0.0000	38.4916
Total	**0.0226**	**0.2058**	**0.2654**	**4.4000e-004**		**8.7000e-003**	**8.7000e-003**		**8.1900e-003**	**8.1900e-003**	**0.0000**	**38.2667**	**38.2667**	**9.0000e-003**	**0.0000**	**38.4916**

3.4 Structural Framing - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.5300e-003	0.0525	0.0159	2.4000e-004	5.5600e-003	1.1000e-004	5.6700e-003	1.5300e-003	1.1000e-004	1.6300e-003	0.0000	23.4115	23.4115	1.2900e-003	0.0000	23.4437
Worker	1.1200e-003	5.7000e-004	7.3700e-003	3.0000e-005	3.6400e-003	2.0000e-005	3.6600e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	2.3978	2.3978	4.0000e-005	0.0000	2.3988
Total	**2.6500e-003**	**0.0530**	**0.0233**	**2.7000e-004**	**9.2000e-003**	**1.3000e-004**	**9.3300e-003**	**2.5000e-003**	**1.3000e-004**	**2.6200e-003**	**0.0000**	**25.8093**	**25.8093**	**1.3300e-003**	**0.0000**	**25.8425**

3.5 Exterior Enclosures/Arch Coating - 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	tons/yr										MT/yr					
Off-Road	0.0221	0.2034	0.3288	5.1000e-004		9.5100e-003	9.5100e-003		8.8000e-003	8.8000e-003	0.0000	44.2213	44.2213	0.0139	0.0000	44.5686
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0221**	**0.2034**	**0.3288**	**5.1000e-004**		**9.5100e-003**	**9.5100e-003**		**8.8000e-003**	**8.8000e-003**	**0.0000**	**44.2213**	**44.2213**	**0.0139**	**0.0000**	**44.5686**

3.5 Exterior Enclosures/Arch Coating - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5000e-003	0.0859	0.0260	3.9000e-004	9.1000e-003	1.8000e-004	9.2800e-003	2.5000e-003	1.7000e-004	2.6700e-003	0.0000	38.3098	38.3098	2.1100e-003	0.0000	38.3625
Worker	1.2300e-003	6.2000e-004	8.0500e-003	3.0000e-005	3.9700e-003	2.0000e-005	3.9900e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	2.6158	2.6158	4.0000e-005	0.0000	2.6169
Total	**3.7300e-003**	**0.0865**	**0.0340**	**4.2000e-004**	**0.0131**	**2.0000e-004**	**0.0133**	**3.5500e-003**	**1.9000e-004**	**3.7400e-003**	**0.0000**	**40.9255**	**40.9255**	**2.1500e-003**	**0.0000**	**40.9793**

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	tons/yr										MT/yr					
Off-Road	0.0221	0.2034	0.3288	5.1000e-004		9.5100e-003	9.5100e-003		8.8000e-003	8.8000e-003	0.0000	44.2212	44.2212	0.0139	0.0000	44.5686
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0221**	**0.2034**	**0.3288**	**5.1000e-004**		**9.5100e-003**	**9.5100e-003**		**8.8000e-003**	**8.8000e-003**	**0.0000**	**44.2212**	**44.2212**	**0.0139**	**0.0000**	**44.5686**

3.5 Exterior Enclosures/Arch Coating - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5000e-003	0.0859	0.0260	3.9000e-004	9.1000e-003	1.8000e-004	9.2800e-003	2.5000e-003	1.7000e-004	2.6700e-003	0.0000	38.3098	38.3098	2.1100e-003	0.0000	38.3625
Worker	1.2300e-003	6.2000e-004	8.0500e-003	3.0000e-005	3.9700e-003	2.0000e-005	3.9900e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	2.6158	2.6158	4.0000e-005	0.0000	2.6169
Total	**3.7300e-003**	**0.0865**	**0.0340**	**4.2000e-004**	**0.0131**	**2.0000e-004**	**0.0133**	**3.5500e-003**	**1.9000e-004**	**3.7400e-003**	**0.0000**	**40.9255**	**40.9255**	**2.1500e-003**	**0.0000**	**40.9793**

3.6 Interior - 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	tons/yr										MT/yr					
Archit. Coating	0.7119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3700e-003	0.0561	0.0887	1.5000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	12.5109	12.5109	6.8000e-004	0.0000	12.5280
Total	**0.7203**	**0.0561**	**0.0887**	**1.5000e-004**		**2.5200e-003**	**2.5200e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**12.5109**	**12.5109**	**6.8000e-004**	**0.0000**	**12.5280**

3.6 Interior - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.5400e-003	0.1558	0.0472	7.1000e-004	0.0165	3.3000e-004	0.0168	4.5300e-003	3.1000e-004	4.8400e-003	0.0000	69.5251	69.5251	3.8300e-003	0.0000	69.6208
Worker	6.6800e-003	3.3900e-003	0.0438	1.6000e-004	0.0216	1.2000e-004	0.0217	5.7400e-003	1.1000e-004	5.8500e-003	0.0000	14.2413	14.2413	2.4000e-004	0.0000	14.2474
Total	**0.0112**	**0.1592**	**0.0910**	**8.7000e-004**	**0.0381**	**4.5000e-004**	**0.0385**	**0.0103**	**4.2000e-004**	**0.0107**	**0.0000**	**83.7665**	**83.7665**	**4.0700e-003**	**0.0000**	**83.8682**

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	tons/yr										MT/yr					
Archit. Coating	0.7119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3700e-003	0.0561	0.0887	1.5000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	12.5109	12.5109	6.8000e-004	0.0000	12.5280
Total	**0.7203**	**0.0561**	**0.0887**	**1.5000e-004**		**2.5200e-003**	**2.5200e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**12.5109**	**12.5109**	**6.8000e-004**	**0.0000**	**12.5280**

3.6 Interior - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.5400e-003	0.1558	0.0472	7.1000e-004	0.0165	3.3000e-004	0.0168	4.5300e-003	3.1000e-004	4.8400e-003	0.0000	69.5251	69.5251	3.8300e-003	0.0000	69.6208
Worker	6.6800e-003	3.3900e-003	0.0438	1.6000e-004	0.0216	1.2000e-004	0.0217	5.7400e-003	1.1000e-004	5.8500e-003	0.0000	14.2413	14.2413	2.4000e-004	0.0000	14.2474
Total	**0.0112**	**0.1592**	**0.0910**	**8.7000e-004**	**0.0381**	**4.5000e-004**	**0.0385**	**0.0103**	**4.2000e-004**	**0.0107**	**0.0000**	**83.7665**	**83.7665**	**4.0700e-003**	**0.0000**	**83.8682**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.575787	0.034976	0.211293	0.106793	0.012806	0.004500	0.018351	0.025279	0.001887	0.001565	0.005515	0.000612	0.000636
General Office Building	0.575787	0.034976	0.211293	0.106793	0.012806	0.004500	0.018351	0.025279	0.001887	0.001565	0.005515	0.000612	0.000636

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	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
General Office Building	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	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
General Office Building	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.5151	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Unmitigated	0.5151	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4687					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0464	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Total	**0.5151**	**0.0178**	**1.5457**	**8.0000e-005**		**8.5800e-003**	**8.5800e-003**		**8.5800e-003**	**8.5800e-003**	**0.0000**	**2.5274**	**2.5274**	**2.4200e-003**	**0.0000**	**2.5880**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4687					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0464	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Total	**0.5151**	**0.0178**	**1.5457**	**8.0000e-005**		**8.5800e-003**	**8.5800e-003**		**8.5800e-003**	**8.5800e-003**	**0.0000**	**2.5274**	**2.5274**	**2.4200e-003**	**0.0000**	**2.5880**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 3C Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	200.00	Space	1.80	70,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2030
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Phase 3C Construction - Sacramento County, Annual

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Grading - 15,556 CY export under excavation phase

Demolition -

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	4200	0
tblConstructionPhase	NumDays	10.00	33.00
tblConstructionPhase	NumDays	200.00	20.00
tblConstructionPhase	NumDays	2.00	41.00
tblConstructionPhase	NumDays	4.00	45.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	2.00	34.00
tblConstructionPhase	PhaseEndDate	11/12/2029	10/31/2029
tblConstructionPhase	PhaseEndDate	10/15/2029	7/13/2029
tblConstructionPhase	PhaseEndDate	1/8/2029	6/15/2029
tblConstructionPhase	PhaseEndDate	10/29/2029	9/14/2029
tblConstructionPhase	PhaseEndDate	1/2/2029	2/15/2029

Phase 3C Construction - Sacramento County, Annual

tblConstructionPhase	PhaseStartDate	10/30/2029	9/16/2029
tblConstructionPhase	PhaseStartDate	1/9/2029	6/16/2029
tblConstructionPhase	PhaseStartDate	1/3/2029	4/16/2029
tblConstructionPhase	PhaseStartDate	10/16/2029	7/16/2029
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	T24E	3.92	0.00
tblGrading	AcresOfGrading	16.88	1.50
tblGrading	AcresOfGrading	17.00	1.00
tblGrading	MaterialExported	0.00	15,556.00
tblLandUse	LandUseSquareFeet	80,000.00	70,000.00
tblTripsAndVMT	HaulingTripNumber	1,945.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	11.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT

tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	6.00	20.00
tblTripsAndVMT	WorkerTripNumber	29.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2029	0.1060	1.0281	0.8070	2.5400e-003	0.3512	0.0344	0.3856	0.1764	0.0319	0.2083	0.0000	230.9161	230.9161	0.0438	0.0000	232.0122
Maximum	**0.1060**	**1.0281**	**0.8070**	**2.5400e-003**	**0.3512**	**0.0344**	**0.3856**	**0.1764**	**0.0319**	**0.2083**	**0.0000**	**230.9161**	**230.9161**	**0.0438**	**0.0000**	**232.0122**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2029	0.1060	1.0281	0.8070	2.5400e-003	0.3512	0.0344	0.3856	0.1764	0.0319	0.2083	0.0000	230.9160	230.9160	0.0438	0.0000	232.0121
Maximum	**0.1060**	**1.0281**	**0.8070**	**2.5400e-003**	**0.3512**	**0.0344**	**0.3856**	**0.1764**	**0.0319**	**0.2083**	**0.0000**	**230.9160**	**230.9160**	**0.0438**	**0.0000**	**232.0121**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2029	3-31-2029	0.4266	0.4266
2	4-1-2029	6-30-2029	0.4198	0.4198
3	7-1-2029	9-30-2029	0.2309	0.2309
		Highest	0.4266	0.4266

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	4.7600e-003	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7600e-003**	**2.0000e-005**	**2.5400e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9600e-003**	**4.9600e-003**	**1.0000e-005**	**0.0000**	**5.2800e-003**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	4.7600e-003	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7600e-003**	**2.0000e-005**	**2.5400e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9600e-003**	**4.9600e-003**	**1.0000e-005**	**0.0000**	**5.2800e-003**

	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	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 3C Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2029	2/15/2029	5	34	
2	Excavation	Site Preparation	2/16/2029	4/13/2029	5	41	
3	Foundation	Grading	4/16/2029	6/15/2029	5	45	
4	Structural Framing	Building Construction	6/16/2029	7/13/2029	5	20	
5	Exterior Enclosures/Arch Coating	Paving	7/16/2029	9/14/2029	5	45	
6	Interior	Architectural Coating	9/16/2029	10/31/2029	5	33	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 4,200 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3C Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Interior	Air Compressors	1	6.00	78	0.48
Site Preparation	Graders	1	8.00	187	0.41
Excavation	Graders	1	8.00	187	0.41
Excavation	Rubber Tired Dozers	1	7.00	247	0.40
Structural Framing	Cranes	1	6.00	231	0.29
Structural Framing	Forklifts	1	6.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Exterior Enclosures/Arch Coating	Pavers	1	6.00	130	0.42
Exterior Enclosures/Arch Coating	Rollers	1	7.00	80	0.38
Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Foundation	Rubber Tired Dozers	1	6.00	247	0.40
Structural Framing	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Foundation	Graders	1	6.00	187	0.41
Foundation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Exterior Enclosures/Arch Coating	Paving Equipment	1	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Structural Framing	Welders	3	8.00	46	0.45
Exterior Enclosures/Arch Coating	Cement and Mortar Mixers	1	6.00	9	0.56
Exterior Enclosures/Arch Coating	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase 3C Construction - Sacramento County, Annual

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
Interior	1	20.00	5.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	7	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	3	20.00	10.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	3	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosures/Arch Coati	5	20.00	5.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Site Preparation	3	20.00	10.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2029

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	tons/yr										MT/yr					
Fugitive Dust					0.0901	0.0000	0.0901	0.0493	0.0000	0.0493	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0172	0.1801	0.1096	2.9000e-004		7.1300e-003	7.1300e-003		6.5600e-003	6.5600e-003	0.0000	25.6915	25.6915	8.3100e-003	0.0000	25.8993
Total	**0.0172**	**0.1801**	**0.1096**	**2.9000e-004**	**0.0901**	**7.1300e-003**	**0.0972**	**0.0493**	**6.5600e-003**	**0.0559**	**0.0000**	**25.6915**	**25.6915**	**8.3100e-003**	**0.0000**	**25.8993**

3.2 Site Preparation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.8000e-004	0.0263	8.1200e-003	1.2000e-004	2.8600e-003	5.0000e-005	2.9200e-003	7.9000e-004	5.0000e-005	8.4000e-004	0.0000	12.0129	12.0129	6.6000e-004	0.0000	12.0294
Worker	7.2000e-004	3.6000e-004	4.7400e-003	2.0000e-005	2.5000e-003	1.0000e-005	2.5100e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	1.5991	1.5991	3.0000e-005	0.0000	1.5997
Total	**1.5000e-003**	**0.0267**	**0.0129**	**1.4000e-004**	**5.3600e-003**	**6.0000e-005**	**5.4300e-003**	**1.4500e-003**	**6.0000e-005**	**1.5200e-003**	**0.0000**	**13.6120**	**13.6120**	**6.9000e-004**	**0.0000**	**13.6291**

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	tons/yr										MT/yr					
Fugitive Dust					0.0901	0.0000	0.0901	0.0493	0.0000	0.0493	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0172	0.1801	0.1096	2.9000e-004		7.1300e-003	7.1300e-003		6.5600e-003	6.5600e-003	0.0000	25.6915	25.6915	8.3100e-003	0.0000	25.8992
Total	**0.0172**	**0.1801**	**0.1096**	**2.9000e-004**	**0.0901**	**7.1300e-003**	**0.0972**	**0.0493**	**6.5600e-003**	**0.0559**	**0.0000**	**25.6915**	**25.6915**	**8.3100e-003**	**0.0000**	**25.8992**

3.2 Site Preparation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.8000e-004	0.0263	8.1200e-003	1.2000e-004	2.8600e-003	5.0000e-005	2.9200e-003	7.9000e-004	5.0000e-005	8.4000e-004	0.0000	12.0129	12.0129	6.6000e-004	0.0000	12.0294
Worker	7.2000e-004	3.6000e-004	4.7400e-003	2.0000e-005	2.5000e-003	1.0000e-005	2.5100e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	1.5991	1.5991	3.0000e-005	0.0000	1.5997
Total	**1.5000e-003**	**0.0267**	**0.0129**	**1.4000e-004**	**5.3600e-003**	**6.0000e-005**	**5.4300e-003**	**1.4500e-003**	**6.0000e-005**	**1.5200e-003**	**0.0000**	**13.6120**	**13.6120**	**6.9000e-004**	**0.0000**	**13.6291**

3.3 Excavation - 2029

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	tons/yr										MT/yr					
Fugitive Dust					0.1205	0.0000	0.1205	0.0608	0.0000	0.0608	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0207	0.2172	0.1322	3.5000e-004		8.5900e-003	8.5900e-003		7.9100e-003	7.9100e-003	0.0000	30.9810	30.9810	0.0100	0.0000	31.2315
Total	**0.0207**	**0.2172**	**0.1322**	**3.5000e-004**	**0.1205**	**8.5900e-003**	**0.1291**	**0.0608**	**7.9100e-003**	**0.0687**	**0.0000**	**30.9810**	**30.9810**	**0.0100**	**0.0000**	**31.2315**

3.3 Excavation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.4000e-004	0.0318	9.7900e-003	1.5000e-004	3.4500e-003	7.0000e-005	3.5200e-003	9.5000e-004	6.0000e-005	1.0100e-003	0.0000	14.4862	14.4862	8.0000e-004	0.0000	14.5060
Worker	8.7000e-004	4.3000e-004	5.7100e-003	2.0000e-005	3.0100e-003	2.0000e-005	3.0300e-003	8.0000e-004	1.0000e-005	8.2000e-004	0.0000	1.9283	1.9283	3.0000e-005	0.0000	1.9291
Total	**1.8100e-003**	**0.0322**	**0.0155**	**1.7000e-004**	**6.4600e-003**	**9.0000e-005**	**6.5500e-003**	**1.7500e-003**	**7.0000e-005**	**1.8300e-003**	**0.0000**	**16.4145**	**16.4145**	**8.3000e-004**	**0.0000**	**16.4351**

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	tons/yr										MT/yr					
Fugitive Dust					0.1205	0.0000	0.1205	0.0608	0.0000	0.0608	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0207	0.2172	0.1322	3.5000e-004		8.5900e-003	8.5900e-003		7.9100e-003	7.9100e-003	0.0000	30.9809	30.9809	0.0100	0.0000	31.2314
Total	**0.0207**	**0.2172**	**0.1322**	**3.5000e-004**	**0.1205**	**8.5900e-003**	**0.1291**	**0.0608**	**7.9100e-003**	**0.0687**	**0.0000**	**30.9809**	**30.9809**	**0.0100**	**0.0000**	**31.2314**

3.3 Excavation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.4000e-004	0.0318	9.7900e-003	1.5000e-004	3.4500e-003	7.0000e-005	3.5200e-003	9.5000e-004	6.0000e-005	1.0100e-003	0.0000	14.4862	14.4862	8.0000e-004	0.0000	14.5060
Worker	8.7000e-004	4.3000e-004	5.7100e-003	2.0000e-005	3.0100e-003	2.0000e-005	3.0300e-003	8.0000e-004	1.0000e-005	8.2000e-004	0.0000	1.9283	1.9283	3.0000e-005	0.0000	1.9291
Total	**1.8100e-003**	**0.0322**	**0.0155**	**1.7000e-004**	**6.4600e-003**	**9.0000e-005**	**6.5500e-003**	**1.7500e-003**	**7.0000e-005**	**1.8300e-003**	**0.0000**	**16.4145**	**16.4145**	**8.3000e-004**	**0.0000**	**16.4351**

3.4 Foundation - 2029

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	tons/yr										MT/yr					
Fugitive Dust					0.1024	0.0000	0.1024	0.0560	0.0000	0.0560	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0188	0.1965	0.1214	3.2000e-004		7.8400e-003	7.8400e-003		7.2100e-003	7.2100e-003	0.0000	27.8558	27.8558	9.0100e-003	0.0000	28.0810
Total	**0.0188**	**0.1965**	**0.1214**	**3.2000e-004**	**0.1024**	**7.8400e-003**	**0.1103**	**0.0560**	**7.2100e-003**	**0.0632**	**0.0000**	**27.8558**	**27.8558**	**9.0100e-003**	**0.0000**	**28.0810**

3.4 Foundation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0600e-003	0.0697	0.0215	3.3000e-004	7.5800e-003	1.4000e-004	7.7200e-003	2.0800e-003	1.4000e-004	2.2200e-003	0.0000	31.7989	31.7989	1.7500e-003	0.0000	31.8425
Worker	1.4300e-003	7.1000e-004	9.4000e-003	4.0000e-005	4.9600e-003	3.0000e-005	4.9800e-003	1.3200e-003	2.0000e-005	1.3400e-003	0.0000	3.1746	3.1746	5.0000e-005	0.0000	3.1759
Total	**3.4900e-003**	**0.0704**	**0.0309**	**3.7000e-004**	**0.0125**	**1.7000e-004**	**0.0127**	**3.4000e-003**	**1.6000e-004**	**3.5600e-003**	**0.0000**	**34.9735**	**34.9735**	**1.8000e-003**	**0.0000**	**35.0184**

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	tons/yr										MT/yr					
Fugitive Dust					0.1024	0.0000	0.1024	0.0560	0.0000	0.0560	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0188	0.1965	0.1214	3.2000e-004		7.8400e-003	7.8400e-003		7.2100e-003	7.2100e-003	0.0000	27.8557	27.8557	9.0100e-003	0.0000	28.0810
Total	**0.0188**	**0.1965**	**0.1214**	**3.2000e-004**	**0.1024**	**7.8400e-003**	**0.1103**	**0.0560**	**7.2100e-003**	**0.0632**	**0.0000**	**27.8557**	**27.8557**	**9.0100e-003**	**0.0000**	**28.0810**

3.4 Foundation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0600e-003	0.0697	0.0215	3.3000e-004	7.5800e-003	1.4000e-004	7.7200e-003	2.0800e-003	1.4000e-004	2.2200e-003	0.0000	31.7989	31.7989	1.7500e-003	0.0000	31.8425
Worker	1.4300e-003	7.1000e-004	9.4000e-003	4.0000e-005	4.9600e-003	3.0000e-005	4.9800e-003	1.3200e-003	2.0000e-005	1.3400e-003	0.0000	3.1746	3.1746	5.0000e-005	0.0000	3.1759
Total	**3.4900e-003**	**0.0704**	**0.0309**	**3.7000e-004**	**0.0125**	**1.7000e-004**	**0.0127**	**3.4000e-003**	**1.6000e-004**	**3.5600e-003**	**0.0000**	**34.9735**	**34.9735**	**1.8000e-003**	**0.0000**	**35.0184**

3.5 Structural Framing - 2029

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	tons/yr										MT/yr					
Off-Road	0.0133	0.1041	0.1244	2.2000e-004		3.9200e-003	3.9200e-003		3.7900e-003	3.7900e-003	0.0000	18.1632	18.1632	2.9700e-003	0.0000	18.2374
Total	**0.0133**	**0.1041**	**0.1244**	**2.2000e-004**		**3.9200e-003**	**3.9200e-003**		**3.7900e-003**	**3.7900e-003**	**0.0000**	**18.1632**	**18.1632**	**2.9700e-003**	**0.0000**	**18.2374**

3.5 Structural Framing - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.1000e-004	0.0310	9.5500e-003	1.4000e-004	3.3700e-003	6.0000e-005	3.4300e-003	9.2000e-004	6.0000e-005	9.9000e-004	0.0000	14.1328	14.1328	7.8000e-004	0.0000	14.1522
Worker	4.2000e-004	2.1000e-004	2.7900e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	0.9406	0.9406	2.0000e-005	0.0000	0.9410
Total	**1.3300e-003**	**0.0312**	**0.0123**	**1.5000e-004**	**4.8400e-003**	**7.0000e-005**	**4.9100e-003**	**1.3100e-003**	**7.0000e-005**	**1.3900e-003**	**0.0000**	**15.0735**	**15.0735**	**8.0000e-004**	**0.0000**	**15.0932**

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	tons/yr										MT/yr					
Off-Road	0.0133	0.1041	0.1244	2.2000e-004		3.9200e-003	3.9200e-003		3.7900e-003	3.7900e-003	0.0000	18.1632	18.1632	2.9700e-003	0.0000	18.2373
Total	**0.0133**	**0.1041**	**0.1244**	**2.2000e-004**		**3.9200e-003**	**3.9200e-003**		**3.7900e-003**	**3.7900e-003**	**0.0000**	**18.1632**	**18.1632**	**2.9700e-003**	**0.0000**	**18.2373**

3.5 Structural Framing - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.1000e-004	0.0310	9.5500e-003	1.4000e-004	3.3700e-003	6.0000e-005	3.4300e-003	9.2000e-004	6.0000e-005	9.9000e-004	0.0000	14.1328	14.1328	7.8000e-004	0.0000	14.1522
Worker	4.2000e-004	2.1000e-004	2.7900e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	0.9406	0.9406	2.0000e-005	0.0000	0.9410
Total	**1.3300e-003**	**0.0312**	**0.0123**	**1.5000e-004**	**4.8400e-003**	**7.0000e-005**	**4.9100e-003**	**1.3100e-003**	**7.0000e-005**	**1.3900e-003**	**0.0000**	**15.0735**	**15.0735**	**8.0000e-004**	**0.0000**	**15.0932**

3.6 Exterior Enclosures/Arch Coating - 2029

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	tons/yr										MT/yr					
Off-Road	0.0129	0.1198	0.1979	3.0000e-004		5.5500e-003	5.5500e-003		5.1200e-003	5.1200e-003	0.0000	26.4904	26.4904	8.4000e-003	0.0000	26.7004
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0129**	**0.1198**	**0.1979**	**3.0000e-004**		**5.5500e-003**	**5.5500e-003**		**5.1200e-003**	**5.1200e-003**	**0.0000**	**26.4904**	**26.4904**	**8.4000e-003**	**0.0000**	**26.7004**

3.6 Exterior Enclosures/Arch Coating - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.1000e-004	0.0174	5.3700e-003	8.0000e-005	1.8900e-003	4.0000e-005	1.9300e-003	5.2000e-004	3.0000e-005	5.5000e-004	0.0000	7.9497	7.9497	4.4000e-004	0.0000	7.9606
Worker	9.5000e-004	4.8000e-004	6.2700e-003	2.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.1164	2.1164	3.0000e-005	0.0000	2.1173
Total	**1.4600e-003**	**0.0179**	**0.0116**	**1.0000e-004**	**5.1900e-003**	**6.0000e-005**	**5.2500e-003**	**1.4000e-003**	**5.0000e-005**	**1.4400e-003**	**0.0000**	**10.0661**	**10.0661**	**4.7000e-004**	**0.0000**	**10.0779**

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	tons/yr										MT/yr					
Off-Road	0.0129	0.1198	0.1979	3.0000e-004		5.5500e-003	5.5500e-003		5.1200e-003	5.1200e-003	0.0000	26.4904	26.4904	8.4000e-003	0.0000	26.7004
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0129**	**0.1198**	**0.1979**	**3.0000e-004**		**5.5500e-003**	**5.5500e-003**		**5.1200e-003**	**5.1200e-003**	**0.0000**	**26.4904**	**26.4904**	**8.4000e-003**	**0.0000**	**26.7004**

3.6 Exterior Enclosures/Arch Coating - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.1000e-004	0.0174	5.3700e-003	8.0000e-005	1.8900e-003	4.0000e-005	1.9300e-003	5.2000e-004	3.0000e-005	5.5000e-004	0.0000	7.9497	7.9497	4.4000e-004	0.0000	7.9606
Worker	9.5000e-004	4.8000e-004	6.2700e-003	2.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.1164	2.1164	3.0000e-005	0.0000	2.1173
Total	**1.4600e-003**	**0.0179**	**0.0116**	**1.0000e-004**	**5.1900e-003**	**6.0000e-005**	**5.2500e-003**	**1.4000e-003**	**5.0000e-005**	**1.4400e-003**	**0.0000**	**10.0661**	**10.0661**	**4.7000e-004**	**0.0000**	**10.0779**

3.7 Interior - 2029

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	tons/yr										MT/yr					
Archit. Coating	9.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8200e-003	0.0189	0.0299	5.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	4.2129	4.2129	2.3000e-004	0.0000	4.2186
Total	**0.0126**	**0.0189**	**0.0299**	**5.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**4.2129**	**4.2129**	**2.3000e-004**	**0.0000**	**4.2186**

3.7 Interior - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.8000e-004	0.0128	3.9400e-003	6.0000e-005	1.3900e-003	3.0000e-005	1.4200e-003	3.8000e-004	3.0000e-005	4.1000e-004	0.0000	5.8298	5.8298	3.2000e-004	0.0000	5.8378
Worker	7.0000e-004	3.5000e-004	4.6000e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	1.5520	1.5520	2.0000e-005	0.0000	1.5527
Total	**1.0800e-003**	**0.0131**	**8.5400e-003**	**8.0000e-005**	**3.8100e-003**	**4.0000e-005**	**3.8600e-003**	**1.0200e-003**	**4.0000e-005**	**1.0700e-003**	**0.0000**	**7.3818**	**7.3818**	**3.4000e-004**	**0.0000**	**7.3905**

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	tons/yr										MT/yr					
Archit. Coating	9.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8200e-003	0.0189	0.0299	5.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	4.2129	4.2129	2.3000e-004	0.0000	4.2186
Total	**0.0126**	**0.0189**	**0.0299**	**5.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**4.2129**	**4.2129**	**2.3000e-004**	**0.0000**	**4.2186**

3.7 Interior - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.8000e-004	0.0128	3.9400e-003	6.0000e-005	1.3900e-003	3.0000e-005	1.4200e-003	3.8000e-004	3.0000e-005	4.1000e-004	0.0000	5.8298	5.8298	3.2000e-004	0.0000	5.8378
Worker	7.0000e-004	3.5000e-004	4.6000e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	1.5520	1.5520	2.0000e-005	0.0000	1.5527
Total	**1.0800e-003**	**0.0131**	**8.5400e-003**	**8.0000e-005**	**3.8100e-003**	**4.0000e-005**	**3.8600e-003**	**1.0200e-003**	**4.0000e-005**	**1.0700e-003**	**0.0000**	**7.3818**	**7.3818**	**3.4000e-004**	**0.0000**	**7.3905**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	4.7600e-003	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Unmitigated	4.7600e-003	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3000e-004	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Total	**4.7500e-003**	**2.0000e-005**	**2.5400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9600e-003**	**4.9600e-003**	**1.0000e-005**	**0.0000**	**5.2800e-003**

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3000e-004	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Total	**4.7500e-003**	**2.0000e-005**	**2.5400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9600e-003**	**4.9600e-003**	**1.0000e-005**	**0.0000**	**5.2800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C

Operational Emissions Modeling

Existing Building Energy, Water, Solid Waste Operation

	Land Use in CalEEMod				
Project Building	**Type**	**Amount**	**Unit**	**Indoor Water Demand**	**Outdoor Water Demand (gal/year)**
All Data Building	General Office Building	76,000	sq ft	6,000,000	3,756,603
2501, 2505, 2509,2521, 2525, 2619 West Taron Court	Strip Mall	58,946	sq ft	CalEEMod Default	Included above

Existing Site Mobile Source GHG Emissions - 2020

Project VMT (mi)	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	**CO2e (MT)**
21,247,504	8,478,515,142.73	8,478.52	515,673.50	0.52	490,439.02	0.49	**8,638**

EMFAC2017 Output				
	VMT (mi)	CO2 (ton/day)	CH4 (ton/day)	N2O (ton/day)
All Vehicles	38,312,798	16,852.33	1.02	0.97

	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
All Vehicles	399.04	0.02	0.02

1	Ton
907185	Grams
1000000	g/MT

Emission Factors

Electricity Emission Factors

2014 SMUD ELECTRICITY EF	Amount	Units	Source
CO2	561.08	lb/MWh	Martha Helek, SMUD, email communication to Dimitri Antoniou of Ascent Environmental on June 28, 2016
CH4	0.014116	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
N20	0.002572	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
2020 SMUD ELECTRICITY EF			
CO2	529.4699	lb/MWh	33% RPS
CH4	0.013321	lb/MWh	
N20	0.002427	lb/MWh	
Conversion Factors			
lb/MT	2204.623		

Phase 1 Existing Buildings

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	37.20	1000sqft	0.85	37,199.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2020
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	529.47	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Phase 1 Existing Buildings - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2020 RPS compliance (33%)

Land Use - 2501, 2505, 2509/2513, 2525 West Taron Court buildings to be demoed under Phase 1

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Grading -

Trips and VMT - Operation only

Architectural Coating - Operation only

Vehicle Trips - Existing mobile sources modeled separately

Energy Use - Building constructed to 2008 Title 24 standards. Historical data used.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	18,600.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	55,799.00	0.00
tblEnergyUse	LightingElect	6.45	5.33
tblEnergyUse	T24E	4.20	3.26
tblEnergyUse	T24NG	5.52	4.49
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	590.31	529.47
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblTripsAndVMT	VendorTripNumber	6.00	0.00
tblTripsAndVMT	WorkerTripNumber	12.00	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	44.32	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.1626	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Energy	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	114.0939	114.0939	2.7400e-003	5.9000e-004	114.3375
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	7.9288	0.0000	7.9288	0.4686	0.0000	19.6433
Water						0.0000	0.0000		0.0000	0.0000	0.9749	4.7169	5.6918	3.4700e-003	2.1400e-003	6.4157
Total	**0.1637**	**9.8700e-003**	**8.7700e-003**	**6.0000e-005**	**0.0000**	**7.5000e-004**	**7.5000e-004**	**0.0000**	**7.5000e-004**	**7.5000e-004**	**8.9037**	**118.8117**	**127.7155**	**0.4748**	**2.7300e-003**	**140.3976**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.1626	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Energy	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	114.0939	114.0939	2.7400e-003	5.9000e-004	114.3375
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	7.9288	0.0000	7.9288	0.4686	0.0000	19.6433
Water						0.0000	0.0000		0.0000	0.0000	0.9749	4.7169	5.6918	3.4700e-003	2.1400e-003	6.4157
Total	**0.1637**	**9.8700e-003**	**8.7700e-003**	**6.0000e-005**	**0.0000**	**7.5000e-004**	**7.5000e-004**	**0.0000**	**7.5000e-004**	**7.5000e-004**	**8.9037**	**118.8117**	**127.7155**	**0.4748**	**2.7300e-003**	**140.3976**

	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	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 1 Existing Buildings - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/14/2019	10/25/2019	5	10	
2	Site Preparation	Site Preparation	10/26/2019	10/28/2019	5	1	
3	Grading	Grading	10/29/2019	10/30/2019	5	2	
4	Building Construction	Building Construction	10/31/2019	3/18/2020	5	100	
5	Paving	Paving	3/19/2020	3/25/2020	5	5	
6	Architectural Coating	Architectural Coating	3/26/2020	4/1/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 1 Existing Buildings - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Site Preparation	Graders	0	8.00	187	0.41
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Off-Road	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
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.551662	0.040953	0.203778	0.123762	0.021802	0.005583	0.018466	0.022043	0.002076	0.002280	0.006004	0.000618	0.000971

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	103.3445	103.3445	2.5400e-003	3.9000e-004	103.5243
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	103.3445	103.3445	2.5400e-003	3.9000e-004	103.5243
NaturalGas Mitigated	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7493	10.7493	2.1000e-004	2.0000e-004	10.8132
NaturalGas Unmitigated	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7493	10.7493	2.1000e-004	2.0000e-004	10.8132

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	201435	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7493	10.7493	2.1000e-004	2.0000e-004	10.8132
Total		**1.0900e-003**	**9.8700e-003**	**8.2900e-003**	**6.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**10.7493**	**10.7493**	**2.1000e-004**	**2.0000e-004**	**10.8132**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	201435	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7493	10.7493	2.1000e-004	2.0000e-004	10.8132
Total		**1.0900e-003**	**9.8700e-003**	**8.2900e-003**	**6.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**10.7493**	**10.7493**	**2.1000e-004**	**2.0000e-004**	**10.8132**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	430309	103.3445	2.5400e-003	3.9000e-004	103.5243
Total		**103.3445**	**2.5400e-003**	**3.9000e-004**	**103.5243**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	430309	103.3445	2.5400e-003	3.9000e-004	103.5243
Total		**103.3445**	**2.5400e-003**	**3.9000e-004**	**103.5243**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.1626	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Unmitigated	0.1626	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1453					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Total	**0.1626**	**0.0000**	**4.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.2000e-004**	**9.2000e-004**	**0.0000**	**0.0000**	**9.9000e-004**

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1453					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Total	**0.1626**	**0.0000**	**4.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.2000e-004**	**9.2000e-004**	**0.0000**	**0.0000**	**9.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.6918	3.4700e-003	2.1400e-003	6.4157
Unmitigated	5.6918	3.4700e-003	2.1400e-003	6.4157

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	2.7555 / 1.68885	5.6918	3.4700e-003	2.1400e-003	6.4157
Total		**5.6918**	**3.4700e-003**	**2.1400e-003**	**6.4157**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	2.7555 / 1.68885	5.6918	3.4700e-003	2.1400e-003	6.4157
Total		**5.6918**	**3.4700e-003**	**2.1400e-003**	**6.4157**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.9288	0.4686	0.0000	19.6433
Unmitigated	7.9288	0.4686	0.0000	19.6433

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	39.06	7.9288	0.4686	0.0000	19.6433
Total		**7.9288**	**0.4686**	**0.0000**	**19.6433**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	39.06	7.9288	0.4686	0.0000	19.6433
Total		**7.9288**	**0.4686**	**0.0000**	**19.6433**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2 Existing Buildings

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	76.00	1000sqft	1.74	76,000.00	0
Strip Mall	7.20	1000sqft	0.17	7,201.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	529.47	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Phase 2 Existing Buildings - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2020 RPS compliance (33%).

Land Use - 9650 and 2521 West Taron Court demoed under Phase 2

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Grading -

Trips and VMT - Operation only

Architectural Coating - Operation only

Vehicle Trips - Existing mobile sources modeled separately

Energy Use - Building constructed to 2008 Title 24 standards. Historical data used.

Water And Wastewater - Landscaping and building water provided in water demand table by applicant for existing building

Stationary Sources - Emergency Generators and Fire Pumps - Cat C15 Diesel generator 400 ekW

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	41,601.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	124,802.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	200.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	4.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	2.00	0.00
tblConstructionPhase	PhaseEndDate	9/21/2020	9/7/2020

Phase 2 Existing Buildings - Sacramento County, Annual

tblConstructionPhase	PhaseEndDate	8/24/2020	11/18/2019
tblConstructionPhase	PhaseEndDate	11/8/2019	10/13/2019
tblConstructionPhase	PhaseEndDate	11/18/2019	11/12/2019
tblConstructionPhase	PhaseEndDate	9/7/2020	8/24/2020
tblConstructionPhase	PhaseEndDate	11/12/2019	11/8/2019
tblEnergyUse	LightingElect	4.50	3.71
tblEnergyUse	LightingElect	6.45	5.33
tblEnergyUse	T24E	6.76	4.98
tblEnergyUse	T24E	4.20	3.26
tblEnergyUse	T24NG	15.15	12.42
tblEnergyUse	T24NG	5.52	4.49
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	590.31	529.47
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	536.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	96.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	14.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	27.00	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	13,507,764.85	2,711,181.00
tblWater	OutdoorWaterUseRate	8,278,952.65	1,740,903.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.3636	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Energy	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	338.7175	338.7175	8.0200e-003	2.0800e-003	339.5387
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
Stationary	0.0422	0.1180	0.1077	2.0000e-004		6.2100e-003	6.2100e-003		6.2100e-003	6.2100e-003	0.0000	19.5943	19.5943	2.7500e-003	0.0000	19.6630
Waste						0.0000	0.0000		0.0000	0.0000	15.8820	0.0000	15.8820	0.9386	0.0000	39.3470
Water						0.0000	0.0000		0.0000	0.0000	1.1479	5.6206	6.7685	4.0900e-003	2.5200e-003	7.6210
Total	**0.4114**	**0.1687**	**0.1513**	**5.0000e-004**	**0.0000**	**0.0101**	**0.0101**	**0.0000**	**0.0101**	**0.0101**	**17.0299**	**363.9345**	**380.9644**	**0.9535**	**4.6000e-003**	**406.1719**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.3636	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Energy	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	338.7175	338.7175	8.0200e-003	2.0800e-003	339.5387
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
Stationary	0.0422	0.1180	0.1077	2.0000e-004		6.2100e-003	6.2100e-003		6.2100e-003	6.2100e-003	0.0000	19.5943	19.5943	2.7500e-003	0.0000	19.6630
Waste						0.0000	0.0000		0.0000	0.0000	15.8820	0.0000	15.8820	0.9386	0.0000	39.3470
Water						0.0000	0.0000		0.0000	0.0000	1.1479	5.6206	6.7685	4.0900e-003	2.5200e-003	7.6210
Total	**0.4114**	**0.1687**	**0.1513**	**5.0000e-004**	**0.0000**	**0.0101**	**0.0101**	**0.0000**	**0.0101**	**0.0101**	**17.0299**	**363.9345**	**380.9644**	**0.9535**	**4.6000e-003**	**406.1719**

	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	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 2 Existing Buildings - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/14/2019	10/13/2019	5	0	
2	Site Preparation	Site Preparation	11/9/2019	11/8/2019	5	0	
3	Grading	Grading	11/13/2019	11/12/2019	5	0	
4	Building Construction	Building Construction	11/19/2019	11/18/2019	5	0	
5	Paving	Paving	8/25/2020	8/24/2020	5	0	
6	Architectural Coating	Architectural Coating	9/8/2020	9/7/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2 Existing Buildings - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Site Preparation	Graders	0	8.00	187	0.41
Paving	Pavers	0	6.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Dozers	0	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Graders	0	6.00	187	0.41
Paving	Paving Equipment	0	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase 2 Existing Buildings - Sacramento County, Annual

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
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Strip Mall	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	283.5099	283.5099	6.9600e-003	1.0700e-003	284.0030
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	283.5099	283.5099	6.9600e-003	1.0700e-003	284.0030
NaturalGas Mitigated	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	55.2076	55.2076	1.0600e-003	1.0100e-003	55.5357
NaturalGas Unmitigated	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	55.2076	55.2076	1.0600e-003	1.0100e-003	55.5357

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	995557	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	53.1267	53.1267	1.0200e-003	9.7000e-004	53.4425
Strip Mall	38993.9	2.1000e-004	1.9100e-003	1.6100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.0809	2.0809	4.0000e-005	4.0000e-005	2.0932
Total		**5.5800e-003**	**0.0507**	**0.0426**	**3.0000e-004**		**3.8600e-003**	**3.8600e-003**		**3.8600e-003**	**3.8600e-003**	**0.0000**	**55.2076**	**55.2076**	**1.0600e-003**	**1.0100e-003**	**55.5357**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	995557	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	53.1267	53.1267	1.0200e-003	9.7000e-004	53.4425
Strip Mall	38993.9	2.1000e-004	1.9100e-003	1.6100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.0809	2.0809	4.0000e-005	4.0000e-005	2.0932
Total		**5.5800e-003**	**0.0507**	**0.0426**	**3.0000e-004**		**3.8600e-003**	**3.8600e-003**		**3.8600e-003**	**3.8600e-003**	**0.0000**	**55.2076**	**55.2076**	**1.0600e-003**	**1.0100e-003**	**55.5357**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.09719e+006	263.5044	6.4700e-003	1.0000e-003	263.9628
Strip Mall	83299.4	20.0055	4.9000e-004	8.0000e-005	20.0403
Total		**283.5099**	**6.9600e-003**	**1.0800e-003**	**284.0030**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.09719e+006	263.5044	6.4700e-003	1.0000e-003	263.9628
Strip Mall	83299.4	20.0055	4.9000e-004	8.0000e-005	20.0403
Total		**283.5099**	**6.9600e-003**	**1.0800e-003**	**284.0030**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.3636	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Unmitigated	0.3636	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3249					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Total	**0.3636**	**1.0000e-005**	**1.0600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0600e-003**	**2.0600e-003**	**1.0000e-005**	**0.0000**	**2.2000e-003**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3249					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Total	**0.3636**	**1.0000e-005**	**1.0600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0600e-003**	**2.0600e-003**	**1.0000e-005**	**0.0000**	**2.2000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.7685	4.0900e-003	2.5200e-003	7.6210
Unmitigated	6.7685	4.0900e-003	2.5200e-003	7.6210

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.71118 / 1.7409	5.6669	3.4200e-003	2.1000e-003	6.3792
Strip Mall	0.533322 / 0.326875	1.1017	6.7000e-004	4.1000e-004	1.2418
Total		**6.7685**	**4.0900e-003**	**2.5100e-003**	**7.6210**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.71118 / 1.7409	5.6669	3.4200e-003	2.1000e-003	6.3792
Strip Mall	0.533322 / 0.326875	1.1017	6.7000e-004	4.1000e-004	1.2418
Total		**6.7685**	**4.0900e-003**	**2.5100e-003**	**7.6210**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.8820	0.9386	0.0000	39.3470
Unmitigated	15.8820	0.9386	0.0000	39.3470

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	70.68	14.3474	0.8479	0.0000	35.5451
Strip Mall	7.56	1.5346	0.0907	0.0000	3.8019
Total		**15.8820**	**0.9386**	**0.0000**	**39.3470**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	70.68	14.3474	0.8479	0.0000	35.5451
Strip Mall	7.56	1.5346	0.0907	0.0000	3.8019
Total		**15.8820**	**0.9386**	**0.0000**	**39.3470**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	96	536	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)	0.0422	0.1180	0.1077	2.0000e-004		6.2100e-003	6.2100e-003		6.2100e-003	6.2100e-003	0.0000	19.5943	19.5943	2.7500e-003	0.0000	19.6630
Total	**0.0422**	**0.1180**	**0.1077**	**2.0000e-004**		**6.2100e-003**	**6.2100e-003**		**6.2100e-003**	**6.2100e-003**	**0.0000**	**19.5943**	**19.5943**	**2.7500e-003**	**0.0000**	**19.6630**

11.0 Vegetation

Phase 3 Existing Buildings

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	14.55	1000sqft	0.33	14,546.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	395.13	**CH4 Intensity (lb/MWhr)**	0.01	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Phase 3 Existing Buildings - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2026 RPS compliance (50%).

Land Use - 2615 and 2619 West Taron Court to be demoed under Phase 3

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Grading -

Trips and VMT - Operation only

Architectural Coating - Operation only

Vehicle Trips - Existing mobile sources modeled separately

Energy Use - Building constructed to 2008 Title 24 standards. Historical data used.

Water And Wastewater - Water demand provided as total for all existing buildings. Allocated to buildings in Phase 1 and 2

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	7,273.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	21,819.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	2.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblConstructionPhase	NumDays	1.00	0.00
tblConstructionPhase	PhaseEndDate	4/1/2020	3/25/2020

Phase 3 Existing Buildings - Sacramento County, Annual

tblConstructionPhase	PhaseEndDate	3/18/2020	10/30/2019
tblConstructionPhase	PhaseEndDate	10/25/2019	10/13/2019
tblConstructionPhase	PhaseEndDate	10/30/2019	10/28/2019
tblConstructionPhase	PhaseEndDate	3/25/2020	3/18/2020
tblConstructionPhase	PhaseEndDate	10/28/2019	10/25/2019
tblEnergyUse	LightingElect	6.45	5.33
tblEnergyUse	T24E	4.20	3.26
tblEnergyUse	T24NG	5.52	4.49
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.01
tblProjectCharacteristics	CO2IntensityFactor	590.31	395.13
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002

tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	1,077,755.19	0.00
tblWater	OutdoorWaterUseRate	660,559.63	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.0636	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Energy	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	34.3611	34.3611	8.4000e-004	2.3000e-004	34.4506
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	3.1017	0.0000	3.1017	0.1833	0.0000	7.6843
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0640**	**3.8600e-003**	**3.4300e-003**	**2.0000e-005**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**3.1017**	**34.3614**	**37.4631**	**0.1842**	**2.3000e-004**	**42.1353**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.0636	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Energy	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	34.3611	34.3611	8.4000e-004	2.3000e-004	34.4506
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	3.1017	0.0000	3.1017	0.1833	0.0000	7.6843
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0640**	**3.8600e-003**	**3.4300e-003**	**2.0000e-005**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**3.1017**	**34.3614**	**37.4631**	**0.1842**	**2.3000e-004**	**42.1353**

	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	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 3 Existing Buildings - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/14/2019	10/13/2019	5	0	
2	Site Preparation	Site Preparation	10/26/2019	10/25/2019	5	0	
3	Grading	Grading	10/29/2019	10/28/2019	5	0	
4	Building Construction	Building Construction	10/31/2019	10/30/2019	5	0	
5	Paving	Paving	3/19/2020	3/18/2020	5	0	
6	Architectural Coating	Architectural Coating	3/26/2020	3/25/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3 Existing Buildings - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Site Preparation	Graders	0	8.00	187	0.41
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1577	30.1577	7.6000e-004	1.5000e-004	30.2223
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1577	30.1577	7.6000e-004	1.5000e-004	30.2223
NaturalGas Mitigated	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2033	4.2033	8.0000e-005	8.0000e-005	4.2283
NaturalGas Unmitigated	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2033	4.2033	8.0000e-005	8.0000e-005	4.2283

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	78767.5	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2033	4.2033	8.0000e-005	8.0000e-005	4.2283
Total		**4.2000e-004**	**3.8600e-003**	**3.2400e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.2033**	**4.2033**	**8.0000e-005**	**8.0000e-005**	**4.2283**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	78767.5	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2033	4.2033	8.0000e-005	8.0000e-005	4.2283
Total		**4.2000e-004**	**3.8600e-003**	**3.2400e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.2033**	**4.2033**	**8.0000e-005**	**8.0000e-005**	**4.2283**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	168265	30.1577	7.6000e-004	1.5000e-004	30.2223
Total		**30.1577**	**7.6000e-004**	**1.5000e-004**	**30.2223**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	168265	30.1577	7.6000e-004	1.5000e-004	30.2223
Total		**30.1577**	**7.6000e-004**	**1.5000e-004**	**30.2223**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.0636	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Unmitigated	0.0636	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.7400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Total	**0.0636**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.6000e-004**	**3.6000e-004**	**0.0000**	**0.0000**	**3.8000e-004**

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.7400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Total	**0.0636**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.6000e-004**	**3.6000e-004**	**0.0000**	**0.0000**	**3.8000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.1017	0.1833	0.0000	7.6843
Unmitigated	3.1017	0.1833	0.0000	7.6843

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	15.28	3.1017	0.1833	0.0000	7.6843
Total		**3.1017**	**0.1833**	**0.0000**	**7.6843**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	15.28	3.1017	0.1833	0.0000	7.6843
Total		**3.1017**	**0.1833**	**0.0000**	**7.6843**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE
SACRAMEN	2020	All Other B	Aggregatec	Aggregatec	DSL	470.8857	24342.87	3955.44	32.32923	0.00054	0.005082
SACRAMEN	2020	LDA	Aggregatec	Aggregatec	GAS	562308.4	20379238	2622438	6488.63	0.273786	0.212098
SACRAMEN	2020	LDA	Aggregatec	Aggregatec	DSL	4715.654	173323.5	21897.36	40.34655	0.000184	0.006342
SACRAMEN	2020	LDA	Aggregatec	Aggregatec	ELEC	6575.116	256516.7	32944.15	0	0	0
SACRAMEN	2020	LDT1	Aggregatec	Aggregatec	GAS	62565.85	2093110	283205.1	775.1561	0.047266	0.032756
SACRAMEN	2020	LDT1	Aggregatec	Aggregatec	DSL	230.9232	4421.791	869.7209	2.290688	2.96E-05	0.00036
SACRAMEN	2020	LDT1	Aggregatec	Aggregatec	ELEC	215.1146	7559.58	1037.313	0	0	0
SACRAMEN	2020	LDT2	Aggregatec	Aggregatec	GAS	200449	7002680	925793.4	2859.47	0.127851	0.104089
SACRAMEN	2020	LDT2	Aggregatec	Aggregatec	DSL	874.3506	37105.38	4307.459	11.77238	3.11E-05	0.00185
SACRAMEN	2020	LDT2	Aggregatec	Aggregatec	ELEC	805.6064	27180.57	4087.465	0	0	0
SACRAMEN	2020	LHD1	Aggregatec	Aggregatec	GAS	17931.14	606571.9	267147.3	699.4422	0.021797	0.025952
SACRAMEN	2020	LHD1	Aggregatec	Aggregatec	DSL	14531.28	510511.1	182785.2	325.6884	0.005229	0.051194
SACRAMEN	2020	LHD2	Aggregatec	Aggregatec	GAS	2350.507	80286.25	35019.06	105.9136	0.002595	0.003357
SACRAMEN	2020	LHD2	Aggregatec	Aggregatec	DSL	4640.209	168397.1	58367.99	120.2747	0.001564	0.018906
SACRAMEN	2020	MCY	Aggregatec	Aggregatec	GAS	28915.15	205683.9	57830.3	51.91141	0.095621	0.016097
SACRAMEN	2020	MDV	Aggregatec	Aggregatec	GAS	150962.3	4932504	685998	2460.633	0.121709	0.089853
SACRAMEN	2020	MDV	Aggregatec	Aggregatec	DSL	2487.754	100644.5	12084.33	42.46094	7.53E-05	0.006674
SACRAMEN	2020	MDV	Aggregatec	Aggregatec	ELEC	265.7412	8954.915	1344.151	0	0	0
SACRAMEN	2020	MH	Aggregatec	Aggregatec	GAS	3364.607	28658.06	336.5952	58.21128	0.000664	0.00102
SACRAMEN	2020	MH	Aggregatec	Aggregatec	DSL	1047.878	9419.136	104.7878	11.01393	6.75E-05	0.001731
SACRAMEN	2020	Motor Coa	Aggregatec	Aggregatec	DSL	104.4371	13334.62	1524.781	24.32598	0.000198	0.003824
SACRAMEN	2020	OBUS	Aggregatec	Aggregatec	GAS	618.1662	28972.49	12368.27	59.74574	0.001321	0.001483
SACRAMEN	2020	PTO	Aggregatec	Aggregatec	DSL	0	18015.43	0	41.07113	0.000358	0.006456
SACRAMEN	2020	SBUS	Aggregatec	Aggregatec	GAS	101.2371	5046.944	404.9482	5.138097	0.000394	0.000195
SACRAMEN	2020	SBUS	Aggregatec	Aggregatec	DSL	1066.604	33499.71	12308.46	47.76384	0.000223	0.007508
SACRAMEN	2020	T6 Ag	Aggregatec	Aggregatec	DSL	17.38314	274.3826	76.48584	0.340181	7.59E-06	5.35E-05

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE
SACRAMEN	2020	T6 CAIRP h	Aggregatec	Aggregatec	DSL	104.3856	20726.79	1524.03	21.55275	4.37E-05	0.003388
SACRAMEN	2020	T6 CAIRP sı	Aggregatec	Aggregatec	DSL	56.02069	2968.495	817.9021	3.266816	1.09E-05	0.000513
SACRAMEN	2020	T6 instate (	Aggregatec	Aggregatec	DSL	172.8604	11752.46	781.4952	16.6446	0.000294	0.002616
SACRAMEN	2020	T6 instate (	Aggregatec	Aggregatec	DSL	1688.937	86219.97	7635.62	121.4636	0.002081	0.019092
SACRAMEN	2020	T6 instate l	Aggregatec	Aggregatec	DSL	1343.385	178022.2	15502.48	208.7037	0.001903	0.032805
SACRAMEN	2020	T6 instate s	Aggregatec	Aggregatec	DSL	5293.837	256170.5	61090.14	315.0532	0.00373	0.049522
SACRAMEN	2020	T6 OOS hea	Aggregatec	Aggregatec	DSL	58.91439	11708.35	860.1501	12.17929	2.36E-05	0.001914
SACRAMEN	2020	T6 OOS sm	Aggregatec	Aggregatec	DSL	31.33666	1637.559	457.5152	1.808294	6.49E-06	0.000284
SACRAMEN	2020	T6 Public	Aggregatec	Aggregatec	DSL	4496.374	69021.1	13639	109.1237	0.000418	0.017153
SACRAMEN	2020	T6 utility	Aggregatec	Aggregatec	DSL	171.6652	2865.339	1974.149	3.718785	5.05E-06	0.000585
SACRAMEN	2020	T6TS	Aggregatec	Aggregatec	GAS	2250.191	108653.8	45021.82	223.1953	0.005803	0.005452
SACRAMEN	2020	T7 Ag	Aggregatec	Aggregatec	DSL	10.55333	197.5579	46.43464	0.385965	1.1E-05	6.07E-05
SACRAMEN	2020	T7 CAIRP	Aggregatec	Aggregatec	DSL	807.845	146246.3	11794.54	249.6123	0.000981	0.039236
SACRAMEN	2020	T7 CAIRP c	Aggregatec	Aggregatec	DSL	45.89798	8441.895	207.503	16.74976	7.43E-05	0.002633
SACRAMEN	2020	T7 NNOOS	Aggregatec	Aggregatec	DSL	883.3627	178299.2	12897.09	295.6075	0.001297	0.046465
SACRAMEN	2020	T7 NOOS	Aggregatec	Aggregatec	DSL	317.5425	57459.39	4636.12	100.3453	0.000415	0.015773
SACRAMEN	2020	T7 other p	Aggregatec	Aggregatec	DSL	10.00402	1604.083	76.03052	3.346185	2.14E-05	0.000526
SACRAMEN	2020	T7 POAK	Aggregatec	Aggregatec	DSL	41.85246	4679.204	318.0787	10.17386	7.74E-05	0.001599
SACRAMEN	2020	T7 Public	Aggregatec	Aggregatec	DSL	4391.136	88892.13	13319.78	193.5638	0.000861	0.030426
SACRAMEN	2020	T7 Single	Aggregatec	Aggregatec	DSL	1220.09	90729.3	14079.67	164.4255	0.00134	0.025845
SACRAMEN	2020	T7 single c	Aggregatec	Aggregatec	DSL	296.9415	20942.79	1342.461	44.94422	0.000589	0.007065
SACRAMEN	2020	T7 SWCV	Aggregatec	Aggregatec	DSL	568.3002	23183.53	2216.371	108.1785	7.3E-05	0.017004
SACRAMEN	2020	T7 SWCV	Aggregatec	Aggregatec	NG	259.8475	10586.88	1013.405	39.76441	0.053067	0.008106
SACRAMEN	2020	T7 tractor	Aggregatec	Aggregatec	DSL	794.1183	109688.9	10085.3	174.7178	0.000991	0.027463
SACRAMEN	2020	T7 tractor (	Aggregatec	Aggregatec	DSL	245.8322	17275.96	1111.398	37.24275	0.000507	0.005854
SACRAMEN	2020	T7 utility	Aggregatec	Aggregatec	DSL	24.14959	490.115	277.7203	0.980467	2.7E-06	0.000154

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE
SACRAMEN	2020	T7IS	Aggregatec	Aggregatec	GAS	9.793828	362.9092	195.9549	0.922662	0.000165	9.56E-05
SACRAMEN	2020	UBUS	Aggregatec	Aggregatec	GAS	170.4936	12872.13	681.9743	32.71646	0.000191	0.000425
SACRAMEN	2020	UBUS	Aggregatec	Aggregatec	DSL	4.334945	242.4383	17.33978	0.327372	1.52E-05	5.15E-05
SACRAMEN	2020	UBUS	Aggregatec	Aggregatec	ELEC	0.002191	0.046908	0.008765	0	0	0
SACRAMEN	2020	UBUS	Aggregatec	Aggregatec	NG	360.4708	34604.16	1441.883	77.68276	0.248468	0.015836
						1093746	38312798	5453300	16852.33	1.024979	0.974822

Summary of GHG Emissions

Existing Site

	MTCO2e/year		
Source	Phase 1	Phase 2	Phase 3
Area	0	0	0
Energy	114	340	34
Mobile	2,381	4,843	771
Waste	20	39	8
Water	6	8	-
Stationary	-	20	-
Total	**2,521**	**5,249**	**813**
Operational Total	**93,292**	**178,479**	**24,380**

Construction

Phase	Year	Off-Road Equipment	On-Road Travel	MTCO2e
1	2020	607	453	1,267
1	2021	417	1,394	1,810
1	2022	30	1,215	1,245
2A	2023	36	7	43
2A	2024	297	223	520
2B	2024	164	615	779
2B	2025	56	112	168
2C	2023	35	7	43
2C	2024	247	429	676
2C	2025	14	335	349
2D	2025	223	49	271
3A	2026	39	8	47
3A	2027	214	195	409
3B	2027	76	15	91
3B	2028	141	180	321
3C	2029	134	98	232
Total		**2,732**	**5,334**	**8,273**

Total by Year				
	Year	Off-Road Equipment	On-Road Travel	MTCO2e
	2020	607	453	1,267
	2021	417	1,394	1,810
	2022	30	1,215	1,245
	2023	71	15	86
	2024	709	1,267	1,976
	2025	292	495	787
	2026	39	8	47
	2027	290	210	500
	2028	141	180	321
	2029	134	98	232
Total				**8,273**

Operational Emissions - Unmitigated

First Year of Operation	MTCO2e/year		
Phase	Phase 1	Phase 2	Phase 3
Year	2023	2026	2030

Area	0	0	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Stationary	925	-	-
Waste	3,256	2,046	68
Water	82	45	12
Total	**26,553**	**14,061**	**5,071**

Operational Emissions - Mitigated

First Year of Operation	MTCO2e/year		
Phase	Phase 1	Phase 2	Phase 3
Year	2023	2026	2030
Area	0	0	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Stationary	925	-	-
Waste	1,628	1,023	34
Water	82	45	12
Solar Reduction	(319)	(456)	(227)
EV Charging Reduction	(335)	(353)	(113)
SMUD Greenergy	(4,950)	(2,076)	(338)
TDM Plan	(1,974)	(1,050)	(613)
Carbon Sequestration Gain	-	-	(11)
Total	**17,347**	**9,103**	**3,736**

Total Lifetime Operation Unmitigated	1,370,530	1,074,378
Total Lifetime Operation Mitigated	1,063,501	
Net Increase in Operation	767,349	
Project Total w/ Construction	775,622	

Area	0	0	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Stationary	925	-	-
Waste	3,256	2,046	68
Water	82	45	12
Total	**26,553**	**14,061**	**5,071**

Operational Emissions - Mitigated

First Year of Operation	MTCO2e/year		
Phase	Phase 1	Phase 2	Phase 3
Year	2023	2026	2030
Area	0	0	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Stationary	925	-	-
Waste	1,628	1,023	34
Water	82	45	12
Solar Reduction	(319)	(456)	(227)
EV Charging Reduction	(335)	(353)	(113)
SMUD Greenergy	(4,950)	(2,076)	(338)
TDM Plan	(1,974)	(1,050)	(613)
Carbon Sequestration Gain	-	-	(11)
Total	**17,347**	**9,103**	**3,736**

Total Lifetime Operation Unmitigated	1,370,530	1,113,025
Total Lifetime Operation Mitigated	1,063,501	
Net Increase in Operation	805,997	
Project Total w/ Construction	814,269	

Proposed Project Building Energy, Water, Solid Waste Operation

		Land Use in CalEEMod						
Phase	**Project Building**	**Type**	**Amount**	**Unit**	**Water Demand (gal/year)**	**Electricity Demand (kWh/year)**	**Natural Gas Demand (cubic feet/year)**	**Notes**
1	CNU Medical Center (Hospital Podium/West Tower w/Helistop)	Hospital	596,790	sq ft	42,871,510	20,887,700	68,630,900	Accounts for reduced water demand from xeriscaping
			250	beds				
		Enclosed Parking with Elevator	230	spaces				
			33,290	sq ft				
	Central Plant	General Light Industry	22,850	sq ft	2,190,000	1,008,000	-	
	Central Plant Parking	Enclosed Parking with Elevator	14,650	sq ft	-	-	-	
			80	spaces				
	Mechanical Yard	Surface Parking Lot	15,500	sq ft	-	-	-	
2	CNU Med Center (Hospital Podium/West Tower w/Helistop/East Tower)	Hospital	103,210	sq ft	7,101,510	3,612,400	11,869,200	Accounts for reduced water demand from xeriscaping
			150	beds				
	Out-Patient Clinic	Hospital	168,500	sq ft	12,410,000	5,897,500	19,377,500	
	Out-Patient Clinic Parking	Enclosed Parking with Elevator	170	spaces				
			33,700	sq ft				
	Parking Garage 1	Unenclosed Parking with Elevator	205,600	sq ft	-	-	-	
			1,500	spaces				
	Retail South	Strip Mall	51,400	sq ft	2,920,000	1,088,000	1,142,400	
	Medical Office Building	Medical Office Building	100,000	sq ft	7,300,000	3,500,000	11,500,000	
	Central Quad Landscape Area	City Park	3.2139449	acres	-	-	-	
			140,000	sq ft				
3	Parking Garage 2	Unenclosed Parking with Elevator	165,600	sq ft	-	-	-	
			1,000	spaces				
	Retail North	Strip Mall	41,400	sq ft	2,190,000	828,000	869,400	
	Dormitory	Apartments Mid-Rise	96,000	sq ft	5,837,735	2,400,000	4,800,000	Accounts for reduced water demand from xeriscaping
			150	dwelling units				
	Admin Support	General Office Building	24,000	sq ft				
	Student Parking	Enclosed Parking with Elevator	70,000	sq ft	1,825,000	700,000	735,000	
			200	spaces				
		Sport Floor	35,000	sq ft				

Phase 1 Project Mobile Source GHG Emissions - 2023

	Project VMT (mi)	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	**CO2e (MT)**
Without TDMs	35,604,629	12,930,679,218	12,931	754,451	0.75	716,858	0.72	**13,163**
With TDMs	30,263,952	10,991,083,636	10,991.08	641,283	0.64	609,329	0.61	**11,189**

EMFAC2017 Output				
	VMT (mi)	CO2 (ton/day)	CH4 (ton/day)	N2O (ton/day)
All Vehicles	39,750,906	15,913.51	0.93	0.88

	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
All Vehicles	363.17	0.02	0.02

1	Ton
907185	Grams
1000000	g/MT

Phase 2 Project Mobile Source GHG Emissions - 2026

	Project VMT (mi)	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	**CO2e (MT)**
Without TDMs	20,807,508	6,877,241,877	6,877	404,688	0.40	379,163	0.38	**7,000**
With TDMs	17,686,243	5,845,609,719	5,845.61	343,982	0.34	322,286	0.32	**5,950**

EMFAC2017 Output				
	VMT (mi)	CO2 (ton/day)	CH4 (ton/day)	N2O (ton/day)
All Vehicles	41,135,078	14,986.86	0.88	0.83

	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
All Vehicles	330.52	0.02	0.02

1	Ton
907185	Grams
1000000	g/MT

Phase 3 Project Mobile Source GHG Emissions - 2030

	Project VMT (mi)	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	**CO2e (MT)**
Without TDMs	13,469,499	4,011,526,443	4,012	245,548	0.25	223,362	0.22	**4,084**
With TDMs	11,449,265	3,409,854,316	3,409.85	208,720	0.21	189,860	0.19	**3,472**

EMFAC2017 Output				
	VMT (mi)	CO2 (ton/day)	CH4 (ton/day)	N2O (ton/day)
All Vehicles	43,068,139	14,138.99	0.87	0.79

	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
All Vehicles	297.82	0.02	0.02

1	Ton
907185	Grams
1000000	g/MT

Helicopter Emissions

Phase 1 GHG Emissions

Helicopter operation	**Value**	Source
Gallons of jet fuel used per hour	100	FOCA 2009 - used AS 365 N3 Dauphin as proxy
Gallons of fuel used per LTO	15	FOCA 2009 - used AS 365 N3 Dauphin as proxy
Average hours/use (assumes 2 LTO)	4	assumption
Total Days Helicopter Used per Year	52	Applicant data - 1 trip per week
Total Hours Helicopter Used per Year	208	calculated
Gallons used for LTO	805	calculated
Gallons used for cruising	20,868	calculated
Total gallons used per year	21,674	calculated
Jet A Emissions Factor (kg CO2/gal)	9.7497	Climate Registry 2017 Emission Factors
Jet A Emissions Factor (kg N2O/gal)	0.000308	Climate Registry 2017 Emission Factors
GWP N2O	298	
LTO MTCO2E	7.93	
Cruising MTCO2E	205.37	
Total MTCO2E	213.30	
Note: No emission factor available for CH4 helicopter emissions.		

Phase 2 GHG Emissions

Helicopter operation	**Value**	Source
Gallons of jet fuel used per hour	100	FOCA 2009 - used AS 365 N3 Dauphin as proxy
Gallons of fuel used per LTO	15	FOCA 2009 - used AS 365 N3 Dauphin as proxy
Average hours/use (assumes 2 LTO)	4	assumption
Total Days Helicopter Used per Year	26	Applicant data - 0.5 trip per week
Total Hours Helicopter Used per Year	104	calculated
Gallons used for LTO	403	calculated
Gallons used for cruising	10,434	calculated
Total gallons used per year	10,837	calculated
Jet A Emissions Factor (kg CO2/gal)	9.7497	Climate Registry 2017 Emission Factors
Jet A Emissions Factor (kg N2O/gal)	0.000308	Climate Registry 2017 Emission Factors
GWP N2O	298	
LTO MTCO2E	3.96	
Cruising MTCO2E	102.69	
Total MTCO2E	106.65	
Note: No emission factor available for CH4 helicopter emissions.		

FOCA 2009 - Guidance on the Determination of Helicopter Emissions

Green Project Features

On-Site Solar

	kWh/year	MTCO2e	sq ft	m^2	kW system
Phase 1	1,327,446	319.44	46,665	4,335	824
Phase 2	2,537,432	455.68	89,335	8,299	1,577
Phase 3	1,578,453	226.77	55,590	5,164	981

EV Charging Stations

Phase 1			
Number of Chargers		37	
Number of Connections per Charge		2	<-- assumption
Average Charging hours per Connection per day		3	<-- assumption
Number of hours of charge per year for all chargers (h/year)		70,034	
Average Efficiency of EV LDV (kWh/100-mi) (1)		34	<-for MY2015-2018
Average Efficiency of Gasoline LDV in 2023 (mpg)		32	<- EMFAC2017 for Sacramento
GHG Emissions per kWh in 2023 (MTCO2e/kWh)		0.0002406	
GHG Emissions per mi for average gasoline LDV (gCO2/mi)		325	
Emissions reductions per EV mi (kg CO2/mi)		0.24	

Type of EV Charger	Charger Power (kW or kWh/h) (2)	Charged amount (kWh)	Equivalent VMT (mi)	EV emissions (MT CO2e)	Equivalent Gasoline emissions (MT CO2e)	Emissions reductions (MT CO2e)	Emissions reductions per hour of charge (kg CO2e/h)
Level 2 (high)	6.6	462,221.76	1,374,514	111	446	335	5
		Total VMT	1,374,514		Total Reductions	335	

Phase 2			
Number of Chargers		36	
Number of Connections per Charge		2	<-- assumption
Average Charging hours per Connection per day		3	<-- assumption
Number of hours of charge per year for all chargers (h/year)		68,141	
Average Efficiency of EV LDV (kWh/100-mi) (1)		34	<-for MY2015-2018
Average Efficiency of Gasoline LDV in 2026 (mpg)		35	<- EMFAC2017 for Sacramento
GHG Emissions per kWh in 2026 (MTCO2e/kWh)		0.0001796	
GHG Emissions per mi for average gasoline LDV (gCO2/mi)		325	
Emissions reductions per EV mi (kg CO2/mi)		0.26	

Type of EV Charger	Charger Power (kW or kWh/h) (2)	Charged amount (kWh)	Equivalent VMT (mi)	EV emissions (MT CO2e)	Equivalent Gasoline emissions (MT CO2e)	Emissions reductions (MT CO2e)	Emissions reductions per hour of charge (kg CO2e/h)
Level 2 (high)	6.6	449,729.28	1,337,365	81	434	353	5
		Total VMT	1,337,365		Total Reductions	353	

Phase 3			
Number of Chargers		11	
Number of Connections per Charge		2	<-- assumption
Average Charging hours per Connection per day		3	<-- assumption
Number of hours of charge per year for all chargers (h/year)		20,821	
Average Efficiency of EV LDV (kWh/100-mi) (1)		34	<-for MY2015-2018
Average Efficiency of Gasoline LDV in 2030 (mpg)		38	<- EMFAC2017 for Sacramento
GHG Emissions per kWh in 2030 (MTCO2e/kWh)		0.0001437	
GHG Emissions per mi for average gasoline LDV (gCO2/mi)		325	
Emissions reductions per EV mi (kg CO2/mi)		0.28	

Type of EV Charger	Charger Power (kW or kWh/h) (2)	Charged amount (kWh)	Equivalent VMT (mi)	EV emissions (MT CO2e)	Equivalent Gasoline emissions (MT CO2e)	Emissions reductions (MT CO2e)	Emissions reductions per hour of charge (kg CO2e/h)
Level 2 (high)	6.6	137,417.28	408,639	20	133	113	5
		Total VMT	408,639		Total Reductions	113	

Vegetation Change

	Number of trees	MTCO2e
New Trees Gained after Construction	313	222

Notes

Assumed all trees removed are fully mature

Assumed new planted trees are miscellaneous mix of species

Source: CalEEMod 2016.3.2

Emission Factors

Electricity Emission Factors

2014 SMUD ELECTRICITY EF	Amount	Units	Source
CO2	561.08	lb/MWh	Martha Helek, SMUD, email communication to Dimitri Antoniou of Ascent Environmental on June 28, 2016
CH4	0.014116	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
N20	0.002572	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
2020 SMUD ELECTRICITY EF			
CO2	529.4699	lb/MWh	33% RPS
CH4	0.013321	lb/MWh	
N20	0.002427	lb/MWh	
2026 SMUD ELECTRICITY EF			50% RPS
CO2	395.1268	lb/MWh	
CH4	0.009941	lb/MWh	
N20	0.001811	lb/MWh	
2030 SMUD ELECTRICITY EF			60% RPS
CO2	316.1014	lb/MWh	
CH4	0.007953	lb/MWh	
N20	0.001449	lb/MWh	
Natural Gas Emission Factors			
	53.06	kg CO2/MMBtu	2017 Default Emission Factors Table 12.1
	0.001	kg CH4/MMBtu	2017 Default Emission Factors Table 12.9
	0.0001	kg N2O/MMBtu	2017 Default Emission Factors Table 12.9
Diesel Emission Factors			
	10.21	kg CO2/gal	2017 Default Emission Facotrs Table 13.1
	0.00006	kg CH4/gal	2017 Default Emission Factors Table 13.7
	0.00045	kg N2O/gal	2017 Default Emission Factors Table 13.7
Conversion Factors			
lb/MT	2204.623		
BTU/ft^3	1000		
BTU/MMBTU	1000000		
MT/kg	0.001		
g/lb	453.592		
lb jet fuel/gallon	6.79		

Phase 1 Operation

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	596.79	1000sqft	13.70	596,790.00	0
General Light Industry	22.85	1000sqft	0.52	22,850.00	0
Enclosed Parking with Elevator	80.00	Space	0.72	14,650.00	0
Parking Lot	15.50	1000sqft	0.36	15,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	529.47	**CH4 Intensity (lb/MWhr)**	0.012	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Phase 1 Operation - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2020 RPS compliance (33% renewable)

Land Use - See appendix for modeling inputs

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Trips and VMT - Operation only

Grading - Operation only

Architectural Coating - Operation only

Vehicle Trips - Mobile sources modeled separately

Energy Use - Energy modeled separately

Water And Wastewater - Water demand accounts for landscaping demand from data provided by applicant

Land Use Change -

Waste Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	309,820.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	929,460.00	0.00
tblArchitecturalCoating	ConstArea_Parking	1,809.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	300.00	0.00
tblConstructionPhase	NumDays	20.00	0.00

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tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	4.57	0.00
tblEnergyUse	LightingElect	4.98	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	7.20	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24NG	12.42	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	3.41	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24NG	23.39	0.00
tblEnergyUse	T24NG	57.91	0.00
tblLandUse	LandUseSquareFeet	32,000.00	14,650.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.012
tblProjectCharacteristics	CO2IntensityFactor	590.31	529.47
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblTripsAndVMT	VendorTripNumber	107.00	0.00
tblTripsAndVMT	WorkerTripNumber	213.00	0.00
tblTripsAndVMT	WorkerTripNumber	43.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblWater	IndoorWaterUseRate	5,284,062.50	2,190,000.00
tblWater	IndoorWaterUseRate	74,885,530.01	42,871,510.00
tblWater	OutdoorWaterUseRate	14,263,910.48	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

	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	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**

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	2.7104	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Energy	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
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	1,314.0945	0.0000	1,314.0945	77.6608	0.0000	3,255.6134
Water						0.0000	0.0000		0.0000	0.0000	15.9428	53.9224	69.8652	0.0561	0.0349	81.6601
Total	**2.7104**	**8.0000e-005**	**9.1300e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**1,330.0373**	**53.9401**	**1,383.9774**	**77.7169**	**0.0349**	**3,337.2924**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	2.7104	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Energy	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
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	657.0472	0.0000	657.0472	38.8304	0.0000	1,627.8067
Water						0.0000	0.0000		0.0000	0.0000	15.9428	53.9224	69.8652	0.0561	0.0349	81.6601
Total	**2.7104**	**8.0000e-005**	**9.1300e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**672.9901**	**53.9401**	**726.9302**	**38.8865**	**0.0349**	**1,709.4857**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**49.40**	**0.00**	**47.48**	**49.96**	**0.00**	**48.78**

3.0 Construction Detail

Construction Phase

Phase 1 Operation - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	12/31/2019	5	0	
2	Site Preparation	Site Preparation	1/29/2020	1/28/2020	5	0	
3	Grading	Grading	2/12/2020	2/11/2020	5	0	
4	Building Construction	Building Construction	3/25/2020	3/24/2020	5	0	
5	Paving	Paving	5/19/2021	5/18/2021	5	0	
6	Architectural Coating	Architectural Coating	6/16/2021	6/15/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 1 Operation - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase 1 Operation - Sacramento County, Annual

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
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
General Light Industry	10.00	5.00	6.50	59.00	28.00	13.00	92	5	3
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
General Light Industry	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Hospital	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
General Light Industry	0	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
Hospital	0	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
Parking Lot	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
General Light Industry	0	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
Hospital	0	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
Parking Lot	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	2.7104	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Unmitigated	2.7104	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.5000e-004	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Total	**2.7104**	**8.0000e-005**	**9.1300e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0178**	**0.0178**	**5.0000e-005**	**0.0000**	**0.0189**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.5000e-004	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Total	**2.7104**	**8.0000e-005**	**9.1300e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0178**	**0.0178**	**5.0000e-005**	**0.0000**	**0.0189**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	69.8652	0.0561	0.0349	81.6601
Unmitigated	69.8652	0.0561	0.0349	81.6601

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	2.19 / 0	3.3955	2.7300e-003	1.6900e-003	3.9687
Hospital	42.8715 / 0	66.4697	0.0534	0.0332	77.6914
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**69.8652**	**0.0561**	**0.0349**	**81.6601**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	2.19 / 0	3.3955	2.7300e-003	1.6900e-003	3.9687
Hospital	42.8715 / 0	66.4697	0.0534	0.0332	77.6914
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**69.8652**	**0.0561**	**0.0349**	**81.6601**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	657.0472	38.8304	0.0000	1,627.8067
Unmitigated	1,314.0945	77.6608	0.0000	3,255.6134

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	28.33	5.7507	0.3399	0.0000	14.2472
Hospital	6445.33	1,308.3437	77.3209	0.0000	3,241.3662
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1,314.0945**	**77.6608**	**0.0000**	**3,255.6134**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	14.165	2.8754	0.1699	0.0000	7.1236
Hospital	3222.67	654.1719	38.6605	0.0000	1,620.6831
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**657.0472**	**38.8304**	**0.0000**	**1,627.8067**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2023	All Other B	Aggregatec	Aggregatec	DSL	432.3096	23331	3631.4	28.3112	1.39E-05	0.00445	2.52318
SACRAMEN	2023	LDA	Aggregatec	Aggregatec	GAS	606308.3	21470908	2835871	6304.102	0.21921	0.183874	665.4181
SACRAMEN	2023	LDA	Aggregatec	Aggregatec	DSL	5931.129	213255.2	27679.17	45.87348	0.00015	0.007211	4.088384
SACRAMEN	2023	LDA	Aggregatec	Aggregatec	ELEC	11992.87	495863.5	59658.62	0	0	0	0
SACRAMEN	2023	LDT1	Aggregatec	Aggregatec	GAS	65368.82	2148248	297348.1	738.5381	0.035426	0.02596	77.95506
SACRAMEN	2023	LDT1	Aggregatec	Aggregatec	DSL	171.8028	2906.858	624.5734	1.488277	1.82E-05	0.000234	0.13264
SACRAMEN	2023	LDT1	Aggregatec	Aggregatec	ELEC	520.3597	21554.14	2582.693	0	0	0	0
SACRAMEN	2023	LDT2	Aggregatec	Aggregatec	GAS	210187	7110546	970164.9	2632.827	0.103966	0.083689	277.9034
SACRAMEN	2023	LDT2	Aggregatec	Aggregatec	DSL	1241.048	49360.09	6058.387	14.42235	3.83E-05	0.002267	1.285364
SACRAMEN	2023	LDT2	Aggregatec	Aggregatec	ELEC	2017.989	64372.67	10165.34	0	0	0	0
SACRAMEN	2023	LHD1	Aggregatec	Aggregatec	GAS	16570.85	539163.4	246880.9	607.1481	0.0168	0.020783	64.08642
SACRAMEN	2023	LHD1	Aggregatec	Aggregatec	DSL	14242.94	481068	179158.3	296.8832	0.004531	0.046666	26.45913
SACRAMEN	2023	LHD2	Aggregatec	Aggregatec	GAS	2262.202	74699.66	33703.44	96.02306	0.001981	0.002773	10.13554
SACRAMEN	2023	LHD2	Aggregatec	Aggregatec	DSL	4802.26	166508.8	60406.39	114.8289	0.001436	0.01805	10.2339
SACRAMEN	2023	MCY	Aggregatec	Aggregatec	GAS	30303.88	203769.7	60607.75	51.53285	0.093701	0.015898	5.439458
SACRAMEN	2023	MDV	Aggregatec	Aggregatec	GAS	150190.5	4749354	681491.9	2164.009	0.090399	0.067064	228.4181
SACRAMEN	2023	MDV	Aggregatec	Aggregatec	DSL	3183.546	120771.4	15325.09	46.92857	7.22E-05	0.007377	4.182417
SACRAMEN	2023	MDV	Aggregatec	Aggregatec	ELEC	1127.726	36901.46	5725.011	0	0	0	0
SACRAMEN	2023	MH	Aggregatec	Aggregatec	GAS	2990.831	25478.21	299.2028	50.04589	0.000411	0.000733	5.282504
SACRAMEN	2023	MH	Aggregatec	Aggregatec	DSL	1076.009	9299.846	107.6009	10.57767	6.2E-05	0.001663	0.942714
SACRAMEN	2023	Motor Coa	Aggregatec	Aggregatec	DSL	99.86095	14071.11	1457.97	24.14589	3.39E-05	0.003795	2.151955
SACRAMEN	2023	OBUS	Aggregatec	Aggregatec	GAS	560.205	24124.38	11208.58	48.29858	0.00097	0.001077	5.09807
SACRAMEN	2023	PTO	Aggregatec	Aggregatec	DSL	0	22179.21	0	46.08897	2.67E-05	0.007245	4.107589
SACRAMEN	2023	SBUS	Aggregatec	Aggregatec	GAS	126.4847	6096.482	505.9387	6.016118	0.000442	0.000186	0.63502
SACRAMEN	2023	SBUS	Aggregatec	Aggregatec	DSL	1040.459	32508.3	12006.75	45.58128	0.000205	0.007165	4.062342
SACRAMEN	2023	T6 Ag	Aggregatec	Aggregatec	DSL	16.07611	207.8509	70.7349	0.254846	1.45E-07	4.01E-05	0.022713

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2023	T6 CAIRP h	Aggregatec	Aggregatec	DSL	112.1188	21881.03	1636.934	21.08746	8.99E-06	0.003315	1.879378
SACRAMEN	2023	T6 CAIRP sı	Aggregatec	Aggregatec	DSL	60.92955	3190.303	889.5714	3.281647	1.43E-06	0.000516	0.29247
SACRAMEN	2023	T6 instate (	Aggregatec	Aggregatec	DSL	200.3538	13192.91	905.792	17.36633	1.9E-05	0.00273	1.54774
SACRAMEN	2023	T6 instate (	Aggregatec	Aggregatec	DSL	1725.535	96787.54	7801.076	126.5513	7.92E-05	0.019892	11.27863
SACRAMEN	2023	T6 instate l	Aggregatec	Aggregatec	DSL	1384.478	187980.5	15976.68	199.0075	8.91E-05	0.031281	17.73615
SACRAMEN	2023	T6 instate s	Aggregatec	Aggregatec	DSL	5035.97	260027.7	58114.39	290.817	0.000132	0.045712	25.9185
SACRAMEN	2023	T6 OOS hea	Aggregatec	Aggregatec	DSL	62.98831	12260.01	919.6294	11.82427	5.04E-06	0.001859	1.053815
SACRAMEN	2023	T6 OOS sm	Aggregatec	Aggregatec	DSL	33.22714	1720.234	485.1162	1.774206	7.74E-07	0.000279	0.158123
SACRAMEN	2023	T6 Public	Aggregatec	Aggregatec	DSL	4468.183	69648.01	13553.49	104.4354	0.00033	0.016416	9.307596
SACRAMEN	2023	T6 utility	Aggregatec	Aggregatec	DSL	175.4286	2940.509	2017.429	3.548332	2.33E-06	0.000558	0.316238
SACRAMEN	2023	T6TS	Aggregatec	Aggregatec	GAS	2071.193	97303.04	41440.42	193.3592	0.00408	0.003857	20.40968
SACRAMEN	2023	T7 Ag	Aggregatec	Aggregatec	DSL	11.9101	151.0314	52.40443	0.297981	6.03E-07	4.68E-05	0.026557
SACRAMEN	2023	T7 CAIRP	Aggregatec	Aggregatec	DSL	848.0909	154330.8	12382.13	247.4425	0.00062	0.038895	22.05282
SACRAMEN	2023	T7 CAIRP c	Aggregatec	Aggregatec	DSL	51.96953	9476.578	234.9522	17.6385	2.2E-05	0.002773	1.571997
SACRAMEN	2023	T7 NNOOS	Aggregatec	Aggregatec	DSL	952.1692	188153.9	13901.67	287.3122	0.000814	0.045161	25.60613
SACRAMEN	2023	T7 NOOS	Aggregatec	Aggregatec	DSL	336.1067	60637.58	4907.157	99.62819	0.000289	0.01566	8.879167
SACRAMEN	2023	T7 other p	Aggregatec	Aggregatec	DSL	10.34874	1777.384	78.65044	3.192215	3.47E-06	0.000502	0.2845
SACRAMEN	2023	T7 POAK	Aggregatec	Aggregatec	DSL	45.75421	5550.891	347.732	10.36048	1.45E-05	0.001629	0.923358
SACRAMEN	2023	T7 Public	Aggregatec	Aggregatec	DSL	4682.134	94808.83	14202.47	196.7875	0.000834	0.030932	17.5383
SACRAMEN	2023	T7 Single	Aggregatec	Aggregatec	DSL	1507.418	111698.9	17395.39	181.1458	0.000264	0.028474	16.14426
SACRAMEN	2023	T7 single c	Aggregatec	Aggregatec	DSL	338.7823	23509.65	1531.622	46.23886	8.05E-05	0.007268	4.120947
SACRAMEN	2023	T7 SWCV	Aggregatec	Aggregatec	DSL	549.8797	22429.39	2144.531	99.9639	7.38E-05	0.015713	8.909086
SACRAMEN	2023	T7 SWCV	Aggregatec	Aggregatec	NG	298.5023	12165.01	1164.159	44.0066	0.054978	0.008971	5.086492
SACRAMEN	2023	T7 tractor	Aggregatec	Aggregatec	DSL	843.5276	115843.1	10712.8	166.1206	0.000191	0.026112	14.80517
SACRAMEN	2023	T7 tractor (	Aggregatec	Aggregatec	DSL	284.6932	19393.39	1287.087	38.3361	6.65E-05	0.006026	3.416629
SACRAMEN	2023	T7 utility	Aggregatec	Aggregatec	DSL	24.7459	502.0886	284.5779	0.946626	1.2E-06	0.000149	0.084366

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2023	T7IS	Aggregatec	Aggregatec	GAS	4.126049	370.9549	82.554	0.784019	4.91E-05	6.9E-05	0.082756
SACRAMEN	2023	UBUS	Aggregatec	Aggregatec	GAS	202.327	15275.52	809.308	33.7431	0.000201	0.000364	3.561692
SACRAMEN	2023	UBUS	Aggregatec	Aggregatec	DSL	2.109857	135.6226	8.439428	0.1748	6.36E-06	2.75E-05	0.015579
SACRAMEN	2023	UBUS	Aggregatec	Aggregatec	ELEC	0.002191	0.046908	0.008765	0	0	0	0
SACRAMEN	2023	UBUS	Aggregatec	Aggregatec	NG	430.8104	41217.31	1723.241	92.41423	0.295338	0.018839	10.68168
						1159521	39750906	5749731	15913.51	0.928486	0.882222	1634.254

Phase 2 Operation

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	103.21	1000sqft	2.37	103,210.00	0
Hospital	168.50	1000sqft	3.87	168,500.00	0
Medical Office Building	100.00	1000sqft	2.30	100,000.00	0
Enclosed Parking with Elevator	170.00	Space	1.53	33,700.00	0
Unenclosed Parking with Elevator	1,500.00	Space	13.50	205,600.00	0
Strip Mall	51.40	1000sqft	1.18	51,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	395.13	**CH4 Intensity (lb/MWhr)**	0.01	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Phase 2 Operation - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2026 RPS compliance (50% renewable)

Land Use - See appendix for modeling inputs

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Trips and VMT - Operation only

Grading - Operation only

Architectural Coating - Operation only

Vehicle Trips - Mobile sources modeled separately

Energy Use - Energy modeled separately

Water And Wastewater - Water demand accounts for landscaping demand from data provided by applicant

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	211,555.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	634,665.00	0.00
tblArchitecturalCoating	ConstArea_Parking	14,358.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	35.00	0.00
tblConstructionPhase	NumDays	370.00	0.00

Phase 2 Operation - Sacramento County, Annual

tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	4.98	0.00
tblEnergyUse	LightingElect	3.71	0.00
tblEnergyUse	LightingElect	5.33	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	2.98	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	NT24NG	0.68	0.00
tblEnergyUse	NT24NG	0.93	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24E	4.98	0.00
tblEnergyUse	T24E	3.26	0.00
tblEnergyUse	T24NG	57.91	0.00
tblEnergyUse	T24NG	12.42	0.00
tblEnergyUse	T24NG	4.49	0.00
tblLandUse	LandUseSquareFeet	68,000.00	33,700.00
tblLandUse	LandUseSquareFeet	600,000.00	205,600.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.01
tblProjectCharacteristics	CO2IntensityFactor	590.31	395.13
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblTripsAndVMT	VendorTripNumber	109.00	0.00
tblTripsAndVMT	WorkerTripNumber	236.00	0.00
tblTripsAndVMT	WorkerTripNumber	47.00	0.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	SU_TR	1.55	0.00

tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	34,094,316.86	19,511,510.00
tblWater	IndoorWaterUseRate	12,548,053.76	7,300,000.00
tblWater	IndoorWaterUseRate	3,807,327.60	2,920,000.00
tblWater	OutdoorWaterUseRate	6,494,155.59	0.00
tblWater	OutdoorWaterUseRate	2,390,105.48	0.00
tblWater	OutdoorWaterUseRate	2,333,523.37	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

	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	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**

Phase 2 Operation - Sacramento County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	1.8698	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Energy	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
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	825.8566	0.0000	825.8566	48.8067	0.0000	2,046.0247
Water						0.0000	0.0000		0.0000	0.0000	10.5191	26.5509	37.0699	0.0369	0.0230	44.8488
Total	**1.8698**	**2.4000e-004**	**0.0266**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**836.3756**	**26.6028**	**862.9784**	**48.8437**	**0.0230**	**2,090.9288**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	1.8698	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Energy	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
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	412.9283	0.0000	412.9283	24.4034	0.0000	1,023.0123
Water						0.0000	0.0000		0.0000	0.0000	10.5191	26.5509	37.0699	0.0369	0.0230	44.8488
Total	**1.8698**	**2.4000e-004**	**0.0266**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**423.4473**	**26.6028**	**450.0502**	**24.4404**	**0.0230**	**1,067.9165**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**49.37**	**0.00**	**47.85**	**49.96**	**0.00**	**48.93**

3.0 Construction Detail

Construction Phase

Phase 2 Operation - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	12/31/2019	5	0	
2	Site Preparation	Site Preparation	1/29/2020	1/28/2020	5	0	
3	Grading	Grading	2/12/2020	2/11/2020	5	0	
4	Building Construction	Building Construction	4/1/2020	3/31/2020	5	0	
5	Paving	Paving	9/1/2021	8/31/2021	5	0	
6	Architectural Coating	Architectural Coating	9/29/2021	9/28/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 15.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2 Operation - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase 2 Operation - Sacramento County, Annual

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
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Phase 2 Operation - Sacramento County, Annual

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Medical Office Building	10.00	5.00	6.50	29.60	51.40	19.00	60	30	10
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Hospital	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Medical Office Building	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Strip Mall	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Unenclosed Parking with Elevator	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Phase 2 Operation - Sacramento County, Annual

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Hospital	0	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
Medical Office Building	0	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
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Hospital	0	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
Medical Office Building	0	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
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	1.8698	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Unmitigated	1.8698	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1994					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4500e-003	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Total	**1.8698**	**2.4000e-004**	**0.0266**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0520**	**0.0520**	**1.4000e-004**	**0.0000**	**0.0553**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1994					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4500e-003	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Total	**1.8698**	**2.4000e-004**	**0.0266**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0520**	**0.0520**	**1.4000e-004**	**0.0000**	**0.0553**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	37.0699	0.0369	0.0230	44.8488
Unmitigated	37.0699	0.0369	0.0230	44.8488

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	19.5115 / 0	24.3274	0.0242	0.0151	29.4323
Medical Office Building	7.3 / 0	9.1018	9.0500e-003	5.6500e-003	11.0118
Strip Mall	2.92 / 0	3.6407	3.6200e-003	2.2600e-003	4.4047
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**37.0699**	**0.0369**	**0.0230**	**44.8488**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	19.5115 / 0	24.3274	0.0242	0.0151	29.4323
Medical Office Building	7.3 / 0	9.1018	9.0500e-003	5.6500e-003	11.0118
Strip Mall	2.92 / 0	3.6407	3.6200e-003	2.2600e-003	4.4047
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**37.0699**	**0.0369**	**0.0230**	**44.8488**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	412.9283	24.4034	0.0000	1,023.0123
Unmitigated	825.8566	48.8067	0.0000	2,046.0247

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	2934.47	595.6709	35.2031	0.0000	1,475.7494
Medical Office Building	1080	219.2302	12.9561	0.0000	543.1336
Strip Mall	53.97	10.9554	0.6475	0.0000	27.1416
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**825.8566**	**48.8067**	**0.0000**	**2,046.0247**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	1467.23	297.8355	17.6016	0.0000	737.8747
Medical Office Building	540	109.6151	6.4781	0.0000	271.5668
Strip Mall	26.985	5.4777	0.3237	0.0000	13.5708
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**412.9283**	**24.4034**	**0.0000**	**1,023.0123**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2026	All Other B	Aggregatec	Aggregatec	DSL	450.3192	22870.04	3782.681	26.89342	1.4E-05	0.004227	2.396823
SACRAMEN	2026	LDA	Aggregatec	Aggregatec	GAS	650890.6	22324683	3044173	6022.409	0.18193	0.167028	635.6846
SACRAMEN	2026	LDA	Aggregatec	Aggregatec	DSL	6973.938	243777.2	32661.99	48.43658	0.000121	0.007614	4.316815
SACRAMEN	2026	LDA	Aggregatec	Aggregatec	ELEC	19872.84	835373.8	98202.35	0	0	0	0
SACRAMEN	2026	LDT1	Aggregatec	Aggregatec	GAS	68561.71	2198585	312732	697.8684	0.026982	0.021551	73.66224
SACRAMEN	2026	LDT1	Aggregatec	Aggregatec	DSL	125.8905	1914.326	443.0684	0.959033	1.1E-05	0.000151	0.085472
SACRAMEN	2026	LDT1	Aggregatec	Aggregatec	ELEC	973.1006	41688.24	4831.856	0	0	0	0
SACRAMEN	2026	LDT2	Aggregatec	Aggregatec	GAS	220207	7209554	1015428	2410.04	0.085035	0.069703	254.3874
SACRAMEN	2026	LDT2	Aggregatec	Aggregatec	DSL	1581.089	58923.56	7641.529	15.86343	4.41E-05	0.002494	1.413797
SACRAMEN	2026	LDT2	Aggregatec	Aggregatec	ELEC	3777.031	113158.2	18833.68	0	0	0	0
SACRAMEN	2026	LHD1	Aggregatec	Aggregatec	GAS	15400.25	490024.7	229440.8	531.8281	0.012749	0.016709	56.13615
SACRAMEN	2026	LHD1	Aggregatec	Aggregatec	DSL	13917.02	457409	175058.6	269.9721	0.00394	0.042436	24.06073
SACRAMEN	2026	LHD2	Aggregatec	Aggregatec	GAS	2184.141	70428.39	32540.45	87.13537	0.001534	0.002299	9.197417
SACRAMEN	2026	LHD2	Aggregatec	Aggregatec	DSL	4933.9	164690.6	62062.26	108.6092	0.001325	0.017072	9.679579
SACRAMEN	2026	MCY	Aggregatec	Aggregatec	GAS	31485.42	202349	62970.85	51.25422	0.092308	0.015751	5.410047
SACRAMEN	2026	MDV	Aggregatec	Aggregatec	GAS	150154.4	4622823	681448.1	1902.936	0.068607	0.051867	200.861
SACRAMEN	2026	MDV	Aggregatec	Aggregatec	DSL	3823.35	135927	18216.44	48.53524	6.79E-05	0.007629	4.325608
SACRAMEN	2026	MDV	Aggregatec	Aggregatec	ELEC	2396.39	73387.81	12033.98	0	0	0	0
SACRAMEN	2026	MH	Aggregatec	Aggregatec	GAS	2688.662	23216.9	268.9737	43.50883	0.000273	0.000551	4.592497
SACRAMEN	2026	MH	Aggregatec	Aggregatec	DSL	1095.317	9216.081	109.5317	10.09942	5.7E-05	0.001587	0.900091
SACRAMEN	2026	Motor Coa	Aggregatec	Aggregatec	DSL	115.2673	14778.67	1682.902	24.20467	3.78E-05	0.003805	2.157194
SACRAMEN	2026	OBUS	Aggregatec	Aggregatec	GAS	516.1638	20818.14	10327.41	39.81125	0.000754	0.00082	4.202205
SACRAMEN	2026	PTO	Aggregatec	Aggregatec	DSL	0	26359.89	0	52.43349	3.25E-05	0.008242	4.673032
SACRAMEN	2026	SBUS	Aggregatec	Aggregatec	GAS	150.1397	7012.582	600.5589	6.662718	0.000465	0.000148	0.703271
SACRAMEN	2026	SBUS	Aggregatec	Aggregatec	DSL	1004.433	31308.84	11591.02	42.92107	0.000185	0.006747	3.825256
SACRAMEN	2026	T6 Ag	Aggregatec	Aggregatec	DSL	15.54002	118.3009	68.37608	0.149654	1.02E-07	2.35E-05	0.013338

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2026	T6 CAIRP h	Aggregatec	Aggregatec	DSL	124.5716	22987	1818.745	20.42336	9.47E-06	0.00321	1.820192
SACRAMEN	2026	T6 CAIRP sı	Aggregatec	Aggregatec	DSL	69.47397	3382.608	1014.32	3.278197	1.54E-06	0.000515	0.292163
SACRAMEN	2026	T6 instate (	Aggregatec	Aggregatec	DSL	233.3297	14575.67	1054.874	18.58305	1.81E-05	0.002921	1.656178
SACRAMEN	2026	T6 instate (	Aggregatec	Aggregatec	DSL	2039.02	106931.9	9218.33	133.7136	8.84E-05	0.021018	11.91696
SACRAMEN	2026	T6 instate l	Aggregatec	Aggregatec	DSL	1614.513	197775.5	18631.25	199.3382	9.68E-05	0.031333	17.76563
SACRAMEN	2026	T6 instate s	Aggregatec	Aggregatec	DSL	5572.478	264563.9	64305.62	283.7704	0.000138	0.044605	25.29047
SACRAMEN	2026	T6 OOS hea	Aggregatec	Aggregatec	DSL	69.70386	12820.27	1017.676	11.40056	5.29E-06	0.001792	1.016052
SACRAMEN	2026	T6 OOS sm	Aggregatec	Aggregatec	DSL	37.45976	1802.459	546.9126	1.752301	8.24E-07	0.000275	0.15617
SACRAMEN	2026	T6 Public	Aggregatec	Aggregatec	DSL	4505.945	70724.25	13668.03	100.2028	0.00026	0.01575	8.930373
SACRAMEN	2026	T6 utility	Aggregatec	Aggregatec	DSL	181.5101	3015.92	2087.366	3.404524	2.39E-06	0.000535	0.303422
SACRAMEN	2026	T6TS	Aggregatec	Aggregatec	GAS	1941.162	89281.22	38838.76	169.2147	0.003079	0.002922	17.86115
SACRAMEN	2026	T7 Ag	Aggregatec	Aggregatec	DSL	14.9824	102.8716	65.92255	0.218562	6.75E-07	3.44E-05	0.019479
SACRAMEN	2026	T7 CAIRP	Aggregatec	Aggregatec	DSL	869.7737	162094.7	12698.7	242.1868	0.000637	0.038068	21.58442
SACRAMEN	2026	T7 CAIRP c	Aggregatec	Aggregatec	DSL	57.20829	10469.83	258.6365	18.2593	2.4E-05	0.00287	1.627324
SACRAMEN	2026	T7 NNOOS	Aggregatec	Aggregatec	DSL	1054.215	197617.2	15391.54	278.2001	0.000889	0.043729	24.79403
SACRAMEN	2026	T7 NOOS	Aggregatec	Aggregatec	DSL	346.9851	63690.29	5065.983	97.74035	0.000298	0.015363	8.710917
SACRAMEN	2026	T7 other p	Aggregatec	Aggregatec	DSL	10.33293	1925.303	78.53025	3.342298	3.78E-06	0.000525	0.297876
SACRAMEN	2026	T7 POAK	Aggregatec	Aggregatec	DSL	44.30628	6467.404	336.7277	11.69123	1.61E-05	0.001838	1.041958
SACRAMEN	2026	T7 Public	Aggregatec	Aggregatec	DSL	4969.677	100624.2	15074.69	197.6137	0.000791	0.031062	17.61194
SACRAMEN	2026	T7 Single	Aggregatec	Aggregatec	DSL	1748.843	132753.7	20181.41	205.8589	0.000311	0.032358	18.34677
SACRAMEN	2026	T7 single c	Aggregatec	Aggregatec	DSL	370.6435	25973.72	1675.665	49.13019	8.2E-05	0.007723	4.378631
SACRAMEN	2026	T7 SWCV	Aggregatec	Aggregatec	DSL	541.046	22064.21	2110.079	93.20286	7.35E-05	0.01465	8.306521
SACRAMEN	2026	T7 SWCV	Aggregatec	Aggregatec	NG	329.653	13434.25	1285.647	46.39574	0.055933	0.009458	5.36264
SACRAMEN	2026	T7 tractor	Aggregatec	Aggregatec	DSL	983.6076	121654.6	12491.82	167.0321	0.000213	0.026255	14.88641
SACRAMEN	2026	T7 tractor (	Aggregatec	Aggregatec	DSL	315.1325	21426.03	1424.702	40.92259	7.13E-05	0.006432	3.647145
SACRAMEN	2026	T7 utility	Aggregatec	Aggregatec	DSL	25.35167	513.9241	291.5442	0.937106	1.24E-06	0.000147	0.083518

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2026	T7IS	Aggregatec	Aggregatec	GAS	3.659869	470.3722	73.22667	0.923951	3.94E-05	6.91E-05	0.097526
SACRAMEN	2026	UBUS	Aggregatec	Aggregatec	GAS	234.1604	17678.92	936.6416	38.42024	0.000249	0.000512	4.05538
SACRAMEN	2026	UBUS	Aggregatec	Aggregatec	DSL	0.928071	76.34291	3.712282	0.098038	3.22E-06	1.54E-05	0.008737
SACRAMEN	2026	UBUS	Aggregatec	Aggregatec	NG	500.1088	47782.97	2000.435	107.0739	0.342088	0.021828	12.37611
						1232104	41135078	6080798	14986.86	0.881895	0.82627	1536.931

Phase 3 Operation

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	24.00	1000sqft	0.55	24,000.00	0
Enclosed Parking with Elevator	200.00	Space	1.80	35,000.00	0
Unenclosed Parking with Elevator	1,000.00	Space	9.00	165,600.00	0
Apartments Mid Rise	150.00	Dwelling Unit	3.95	96,000.00	401
Strip Mall	41.40	1000sqft	0.95	41,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2030
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	316.1	**CH4 Intensity (lb/MWhr)**	0.008	**N2O Intensity (lb/MWhr)**	0.001

1.3 User Entered Comments & Non-Default Data

Phase 3 Operation - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2030 RPS compliance (60% renewable)

Land Use - See appendix for modeling inputs

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Trips and VMT - Operation only

Grading - Operation only

Architectural Coating - Operation only

Vehicle Trips - Mobile sources modeled separately

Energy Use - Energy modeled separately

Water And Wastewater - Water demand accounts for landscaping demand from data provided by applicant

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	32,700.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	98,100.00	0.00
tblArchitecturalCoating	ConstArea_Parking	12,036.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	64,800.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	194,400.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00

Phase 3 Operation - Sacramento County, Annual

tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	300.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	3.71	0.00
tblEnergyUse	LightingElect	5.33	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	2.98	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	NT24NG	0.68	0.00
tblEnergyUse	NT24NG	0.93	0.00
tblEnergyUse	T24E	460.92	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.98	0.00
tblEnergyUse	T24E	3.26	0.00
tblEnergyUse	T24NG	7,061.10	0.00
tblEnergyUse	T24NG	12.42	0.00
tblEnergyUse	T24NG	4.49	0.00
tblLandUse	LandUseSquareFeet	80,000.00	35,000.00
tblLandUse	LandUseSquareFeet	400,000.00	165,600.00
tblLandUse	LandUseSquareFeet	150,000.00	96,000.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.008
tblProjectCharacteristics	CO2IntensityFactor	590.31	316.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.001
tblTripsAndVMT	VendorTripNumber	60.00	0.00
tblTripsAndVMT	WorkerTripNumber	213.00	0.00
tblTripsAndVMT	WorkerTripNumber	43.00	0.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	2.46	0.00

tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	9,773,103.84	5,837,735.00
tblWater	IndoorWaterUseRate	4,265,609.95	0.00
tblWater	IndoorWaterUseRate	3,066,602.39	2,190,000.00
tblWater	OutdoorWaterUseRate	6,161,304.60	0.00
tblWater	OutdoorWaterUseRate	0.00	1,825,000.00
tblWater	OutdoorWaterUseRate	2,614,406.10	0.00
tblWater	OutdoorWaterUseRate	1,879,530.50	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

	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	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**

Phase 3 Operation - Sacramento County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.7841	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Energy	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
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	27.3612	0.0000	27.3612	1.6170	0.0000	67.7861
Water						0.0000	0.0000		0.0000	0.0000	2.8402	6.6509	9.4912	9.9400e-003	6.2000e-003	11.5866
Total	**0.7841**	**0.0179**	**1.5589**	**8.0000e-005**	**0.0000**	**8.6400e-003**	**8.6400e-003**	**0.0000**	**8.6400e-003**	**8.6400e-003**	**30.2014**	**9.2092**	**39.4105**	**1.6294**	**6.2000e-003**	**81.9932**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.7841	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Energy	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
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	13.6806	0.0000	13.6806	0.8085	0.0000	33.8931
Water						0.0000	0.0000		0.0000	0.0000	2.8402	6.6509	9.4912	9.9400e-003	6.2000e-003	11.5866
Total	**0.7841**	**0.0179**	**1.5589**	**8.0000e-005**	**0.0000**	**8.6400e-003**	**8.6400e-003**	**0.0000**	**8.6400e-003**	**8.6400e-003**	**16.5208**	**9.2092**	**25.7300**	**0.8209**	**6.2000e-003**	**48.1001**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**45.30**	**0.00**	**34.71**	**49.62**	**0.00**	**41.34**

3.0 Construction Detail

Construction Phase

Phase 3 Operation - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	12/31/2019	5	0	
2	Site Preparation	Site Preparation	1/29/2020	1/28/2020	5	0	
3	Grading	Grading	2/12/2020	2/11/2020	5	0	
4	Building Construction	Building Construction	3/25/2020	3/24/2020	5	0	
5	Paving	Paving	5/19/2021	5/18/2021	5	0	
6	Architectural Coating	Architectural Coating	6/16/2021	6/15/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 10.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3 Operation - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading		0			
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase 3 Operation - Sacramento County, Annual

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
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618
Enclosed Parking with Elevator	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618
General Office Building	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618
Strip Mall	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618
Unenclosed Parking with Elevator	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	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
Enclosed Parking with Elevator	0	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
General Office Building	0	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
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	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
Enclosed Parking with Elevator	0	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
General Office Building	0	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
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.7841	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Unmitigated	0.7841	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0932					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0476	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Total	**0.7841**	**0.0179**	**1.5589**	**8.0000e-005**		**8.6400e-003**	**8.6400e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**2.5582**	**2.5582**	**2.4900e-003**	**0.0000**	**2.6205**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0932					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0476	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Total	**0.7841**	**0.0179**	**1.5589**	**8.0000e-005**		**8.6400e-003**	**8.6400e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**2.5582**	**2.5582**	**2.4900e-003**	**0.0000**	**2.6205**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.4912	9.9400e-003	6.2000e-003	11.5866
Unmitigated	9.4912	9.9400e-003	6.2000e-003	11.5866

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.83774 / 0	6.2359	7.2100e-003	4.5000e-003	7.7587
Enclosed Parking with Elevator	0 / 1.825	0.9158	2.0000e-005	0.0000	0.9173
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.19 / 0	2.3394	2.7100e-003	1.6900e-003	2.9106
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.4911**	**9.9400e-003**	**6.1900e-003**	**11.5866**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.83774 / 0	6.2359	7.2100e-003	4.5000e-003	7.7587
Enclosed Parking with Elevator	0 / 1.825	0.9158	2.0000e-005	0.0000	0.9173
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.19 / 0	2.3394	2.7100e-003	1.6900e-003	2.9106
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.4911**	**9.9400e-003**	**6.1900e-003**	**11.5866**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.6806	0.8085	0.0000	33.8931
Unmitigated	27.3612	1.6170	0.0000	67.7861

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	69	14.0064	0.8278	0.0000	34.7002
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	22.32	4.5308	0.2678	0.0000	11.2248
Strip Mall	43.47	8.8240	0.5215	0.0000	21.8611
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**27.3612**	**1.6170**	**0.0000**	**67.7861**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	34.5	7.0032	0.4139	0.0000	17.3501
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	11.16	2.2654	0.1339	0.0000	5.6124
Strip Mall	21.735	4.4120	0.2607	0.0000	10.9306
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**13.6806**	**0.8085**	**0.0000**	**33.8930**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2030	All Other B	Aggregatec	Aggregatec	DSL	459.6609	21746.85	3861.151	24.5309	1.37E-05	0.003856	2.186268
SACRAMEN	2030	LDA	Aggregatec	Aggregatec	GAS	709747.4	23397686	3311415	5763.76	0.150224	0.158896	608.3833
SACRAMEN	2030	LDA	Aggregatec	Aggregatec	DSL	7960.516	273992.7	37685.53	50.22292	9.57E-05	0.007894	4.476019
SACRAMEN	2030	LDA	Aggregatec	Aggregatec	ELEC	30723.62	1200676	149837.9	0	0	0	0
SACRAMEN	2030	LDT1	Aggregatec	Aggregatec	GAS	73141.68	2276861	334156.2	661.4106	0.019807	0.018494	69.814
SACRAMEN	2030	LDT1	Aggregatec	Aggregatec	DSL	74.26615	1088.647	259.3938	0.52016	4.82E-06	8.18E-05	0.046358
SACRAMEN	2030	LDT1	Aggregatec	Aggregatec	ELEC	1609.921	63988.44	7889.978	0	0	0	0
SACRAMEN	2030	LDT2	Aggregatec	Aggregatec	GAS	234188.8	7403481	1078222	2204.764	0.06771	0.059413	232.7199
SACRAMEN	2030	LDT2	Aggregatec	Aggregatec	DSL	1974.815	68441.83	9419.155	16.95218	5.09E-05	0.002665	1.51083
SACRAMEN	2030	LDT2	Aggregatec	Aggregatec	ELEC	6254.807	171872.7	30657.21	0	0	0	0
SACRAMEN	2030	LHD1	Aggregatec	Aggregatec	GAS	14437.5	453287.8	215097.2	464.392	0.009238	0.013109	49.01806
SACRAMEN	2030	LHD1	Aggregatec	Aggregatec	DSL	13641.03	439869.7	171587	243.3834	0.003407	0.038256	21.69107
SACRAMEN	2030	LHD2	Aggregatec	Aggregatec	GAS	2115.309	67182.92	31514.96	78.48003	0.001129	0.001858	8.283819
SACRAMEN	2030	LHD2	Aggregatec	Aggregatec	DSL	5132.585	164942.9	64561.46	102.274	0.001237	0.016076	9.114968
SACRAMEN	2030	MCY	Aggregatec	Aggregatec	GAS	32922.54	203129.9	65845.07	51.49675	0.091863	0.015778	5.435647
SACRAMEN	2030	MDV	Aggregatec	Aggregatec	GAS	153104.3	4597116	695429.1	1680.004	0.050965	0.041376	177.3298
SACRAMEN	2030	MDV	Aggregatec	Aggregatec	DSL	4521.458	150846.7	21362.06	49.19651	5.76E-05	0.007733	4.384542
SACRAMEN	2030	MDV	Aggregatec	Aggregatec	ELEC	4179.206	116835.9	20601.93	0	0	0	0
SACRAMEN	2030	MH	Aggregatec	Aggregatec	GAS	2401.982	21378.13	240.2943	37.50081	0.000156	0.000401	3.958331
SACRAMEN	2030	MH	Aggregatec	Aggregatec	DSL	1110.852	9152.646	111.0852	9.532718	5.1E-05	0.001498	0.849585
SACRAMEN	2030	Motor Coa	Aggregatec	Aggregatec	DSL	133.2594	15581.9	1945.588	23.95656	4.22E-05	0.003766	2.135081
SACRAMEN	2030	OBUS	Aggregatec	Aggregatec	GAS	482.1242	18484.3	9646.342	33.01659	0.000594	0.000632	3.485007
SACRAMEN	2030	PTO	Aggregatec	Aggregatec	DSL	0	31418.86	0	59.27036	3.96E-05	0.009316	5.282354
SACRAMEN	2030	SBUS	Aggregatec	Aggregatec	GAS	191.6287	8653.611	766.5148	7.936219	0.000591	0.000186	0.837693
SACRAMEN	2030	SBUS	Aggregatec	Aggregatec	DSL	937.9608	29245.97	10823.94	38.35969	0.00015	0.00603	3.418732

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2030	T6 Ag	Aggregatec	Aggregatec	DSL	13.35776	61.68211	58.77415	0.081817	6.82E-08	1.29E-05	0.007292
SACRAMEN	2030	T6 CAIRP h	Aggregatec	Aggregatec	DSL	136.6622	24239.58	1995.268	19.61092	9.99E-06	0.003083	1.747784
SACRAMEN	2030	T6 CAIRP sı	Aggregatec	Aggregatec	DSL	77.94866	3589.18	1138.05	3.233766	1.65E-06	0.000508	0.288203
SACRAMEN	2030	T6 instate c	Aggregatec	Aggregatec	DSL	284.5435	17303.33	1286.41	21.56235	1.86E-05	0.003389	1.921702
SACRAMEN	2030	T6 instate c	Aggregatec	Aggregatec	DSL	2554.137	126943	11547.15	148.4008	0.000105	0.023327	13.22593
SACRAMEN	2030	T6 instate h	Aggregatec	Aggregatec	DSL	1939.846	209110.3	22385.55	199.1208	0.000105	0.031299	17.74625
SACRAMEN	2030	T6 instate s	Aggregatec	Aggregatec	DSL	6073.963	270668.6	70092.69	271.8139	0.000143	0.042725	24.22488
SACRAMEN	2030	T6 OOS hea	Aggregatec	Aggregatec	DSL	75.92639	13485.13	1108.525	10.90769	5.55E-06	0.001715	0.972127
SACRAMEN	2030	T6 OOS sm	Aggregatec	Aggregatec	DSL	41.65002	1897.38	608.0903	1.713446	8.73E-07	0.000269	0.152708
SACRAMEN	2030	T6 Public	Aggregatec	Aggregatec	DSL	4641.636	72695.49	14079.63	96.07219	0.000196	0.015101	8.562245
SACRAMEN	2030	T6 utility	Aggregatec	Aggregatec	DSL	187.2302	3112.892	2153.147	3.237952	2.46E-06	0.000509	0.288576
SACRAMEN	2030	T6TS	Aggregatec	Aggregatec	GAS	1838.756	83408.91	36789.83	147.5979	0.00243	0.002319	15.57944
SACRAMEN	2030	T7 Ag	Aggregatec	Aggregatec	DSL	15.14229	55.15206	66.62609	0.133319	6.31E-07	2.1E-05	0.011882
SACRAMEN	2030	T7 CAIRP	Aggregatec	Aggregatec	DSL	854.417	170906.8	12474.49	224.334	0.000633	0.035262	19.99332
SACRAMEN	2030	T7 CAIRP c	Aggregatec	Aggregatec	DSL	67.46232	12429.13	304.9945	19.63177	2.81E-05	0.003086	1.749643
SACRAMEN	2030	T7 NNOOS	Aggregatec	Aggregatec	DSL	1162.605	208358.8	16974.04	267.744	0.00097	0.042086	23.86216
SACRAMEN	2030	T7 NOOS	Aggregatec	Aggregatec	DSL	340.7991	67154.86	4975.667	90.56157	0.000296	0.014235	8.071122
SACRAMEN	2030	T7 other po	Aggregatec	Aggregatec	DSL	11.13096	2043.896	84.59532	3.05323	3.88E-06	0.00048	0.272113
SACRAMEN	2030	T7 POAK	Aggregatec	Aggregatec	DSL	51.9459	7810.198	394.7889	12.05176	1.84E-05	0.001894	1.074089
SACRAMEN	2030	T7 Public	Aggregatec	Aggregatec	DSL	5345.982	108256.4	16216.15	196.4868	0.000714	0.030885	17.5115
SACRAMEN	2030	T7 Single	Aggregatec	Aggregatec	DSL	2026.818	158231.7	23389.2	232.3279	0.000367	0.036519	20.70577
SACRAMEN	2030	T7 single c	Aggregatec	Aggregatec	DSL	433.8523	30834.39	1961.429	55.37132	9.08E-05	0.008704	4.93486
SACRAMEN	2030	T7 SWCV	Aggregatec	Aggregatec	DSL	532.1123	21700.03	2075.238	84.78019	7.12E-05	0.013326	7.555868
SACRAMEN	2030	T7 SWCV	Aggregatec	Aggregatec	NG	360.5665	14698.02	1406.209	47.55513	0.05675	0.009694	5.496647
SACRAMEN	2030	T7 tractor	Aggregatec	Aggregatec	DSL	1094.81	128202.7	13904.09	162.7523	0.000228	0.025582	14.50498

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2030	T7 tractor (	Aggregatec	Aggregatec	DSL	364.341	25435.66	1647.171	45.84738	8.08E-05	0.007207	4.086057
SACRAMEN	2030	T7 utility	Aggregatec	Aggregatec	DSL	26.12163	528.958	300.3987	0.884148	1.28E-06	0.000139	0.078798
SACRAMEN	2030	T7IS	Aggregatec	Aggregatec	GAS	4.378608	596.9609	87.60719	1.101839	4.51E-05	8.41E-05	0.116303
SACRAMEN	2030	UBUS	Aggregatec	Aggregatec	GAS	276.605	20883.45	1106.42	43.446	0.000306	0.000669	4.585864
SACRAMEN	2030	UBUS	Aggregatec	Aggregatec	DSL	0	0	0	0	0	0	0
SACRAMEN	2030	UBUS	Aggregatec	Aggregatec	NG	591.8562	56534.42	2367.425	126.6161	0.404412	0.025812	14.63489
						1332874	43068139	6535915	14138.99	0.865458	0.787258	1448.324

Table 6-1

Preliminary Utility Load Summary Table

CNUMC, CUP, OUT-PATIENT, MOB, DORM, RETAIL/PARKING & SOM LOCATED at ELK GROVE CAMPUS

Utility Provider			SMUD	Building Generators	City of Elk Grove			City of Elk Grove	PG&E	
		sqft	Normal Power peak demand	Emerg Power peak demand	Water peak demand	Water avg demand	Water Consumption	Sewer Volumn	Natural Gas Consumption	Remarks
			kWh/year	kW	gpm	gpd	gpy	gpy	CFH/yr	
Factor			**kwh/sqft**		**x avg gpm**	**gpd per sqft**		**x % of metered water**	**cfh/sqft**	
			35		**5**	**0.2**		**0.4**	**40**	
Existing Utility Loads										
SOM		109,800	3,843,000		80	22,000	8,030,000	3,212,000	4,392,000	
Subtotals - Existing Loads			**3,843,000**		**80**	**22,000**	**8,030,000**	**3,212,000**	**4,392,000**	
			kwh/sqft		**x avg gpm**	**gpd per sqft**		**x % of metered water**	**cfh/sqft**	
			35		**5**	**0.2**		**0.9**	**115**	
			20			**0.15**		**0.4**	**40**	
									21	
New Utility Loads										
PHASE I										
CNUMC-PH1	Hospital - Phase 1 - 12 stories above + 1 basement	596,790	20,887,700		410	119,000	43,435,000	39,091,500	68,630,900	
CUP-PH1	Central Plant - Phase 1 - 2 Stories	28,800	1,008,000		100	6,000	2,190,000	1,971,000	-	
PHASE 2										
CNUMC-PH2	Hospital - Phase 2 - East Tower addition	103,210	3,612,400		70	21,000	7,665,000	6,898,500	11,869,200	
Out-Patient-PH2	Out-Patient - 4 stories above + 1 basement	168,500	5,897,500		120	34,000	12,410,000	11,169,000	19,377,500	
MOB-PH2	MOB - 5 stories above	100,000	3,500,000		70	20,000	7,300,000	6,570,000	11,500,000	
Retail Parking-PH2	Retail floor estimation only.	54,400	1,088,000		30	8,000	2,920,000	2,628,000	1,142,400	
PHASE 3										
Dorm -PH3	Dormitory - 5 stories above	120,000	2,400,000		60	18,000	6,570,000	5,913,000	4,800,000	
Retail Parking - PH3	Retail floor estimation only.	41,400	828,000		20	6,000	2,190,000	1,971,000	869,400	
SOM	New School - 2 stoies	109,800	3,843,000		80	22,000	8,030,000	3,212,000	4,392,000	
Parking/Sport-PH3	Sport floor estimation only	35,000	700,000		20	5,000	1,825,000	1,642,500	735,000	
Subtotals- Proposed Load			**42,756,600**		**880**	**253,000**	**92,345,000**	**79,095,500**	**123,316,400**	
Total CNSUMC Load Increase after Project			**38,913,600**		**800**	**231,000**	**84,315,000**	**75,883,500**	**118,924,400**	

Attachment D

Solar Generation Estimates

PV WATT - INPUTS

Size (kW) = Area * (1 kW/m2) * PV efficiency

Areas		Efficiencies		
Rooftop		Standard	Crystalline Silicon	15%
55,000	sf	Premium	Crystalline Silicon	19%
5,110	m2	Thin Film	Thin Film	10%
85%	Coverage	System Losses		
4343	m2	Default		14%
4,343	Area, m2			
19%	PV efficiency			
825.2	**Size, kW**			

TARGET

Desired Output	
26,500,000	kBtu from energy model
31,800,000	kBtu assuming 20% increase for uses not in model yet
10,120,942	**kWh**

PV WATT - OUTPUT

High End		Low End	
Module - Premium		**Module - Standard**	
1,327,446	kWh/year	1,202,584	kWh/year
20	Tilt	20	Tilt
4,170,835	kBtu/year	3,778,519	kBtu/year
13%	**of Desired Output**	**12%**	**of Desired Output**

Standard

SYSTEM INFO

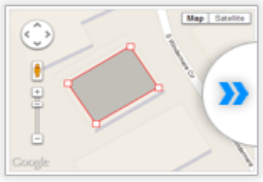
RESTORE DEFAULTS

Modify the inputs below to run the simulation.

DC System Size (kW):	652	
Module Type:	Standard	
Array Type:	Fixed (open rack)	
System Losses (%):	14.08	Loss Calculator
Tilt (deg):	20	
Azimuth (deg):	180	

Draw Your System

Click below to customize your system on a map. (optional)



+ Advanced Parameters

RETAIL ELECTRICITY RATE

To automatically download an average annual retail electricity rate for your location, choose a rate type (residential or commercial). You can change the rate to use a different value by typing a different number.

Rate Type:	Commercial
Rate ($/kWh):	0.138

Premium

SYSTEM INFO

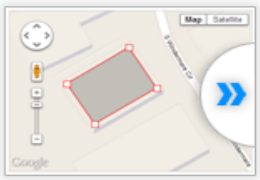
RESTORE DEFAULTS

Modify the inputs below to run the simulation.

DC System Size (kW):	825
Module Type:	Premium
Array Type:	Fixed (open rack)
System Losses (%):	14.08 Loss Calculator
Tilt (deg):	20
Azimuth (deg):	180

Draw Your System

Click below to customize your system on a map. (optional)



+ Advanced Parameters

RETAIL ELECTRICITY RATE

To automatically download an average annual retail electricity rate for your location, choose a rate type (residential or commercial). You can change the rate to use a different value by typing a different number.

Rate Type:	Commercial
Rate ($/kWh):	0.138

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at https://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

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RESULTS

2,537,432 kWh/Year*

System output may range from 2,478,564 to 2,589,196 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Value ($)
January	2.91	114,232	15,798
February	3.72	130,929	18,107
March	5.43	205,477	28,417
April	6.70	246,331	34,068
May	7.46	274,687	37,989
June	8.01	283,542	39,214
July	8.06	289,546	40,044
August	7.98	288,067	39,840
September	6.93	241,652	33,420
October	5.47	203,267	28,112
November	3.87	142,252	19,673
December	2.99	117,449	16,243
Annual	5.79	2,537,431	$ 350,925

Location and Station Identification

Requested Location	elk grove, ca
Weather Data Source	Lat, Lon: 38.41, -121.38 0.9 mi

LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. IN NO EVENT SHALL DOE/NREL/ALLIANCE BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO CLAIMS ASSOCIATED WITH THE LOSS OF DATA OR PROFITS, WHICH MAY RESULT FROM ANY ACTION IN CONTRACT, NEGLIGENCE OR OTHER TORTIOUS CLAIM THAT ARISES OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE MODEL.

The energy output range is based on analysis of 30 years of historical weather data for nearby , and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

Latitude	**38.41° N**
Longitude	**121.38° W**

PV System Specifications *(Commercial)*

DC System Size	**1577 kW**
Module Type	**Premium**
Array Type	**Fixed (open rack)**
Array Tilt	**20°**
Array Azimuth	**180°**
System Losses	**14.08%**
Inverter Efficiency	**96%**
DC to AC Size Ratio	**1.2**

Economics

Average Retail Electricity Rate	**0.138 $/kWh**

Performance Metrics

Capacity Factor	**18.4%**

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at https://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

Disclaimer: The PVWatts® Model ("Model") is provided by the National Renewable Energy Laboratory ("NREL"), which is operated by the Alliance for Sustainable Energy, LLC ("Alliance") for the U.S. Department Of Energy ("DOE") and may be used for any purpose whatsoever.

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RESULTS

1,578,453 kWh/Year*

System output may range from 1,541,833 to 1,610,654 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Value ($)
January	2.91	71,060	9,828
February	3.72	81,447	11,264
March	5.43	127,821	17,678
April	6.70	153,235	21,192
May	7.46	170,874	23,632
June	8.01	176,382	24,394
July	8.06	180,117	24,910
August	7.98	179,197	24,783
September	6.93	150,324	20,790
October	5.47	126,446	17,487
November	3.87	88,490	12,238
December	2.99	73,061	10,104
Annual	5.79	1,578,454	$ 218,300

Location and Station Identification

Requested Location	elk grove, ca
Weather Data Source	Lat, Lon: 38.41, -121.38 0.9 mi

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The energy output range is based on analysis of 30 years of historical weather data for nearby , and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

Latitude	**38.41° N**
Longitude	**121.38° W**

PV System Specifications *(Commercial)*

DC System Size	**981 kW**
Module Type	**Premium**
Array Type	**Fixed (open rack)**
Array Tilt	**20°**
Array Azimuth	**180°**
System Losses	**14.08%**
Inverter Efficiency	**96%**
DC to AC Size Ratio	**1.2**

Economics

Average Retail Electricity Rate	**0.138 $/kWh**

Performance Metrics

Capacity Factor	**18.4%**

Appendix G

Greenhouse Gas Offset
Letter of Commitment

CALIFORNIA NORTHSTATE UNIVERSITY

September 20, 2019

Mr. Steve Zelinka
Staff Air Pollution Specialist
Greenhouse Gas and Toxics Emission Inventory Branch
1001 I Street
Sacramento, California 95814

Subject: California Northstate University Medical Center Project - Greenhouse Gas Emissions Offset Commitment

Dear Mr. Zelinka:

I am writing to inform the California Air Resources Board (CARB) that California Northstate University (CNU) has submitted an Application for the California Northstate University Medical Center Project (Project) seeking certification of the Project as an Environmental Leadership Development Project (ELDP) pursuant to AB 900.

The Project has committed to meeting the requirements set forth in California Public Resources Code Section 21183(c), which requires that the Project demonstrate that it will not result in any net additional greenhouse gas (GHG) emissions. CNU has committed to no net increase in construction- and operations-related GHG emissions over the Project's 30-year lifetime.

CNU shall enter into one or more contracts to purchase carbon credits available through any one of the following verifiable entities/registries: CARB, Climate Action Reserve, California Air Pollution Control Officers Association, the Sacramento Metropolitan Air Quality Management District, or any other equivalent or verifiable registry. Such carbon offsets will meet the requirements of the California Environmental Quality Act (CEQA) Guidelines Section 15126.4(c)(3), and meet the following criteria:

- Real—They represent reductions actually achieved (not based on maximum permit levels) as defined in the California Health and Safety Code Section 38562(d)(1).
- Additional/surplus—They are not already planned or required by regulation or policy (i.e., not double-counted).
- Quantifiable—They are readily accounted for through process information and other reliable data.
- Enforceable—They are acquired through legally binding commitments/agreements.
- Validated—They are verified through the accurate means by a reliable third party.
- Permanent—They will remain as GHG reductions in perpetuity.

To the extent offsets are used to mitigate GHG emissions, prior to issuance of any Temporary Certificate of Occupancy for any building in the Project, CNU shall enter into one or more contracts to purchase carbon credits issued by a verifiable entity/registry, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the operational emissions attributable to each building constructed within the Project over the analysis horizon of 30 years. Prior to execution of the contract(s), the Applicant shall provide the lead agency (the City of Elk Grove) a calculation of the net additional operational GHG emissions according to the methodology followed in the *Draft Technical Report for the California Northstate University Medical Center Campus Greenhouse Gas Emissions Analysis under Assembly Bill 900* document. The Applicant shall agree to promptly submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office of Planning and Research (OPR). The commitments to enter into contracts to offset net additional GHG emissions will be

incorporated as a condition of Project approval under the Public Resources Code Section 21183(e), which is binding and enforceable by the lead agency.

CNU proposes to meet the requirement set forth in Public Resources Code Section 21183(c), which requires that the Project demonstrate that it will not result in net additional GHG emissions through the implementation of GHG-reducing Project design features and/or acquisition of voluntary carbon credits sufficient to offset all projected additional emissions in the following manner:

1. Prior to issuance of a Temporary Certificate of Occupancy for the Project, CNU shall commit to providing the lead agency, the City of Elk Grove, a calculation of the net additional GHG emissions resulting from the construction of the Project, to be calculated in accordance with the methodology agreed upon by CARB in connection with the AB 900 certification of the Project. The Applicant shall provide courtesy copies of the calculations to CARB and OPR promptly following transmittal of the calculations to the City of Elk Grove. The Applicant shall enter into one or more contracts for the implementation of GHG-reducing Project design features and/or purchase voluntary carbon credits from a verifiable entity/registry in an amount sufficient to offset the construction-generated emissions. The Applicant shall provide courtesy copies of any such contracts to CARB and OPR promptly following the execution of such contracts.

2. Prior to the issuance of any Temporary Certificate of Occupancy for the Project, CNU shall commit to entering into one or more contracts to purchase carbon credits from a verifiable entity/registry, which contract, together with any previous contracts for the purchase of carbon credits, shall evidence the purchase of carbon credits in an amount sufficient to offset the operational GHG emissions attributable to the Project, and shall be calculated on a net present value basis for a 30-year lifetime.

   Prior to execution of the contract(s), CNU and its consultant shall calculate the operational emissions in accordance with the methodology described in the *Draft Technical Report for the California Northstate University Medical Center Campus Greenhouse Gas Emissions Analysis under Assembly Bill 900* document (see Appendix F).

   The City will issue a Temporary Certificate of Occupancy upon receipt of the following: (1) a fully executed copy of the carbon offset purchase agreement(s); (2) a final CARB Determination that the Project will not result in any net additional GHG emissions; and (3) a copy of OPR's Certification Letter for the Project.

3. The following design features were accounted for in the AB 900 Application for the purposes of reducing GHG emissions and are, therefore, included as commitments in this letter.

   a. The design of new buildings shall incorporate features to be capable of achieving Gold certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) version 4 rating system for Healthcare. Refer to the AB 900 Application for specific sustainability features to enable the Project to achieve LEED Gold certification.

   b. The Project will install the equivalent of 3,382 kilowatts of solar photovoltaic panels on the Project site.

   c. The Project will purchase 100 percent renewable electricity for the remaining electricity demand through the Sacramento Municipal Utility District's Greenergy program.

   d. The Project will install 84 Level 2 electric vehicle chargers capable of serving at least 168 parking spaces.

e. The Project will develop a Transportation Demand Management Plan to reduce vehicle miles traveled by 15 percent through design features such as bike facilities, on-site amenities, transit, parking facilities, and others.

The improvement measure commitments outlined in this letter will be incorporated into the Project's Environmental Impact Report (EIR) as Project design features or mitigation measures. The Applicant will agree to comply with all Project design features and mitigation measures contained in the EIR through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement with the lead agency, the City of Elk Grove.

Sincerely,

Alvin Cheung, PharmD, MHSA

President & CEO

California Northstate University, LLC

cc: Sarah Kirchgessner, City of Elk Grove

Appendix H

Waste Management Plan

Integrated Waste Management Plan

The California Solid Waste Reuse and Recycling Access Act requires new commercial and multi-family developments of 5 units or more, or improvements that add 30% or more to the existing floor area, to include adequate, accessible, and convenient areas for collecting and loading recyclable materials.

Please refer to the *Space Allocation and Enclosure Design Standards and Guidelines for Trash and Recycling* before completing an Integrated Waste Management Plan. You may download a copy of the document at www.egtrashrecycleservices.org and click on the link for the Design Standards for Trash/Recycling. For questions pertaining to the *Design Standards and Guidelines* or for assistance completing this form, contact Integrated Waste at (916) 627-3452.

Please answer the questions and provide the information requested below. Use additional sheets if necessary.

1. Provide a summary of the solid waste and recycling services to be provided at this location (i.e. commercial solid waste, medical waste, organic waste, hazardous waste, cardboard compactor, used oil, etc.).

   CNUMC's Waste Management Plan aims to reduce wastes such as paper, plastics, cardboard, glass, batteries, etc. Healthcare facilities such as ours have evaluated the approach, costs, feasibility, and impacts of additional waste management measures. Waste Types: Reusable, Recyclable, Compostable Food Waste, Municipal Solid Waste, Regulated Medical Waste, RMW Requiring Incineration, Pharmaceutical Waste, Hazardous Waste, Radioactive Waste.

2. Provide an estimate of the trash and recycling capacity required in your project. (The recycling capacity should equal 50% of the total capacity.)

   When Phase 1 of the California Northstate University Medical Campus is complete there will be an estimated 1,140 Employees. The Elk Grove Waste Management Calculator suggests the site provide 141 yardage for garbage, 141 yardage for recycling, and a yardage of 3 for organics.

3. Provide a diagram (on a separate page) showing the dimensions of all enclosures, and include the enclosure locations and placements. (The diagram should include enough space for collection vehicles to access the enclosures.)

   Please see attached sketch of typical enclosure for dimensions and preliminary siteplan for locations.

Applicant Information

Application Number: _____ Date: 07.01.2019

Application Title: _____ Property Address/ Location: 9700 West Taron Dr

Assessor's Parcel: _____ Telephone: 916-686-7300

For City Use

Date Received: _____ Approval Date: _____ Reviewed by _____:

Comments: _____

TITLE IV

Chapter 4.01 BUSINESS RECYCLING, NON-RESIDENTIAL PROPERTY RECYCLING, MULTI-FAMILY PROPERTY RECYCLING AND SINGLE FAMILY RESIDENTIAL PROPERTY (PROPERTY MANAGED BY AN ASSOCIATION OR OTHER) RECYCLING

4.01.010 Purpose and Declarations.

A. It is the intent and purpose of this title to insure the proper management of solid waste, recyclable material, organic material and bulky items generated at businesses, non-residential properties, and multi-family residential properties in the SWA region.

B. It is the further purpose of this title to provide a mechanism for the implementation of recycling programs for businesses, non-residential properties, and multi-family residential properties within the SWA region and thereby enable SWA member agencies to meet and maintain the solid waste diversion requirements set forth in the Public Resources Code section 41780 (a) (2), by:

1. Requiring businesses, non-residential properties, and multi-family residential properties in the SWA region to keep recyclable materials and organic material separate from solid waste for recycling.
2. Requiring businesses, non-residential properties, and multi-family residential properties to provide for the collection of recyclable materials.
3. Requiring businesses, non-residential properties, and multi-family residential properties to inform their employees, tenants, and residents concerning recycling requirements.

C. It is also the intent of this title to provide for the uniform regulation of business, non-residential property, and multi-family residential property recycling and for the collection of recyclable materials and organic materials in the SWA region.

D. Multi-family residential properties are not required by any provision in this code to separate food material for recycling.

E. If any portion of title IV is for any reason held invalid or unconstitutional by any decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining part of this title.

4.01.035 Participation in Recycling Program

All businesses, non-residential properties, and multi-family residential properties, shall participate and cooperate in a recycling program and an organic material recycling program. Each business, non-residential property and multi-family residential property (the party contracting for solid waste removal service, owners or generators), shall subscribe to a recycling service and an organic material service or self-haul recyclable materials to a recycling facility. Single-family residential properties managed by an association or other organization shall also subscribe to recycling service and a green material service, or self-haul recyclable and/or green materials to a recycling facility if they are not participating in a residential curbside collection recycling program.

4.01.040 Requirements for All Businesses and Non-Residential Properties

A. Each business or non-residential property shall be responsible for ensuring and demonstrating its compliance with the requirements of this title and shall:

1. Enter into a written service agreement with a franchised waste hauler for solid waste collection on, at minimum, a weekly basis, and

2. Subscribe to a service for removal of large and bulky items, as needed, and;

3. Subscribe to a basic level of recycling service that includes, at a minimum, the collection of recyclable materials, and;

4. Source separate organic material from solid waste and subscribe to a basic level of organic material collection service.

B. Alternatively to section 4.01.040(A)(3) and (4) above, each business or non-residential property (the party contracting for solid waste removal service, owners or generators) may submit a self-hauling application form to the GME certifying that all self-hauling activities will be completed in accordance with the provisions of this titleand any other applicable laws or regulation. Upon review, a copy of the self-haul form will be returned to the applicant. A copy of such form shall be made available to the GME within ten (10) business days upon request.

C. Each business and non-residential property shall provide recyclable materials containers, to be used by generators, in maintenance or work areas where recyclable materials may be collected and/or stored.

D. Each business and non-residential property shall prominently post and maintain one or more signs in maintenance or work areas where recyclable materials are collected and/or stored that set forth what materials are required to be source separated in addition to collection procedures for such materials;

E. Each business and non-residential property shall notify and instruct employees, in writing, of applicable source separation requirements, including what materials are required to be source separated and how to source separate such materials. A copy of such instruction shall be provided to the GME within ten (10) business days upon request.

F. Each business and non-residential property shall ensure that recyclable materials generated at their site will be taken only to a recycling facility and not to a landfill.

G. The Service Agreement or other recycling documents shall be made available to the GME within ten (10) business days upon request.

H. Nothing in this title shall abridge the right of any business and non-residential property, owner, or generator, or any other person, to sell or exchange at fair market value its own recyclable materials which are source separated for reuse and recycling.

I. No franchised waste haulers shall be held liable for the failure of its customers to comply with such regulations.

4.01.050 Requirements for All Multi-Family Residential Properties

A. Each multi-family residential property shall be responsible for ensuring and demonstrating its compliance with the requirements of this code and shall enter into a written service agreement with a franchised hauler for solid waste collection on, at minimum, a weekly basis, and shall:

1. Source separate recyclable materials and green material from solid waste, and;

2. Subscribe to a recycling service that reserves a minimum of 30**%** of total capacity for recycling materials, and;

3. Place recyclable materials containers in a location or locations at least as convenient to tenants as the solid waste containers, and;

4. Subscribe to a service for removal of bulky waste such as tenants' furniture and household belongings.

B. Alternatively to section 4.01.050(A)(1) through (3) above, any multi-family residential property may complete and submit a self-hauling application form to the GME certifying that all self-hauling activities will be completed in accordance with the provisions of Title IV and any other applicable laws or regulations. Upon review, a copy of the self-haul form will be returned to the applicant. A copy of such form shall be made available to the GME within ten (10) business days upon request.

C. Each multi-family residential property shall notify and instruct tenants and residents in writing, of recycling requirements, including what materials are required to be recycled and how to keep recyclable materials and green material out of solid waste containers such as dumpsters, carts or roll off bins. A copy of such instruction shall be provided to the GME within ten (10) business days upon request.

D. Each multi-family residential property shall ensure that recyclable materials and green material generated at their site will be taken only to a recycling facility and not to a landfill for proper disposal.

E. The Service Agreement or other recycling documents shall be made available within ten (10) days upon request of the GME.

F. Nothing in this title shall abridge the right of any multi-family -residential property, or any tenant, to sell or exchange at fair market value its own recyclable materials which are source separated for reuse and recycling.

G. No franchised waste haulers shall be held liable for the failure of its multi-family customers to comply with such regulations.

H. After taking reasonable measures to inform tenants of recycling requirements and tenant responsibilities, no multi-family residential property shall be cited for non-compliance with SWA Code as a result of the failure of his or her rental property tenants to source separate designated recyclable materials from solid waste. Such reasonable measures may include, but are not limited to lease agreement provisions requiring tenants to source separate recyclable materials and periodic tenant education efforts such as the distribution of information flyers or handouts.

4.01.060 Special Requirements

In addition to any and all requirements that apply to the recycling of recyclable materials throughout the SWA region under sections 4.01.040 and 4.01.050 above,

collection service received or provided in the SWA region shall be subject to the following additional special requirements:

A. All containers and bins provided by a franchised waste hauler within the collection area of the SWA region shall be equipped with locks and shall remain locked at all times, except when solid waste or recyclable materials are being deposited or collected in accordance with the provisions of this section;

B. No container, bin, or cart within the SWA region shall be placed or located in such a manner that blocks or impedes passage through the alley or through any doorway of any building adjoining the alley, notwithstanding that such building may be abandoned or otherwise out of use.

Compliance with the above special requirements shall be the sole responsibility of the business, non-residential property, multi-family residential property.

4.01.070 Designation of Recyclable Materials

Recyclable materials shall be source separated from solid waste collection, removal, transportation or disposal pursuant to sections 4.01.040 and 4.01.050. The GME shall designate recyclable materials that must be source separated by businesses, non-residential properties, and multi-family residential properties. Such a designation shall consider materials market conditions and the availability of a cost-effective system for recycling such materials.

4.01.080 Ownership of Recyclable Materials.

A. All recyclable materials placed in automatic lift containers, bins, carts, or roll off bins for recyclable materials provided by any franchised waste hauler sufficient to accommodate the quantity and types of recyclable materials of businesses or non-residential properties, and multi-family residential properties shall be considered owned by and be the responsibility of the franchised waste hauler. Without permission of the franchised waste hauler, no person shall collect recycling materials placed in automatic lift containers, bins, carts, or roll off bins for recyclable materials by customers.

B. All recyclable materials placed in recyclable materials containers provided by businesses, non-residential properties, multi-family residential properties shall be considered owned by and be the responsibility of that business, non-residential property, multi-family residential.

4.01.090 Requirements for Franchised Waste Haulers

A. Commercial waste haulers shall be franchised pursuant to the provisions of section 2.01.040 of this code and such franchise shall be in full force and effect.

B. Franchised waste haulers shall offer collection service in containers, bins, carts or roll off bins for solid waste, recyclable materials, and organic materials sufficient to accommodate the quantity and types of solid waste, recyclable materials, and organic materials to all its customers.

C. Franchised waste haulers shall equip and provide containers, bins, carts and roll off bins for solid waste, recyclable materials and organic materials with locks and/or other suitable features to prevent scavenging of recyclable materials and organic materials.

D. A franchised waste hauler shall provide a written service agreement to a customer before the franchise waste hauler begins to collect customer's solid waste and/or recyclable materials and/or organic material.

E. Franchised waste haulers shall conduct all of its activities in accordance with all applicable laws, the SWA Code, and best management practices. Vehicles, equipment and containers shall be kept in a clean and well-maintained condition.

F. Franchised waste haulers shall not take a customer's recyclable materials and organic material to a landfill or other site for disposal, but to a recycling facility.

G. The GME may restrict the hours of collection of solid waste or recyclable materials and organic material by franchised waste haulers in designated areas.

H. Franchised waste haulers, upon request, shall provide the GME with a copy of a service agreement or other document (e.g., receipt from a recycling facility) demonstrating that the generator's recyclable materials and organic materials are being taken to a recycling facility. The service agreement or other document shall be available for inspection by the GME at the franchised waste haulers' place of business during normal business hours.

I. SWA staff may audit all franchised waste haulers' records in the SWA region.

4.01.100 Franchised Waste Hauler Service Agreements

Service agreements shall incorporate, but are not limited to, the following terms and conditions:

A. Be clearly labeled as a service agreement;

B. Describe the services to be provided by the franchised waste hauler and the cost for providing such services to the customer;

C. Clearly state the initial term and renewal terms;

D. Allow for any term that is mutually agreed to by the customer and the franchised waste hauler but recognizing that the hauler's franchise must remain in full force and effect throughout the term of the agreement;

E. May contain automatic renewal for successive periods of no longer than one (1) year, unless either party gives written notice of termination by certified or registered mail at least sixty (60) days prior to termination date of the current agreement;

F. May be amended as mutually agreed upon by the customer and franchised waste hauler;

G. Customers are to receive written notice of price increases not less than thirty (30) days prior to the effective date of such price increase.

H. Franchisees shall respond to customer inquiries regarding the service agreement within thirty (30) days.

I. Include language stating that collection containers will be removed from the property of a customer within thirty (30) days of final termination of services to the customer.

J. Not require customers to pay over three (3) months liquidated damages during the renewal term and over six (6) months liquated damages during the initial term of the service agreement;

K. Not require a customer to give a franchised waste hauler the exclusive right to provide recycling services or organic material collection services as a condition of a waste hauling contract unless the customer affirmatively indicates that is its desire.

L. Not require customers to give notice of any offer by a competitor or require customers to give franchised waste haulers the right to respond to such an offer.

M. National contracts or agreements are exempt from the requirements of contract length and renewal terms.

N. Franchises must be in full force and effect for the service agreement to be effective.

The requirements for service agreements contained in this section shall be incorporated into all new service agreements and all service agreement renewals.. Existing service agreements between a franchised waste hauler and a customer executed before January 1, 2009 shall remain in force for the remainder of the existing contract and shall be governed by the terms and conditions specified in the existing service agreement contracts, provided that such existing service agreements shall comply, to the extent allowable by law, with the recycling programs established by this title.

4.01.120 Appeal Upon Denial of Self-Haul Application

A. Within thirty (30) days of written notification of award denial or within sixty (60) days of GME's failure to act on the self-haul application, applicant has the right to meet with the GME to review the items cited in the written notice and provide any additional evidence to support an award. Within fifteen (15) days of such meeting, the GME will make a final, written determination of the application, based on the reviews of additional evidence, together with the original application. GME will send a copy of all final, written determinations, including reasons for denial, if any, to both applicant and the Board.

B. Applicant may, within ten (10) days after receiving the GME's, and/or his or her designee's, final denial, request a public hearing before the Board by submitting to the Clerk a written petition for an appeal hearing. If a public hearing is requested, the Clerk shall set the matter for hearing at the next regularly scheduled Board meeting or any later date as agreed upon by the applicant and Clerk. At such hearing, applicant may present evidence in writing and through testimony of its employees and others relevant to the application. During such hearing, the Board may demand from the applicant such additional information, as the Board may deem relevant and necessary. Standard rules of evidence are not in effect at such public hearing, and the applicant shall have the burden of proof to show facts demonstrating that the applicant does in fact meet the requirements of this code. Any hearing may be continued or adjourned to a stated time and place without the giving of further notice. The Board will provide applicant with a written explanation of its determination on the application within thirty (30) days of such hearing. The Board's decision is final.

4.01.130 Self-Hauling.

A. A business, non-residential property, multi-family residential property, owner, or generator, may haul or transport recyclable materials and/or organic material generated and collected at its business, non-residential property, or multi-family residential property to a recycling facility (rather than hiring a franchised waste hauler) only if an owner, generator, employee, or tenant of the entity completes this activity by utilizing a vehicle owned by either an employee or the entity.

B. A business, non-residential property, multi-family residential property, owner, or generator, may designate a third (3rd) party to self-haul bulky items, recyclable materials and/or organic material and represent the owner, generator, employee, or tenant of the entity.

C. A business, non-residential property, or multi-family residential property that hauls or transports recyclable materials and/or organic material generated and collected at its business, non-residential property, or multi-family residential property, to a recycling facility without the utilization of a franchised waste hauler must complete and submit, for review by the GME a self-hauling form that certifies that all self-hauling activities will be completed in accordance with the provisions of Title IV or any other applicable law or regulation. The self-hauling form shall be made available to the GME within 10 business days upon request. At a minimum, the business, non-residential property, multi-family residential property, owner, or generator, shall provide the following information on the self-hauling form:

1. The name, address and telephone number of the business, non-residential property, or multi-family residential property representative that is signing the self-hauling form;
2. A list of the types of materials that are being transported;
3. For each type of recyclable material and/or organic materials, the amount that is being taken from the business, non-residential property, or multi-family residential property to a recycling facility;
4. The name and address of the recycling facility.

D. The self-hauling form shall contain a written statement, signed by the business, non-residential property, multi-family residential property, owner, or generator, certifying that the owner, or generator is in compliance with the requirements of Title IV.

E. The GME may restrict or prohibit self-hauling by a person if the GME determines, after providing notice and an opportunity for a hearing, that the person's self-hauling activities violate the provisions of Title IV or any other applicable law or regulation.

4.01.140 Reporting.

A. Franchised waste haulers shall provide quarterly reports to the SWA identifying, at a minimum, the following:

1. The total number of business and non-residential property customers they have in the SWA region.
2. The total number of business and non-residential property customers they have in the SWA region who source separate recyclable materials.
3. The total number of multi-family residential property complex customers they have in the SWA region.

4. The total number of multi-family residential property units in each multi-family residential property complex customer.

5. The total number of multi-family residential property complex customers they have in the SWA region who source separate recyclable materials and organic materials.

6. The recyclable materials and organic materials tonnage collected and removed within the SWA region during the previous quarter.

7. The location of the recycling facility(ies) to which the recyclable materials and organic material were taken during the previous quarter.

Due dates for reporting periods:

Reporting Period:	Due Date
January 1 – March 31:	May 1
April 1 – June 30:	August 1
July 1 – September 30:	November 1
October 1 – December 31:	February 1

B. If the quarterly report is not filed by the due dates above, the report shall be deemed delinquent, and the franchised waste hauler shall pay to the SWA a delinquent report charge in the amount of fifty dollars ($50.00). If the report remains delinquent for more than fifteen (15) days, the grantee shall pay to the SWA a delinquent report charge in the amount of one hundred dollars ($100.00).

C. Franchised waste haulers' failure to file the reports required by this chapter shall constitute cause for termination or suspension of its franchise pursuant to section 2.01.140 or termination or suspension of its authorization status pursuant to section 4.01.100(A)(8).

D. Upon request of the GME, self-haulers shall prepare reports identifying, at a minimum, the following:

1. An estimate of the material tonnage collected and removed within the SWA Region during the previous quarter.

2. The location of the recycling facility(ies) to which the material were taken during the previous quarter.

E. Quarterly reports shall be made available to the GME, and/or his or her designee within 10 business days upon request.

F. The GME, and/or his or her designee, shall provide and establish guidelines, forms and other appropriate material to assist franchised waste haulers and self-haulers in preparing the reports required by this chapter.

4.01.150 Exemptions from Recycling Standards.

A. Any business or non-residential property (the party contracting for solid waste removal service, owners or generators) that generates less than 4 cubic yards of solid waste per week is exempt from the commercial recycling requirements in section 4.01.040(A)(3) and (4).

B. Any business or non-residential property (the party contracting for solid waste removal service, owners or generators) that generates less than ½ (one half) cubic yard of organic material per week is exempt from the organic material recycling requirements of section 4.01.040(A)(4). .

C. Any multi-family residential property (the party contracting for solid waste removal service, owners or generators) that generates less than 4 cubic yards of solid waste per week is exempt from the recycling requirements in section 4.01.050(A)(1) through (3); and any multi-family residential property (the party contracting for solid waste removal service, owners or generators) that generates less than½ (one half) cubic yard of green material is exempt from the green material recycling requirements of section 4.01.050(A)(1) .

D. Notwithstanding any other provision herein, a business, non-residential property, or multi-family residential property shall be exempt from the requirements in sections 4.01.040 and 4.01.050 if no recyclable materials nor organic materials are being generated by any activities occurring on the owner's business or non-residential property.

E. Notwithstanding any other provision herein, a business, non-residential property, or multi-family residential property shall not be required to source separate recyclable materials and organic material if that business, non-residential property, or multi-family residential property demonstrates to the GME, that there is no collection service or other system available for recycling such material.

F. Notwithstanding any other provision herein, a business, non-residential property, or multi-family residential property shall be exempt from the requirements in sections 4.01.040 4.01.050 if neither
recyclable materials nor organic materials are not being generated by any activities occurring at the business or non-residential property.

G. Businesses, non-residential properties, and multi-family residential properties may be exempted by the GME if it is determined, through a site visit requested by the business, non-residential property, or multi-family residential property that:

1. That there is not adequate storage space for automatic lift containers, bins, carts or roll off bins for recyclable materials and/or organic materials on site and that it is infeasible for the business, non-residential property, or multi-family residential property to share automatic lift containers, bins, roll off bins or carts for recyclable materials with another business, non-residential property, or multi-family residential property on an adjoining property or;

3 That compliance with Title IV results in a violation of zoning code requirements or municipal zoning regulations for minimum parking spaces. If the GME determines that it is feasible for recycling containers to be placed on site or shared with an adjoining business, non-residential property, or multi-family residential property then that business, non-residential property, or multi-family residential property will be responsible for compliance with Title IV.

H. An application for an exemption shall be submitted to the GME, on a form prescribed by the GME. After reviewing the request, the GME shall either approve or disapprove the exemption request.

Comment [GD1]: This provision is inconsistent with State Law (AB 341 of 2011; Chapter 476, PRC Part 3, Division 30, Sections 42649.1 and 42649.2)

All multi-family residential properties of 5 units or more are required to source-separate recyclable material.

SWA Code will be amended to reflect this **current** State of California mandate at the next available opportunity.

4.01.160 Solid Waste Authority Rules and Regulations.

A. The GME is authorized to make and enforce administrative rules and regulations governing recycling at businesses, non-residential properties, and multi-family residential properties, and all related activities including recyclable material, organic material, and commercial solid waste generation, storage, recovery, accumulation, collection, removal, transportation and disposal; the manner in which commercial solid waste, organic material, and recyclable material services are provided; types of commercial solid waste, recyclable material, and organic material containers and vehicles used therefor; for the operation and maintenance of sanitary methods of commercial solid waste, recyclable material, and organic material transfer, processing, recycling, and/or disposal; reporting requirements for franchised waste haulers and self-haulers; and for the effective administration of this title. All such rules and regulations shall be consistent with the provisions of the SWA Code and shall be effective on the thirtieth (30th) day following the filing of any such rules and regulations with the Clerk.

B. The SWA Board may and is hereby empowered to grant to a qualified applicant a non-exclusive franchise to engage in the business of collecting, transporting or disposing of commercial solid waste and/or recyclable materials and/or organic materials kept, accumulated or generated in the SWA region.

C. The SWA Board may grant a franchise based on compliance with this code. Any grant of a franchise by the SWA Board may be subject to such terms conditions, rules, regulations, restrictions, and limitations, as the SWA Board deems necessary to protect the public health, safety, or welfare.

D. The SWA Board hereby empowers and grants to the GME the authority to designate recycling materials and make administrative rules and regulations governing business, non-residential property, or multi-family residential property recycling.

E. The SWA Board hereby empowers and grants to the GME the authority to administer, implement and enforce Title IV and administrative rules and regulations governing business, non-residential property, or multi-family residential recycling thereafter.

F. It shall be unlawful and constitute a violation of Title IV for any person to violate or otherwise fail to comply with any rule or regulation issued pursuant to this chapter.

4.01.170 Rights Reserved to SWA

In addition to all other rights reserved to the SWA under this title, the following shall apply:

A. There is hereby reserved to the SWA every right and power, and the exercise thereof, which is reserved or authorized by any provision of any lawful ordinance, title or tesolution of the SWA, whether enacted before or after the effective date of Title IV.

B. Neither the granting of any franchise nor any provision of any franchise shall constitute a waiver of or a bar to the exercise of any governmental right or power of the SWA.

C. The grantee shall have no recourse whatsoever against the SWA, its officials, officers, employees or agents or any of the SWA member entities, their officials, officers, employees, or agents for any loss, cost, expense or damage arising out of any

provision or requirement of this title or of any franchised waste hauler franchise issued under this title or because of the enforcement of title IV.

D. There is hereby expressly reserved to the SWA the power and authority to amend any chapter of this title so as to require additional or greater standards on the part of the grantee.

4.01.180 Administration and Costs

A. The administration, implementation, and enforcement of this title is the duty of the GME, and/or his or her designee. The GME is authorized and directed by the SWA Board to administer title IV.

B. SWA franchise fees will fund administrative, implementation and enforcement costs.

4.01.190 Unlawful Acts.

A. It shall be unlawful to combine recyclable materials and/or organic materials with each other or with other solid waste. Failure to source separate recyclable materials and/or organic materials for recycling is a violation of this Ordinance.

B. It shall be unlawful for franchised waste haulers to collect solid waste that contains visible signs of recyclable materials.

C. It shall be the responsibility of the business, non-residential property, multi-family residential property, owner, or generator, whose solid waste was not removed because it contained recyclables, to properly separate recyclables from the uncollected solid waste for proper recycling. Allowing such unseparated solid waste to accumulate will be considered a violation of this title and Sacramento County Code section 6.20.115, Refuse Removal.

Appendix I

Public Resources Code
Section 21183(e), (f) and (g)
Letter of Commitment

CALIFORNIA NORTHSTATE UNIVERSITY

September 10, 2019

Darren Wilson, Development Services Director
City of Elk Grove
Elk Grove City Hall
8401 Laguna Palms Way
Elk Grove, CA 95758

Subject: California Northstate University Hospital Project
AB 900 Application for Certification as a Leadership Project and
Acknowledgment of Obligations under Public Resources Code sections 21183(e), (f) and (g)

Dear Mr. Wilson:

California Northstate University (CNU, or Applicant) will be submitting an application to the Governor's Office of Planning and Research, as well as the California Air Resources Board, for certification of the CNU Hospital Project (Project) as a Leadership Project subject to streamlined review by the judiciary under the Jobs and Economic Improvement through Environmental Leadership Act of 2011 (the Act), as amended. The Project is located at 9700 and 9650 West Taron Drive, within the City of Elk Grove (City).

The City has not approved any entitlements for the proposed Project to date, and the City's Planning Division is currently reviewing the proposed Project for compliance with Elk Grove Municipal Code requirements and preparing an environmental impact report (EIR) pursuant to the California Environmental Quality Act (CEQA). The Applicant understands that the City has made no commitment to future approvals of entitlements for the proposed Project, and this letter in no way binds the City to making any future approvals. Please consider this letter as a formal notification that the Applicant is submitting an application to certify the project as a Leadership Project, and as a formal commitment by the Applicant to the following, should the City ultimately approve entitlement for the Project and certify the EIR that is currently being prepared:

> The Applicant agrees that all mitigation measures required pursuant to CEQA to certify the project under the Act shall be made conditions of approval, that these conditions will be fully enforceable by the City of Elk Grove Planning Division, the Department of Building Safety, Inspection & Permits, or any other agency

CALIFORNIA NORTHSTATE UNIVERSITY

designated by the City, and that all environmental mitigation measures will be monitored and enforced by the City for the life of the obligation, pursuant to Public Resources Code, section 21183(e).

The Applicant agrees to pay the costs of the Court of Appeal in hearing and deciding any case, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner specified by the Judicial Council, as provided in the Rules of Court adopted by the Judicial Council pursuant to the Act. (Pub. Res. Code, § 21183(f).)

The Applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with review and consideration of the project pursuant to CEQA, in a form and manner specified by the Planning Division or other City agency, pursuant to Public Resources Code, section 21183(g).

Please return a counter-signed letter to CNU at 9700 W. Taron Dr., Elk Grove, CA 95757, or electronically to Dr. Mike Lee at mike.lee@cnsu.edu. Thank you in advance for your time and consideration.

Sincerely,

California Northstate University, LLC
a Delaware Limited Liability Company

By: California Northstate University, LLC
A Delaware Limited Liability Company

By: _____
Alvin Cheung
President

Acknowledged and agreed

_____
Darren Wilson
Development Services Director
City of Elk Grove

CALIFORNIA
AIR RESOURCES BOARD

Gavin Newsom, Governor
Jared Blumenfeld, CalEPA Secretary
Mary D. Nichols, Chair

December 17, 2019

Ms. Kate Gordon, Director
Office of Planning and Research
Office of Governor Gavin Newsom
1400 10th Street
Sacramento, California 95814

Dear Ms. Gordon:

The Jobs and Economic Improvement through Environmental Leadership Act (Assembly Bill 900, statutes of 2011) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the California Air Resources Board (CARB).

California Northstate University (the Applicant) submitted an original application to CARB on September 20, 2019, clarifying documentation on October 15, 2019 and October 22, 2019, and a final revised application on November 14, 2019 for the proposed California Northstate University Medical Center Project (Proposed Project). As required by the Governor's Guidelines for Streamlining Judicial Review under CEQA, the application includes proposed GHG quantification methodologies and supporting documentation. CARB staff conducted an evaluation of the GHG emission estimates and voluntary improvement measures submitted by the Applicant, and confirmed that the Applicant's methodology, calculations, and documentation are adequate. Based on the documentation submitted by the Applicant, CARB has determined that the Proposed Project will not result in any net additional GHG emissions for purposes of certification under AB 900 once the conditions of approval of the project described in the enclosed staff analysis document are satisfied. CARB staff's evaluation and an Executive Order noting CARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Ms. Nicole Dolney, Chief of Transportation Planning Branch, Sustainable Transportation and Communities Division at (916) 322-1695 or by email at nicole.dolney@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

cc: (via email, with enclosures):

Hannah Kornfeld
Ascent Environmental
(Hannah.Kornfeld@ascentenvironmental.com)

Poonam Boparai
Ascent Environmental
(poonam.boparai@ascentenvironmental.com)

Pat Angell
Ascent Environmental
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Paolo Diaz
Fong & Chan Architects
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Amy Higuera
Thomas Law Group
(AHiguera@thomaslaw.com)

Mr. Scott Morgan
Governor's Office of Planning and Research
(scott.morgan@opr.ca.gov)

cc: Continued next page.

cc: (continued)

Michael Benjamin, Chief
Air Quality Planning and Science Division

Nicole Dolney, Chief
Transportation Planning Branch

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-19-159

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for California Northstate University Medical Center Project

WHEREAS, in September 2011, Governor Brown signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHG), as determined by the California Air Resources Board (CARB);

WHEREAS, the Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act require for purposes of CARB's determination on GHG emissions that an applicant submit electronically to CARB a proposed methodology for quantifying the project's net additional GHG emissions and documentation that the project does not result in any net additional GHG emissions;

WHEREAS, pursuant to the Governor's Guidelines, California Northstate University (the Applicant) submitted its initial proposed GHG quantification methodologies and documentation to CARB on the proposed California Northstate University Medical Center Project (proposed project) on September 20, 2019, clarifying documentation submitted on October 15, 2019 and October 22, 2019, and a final revised application on November 14, 2019;

WHEREAS, the application submitted for the proposed project estimates the project's net additional GHG emissions as follows:

1. Construction GHG Emissions: Additional 8,273 metric tons carbon dioxide equivalent (CO_2e) emissions from project construction and demolition activities. Construction-generated GHG emissions were estimated from equipment used for construction activities and from both on-site and off-site vehicles and equipment;

2. Operation-Related GHG Emissions: Net additional 21,602 metric tons CO2e emissions during the first full year of project operation (2030) reaching a peak

21,613 metric tons CO2e emissions in 2050 and remaining constant over the remaining lifetime of the project through 2059.

WHEREAS, in the application, the applicant proposes to secure 8,273 metric tons of one time voluntary carbon credits sufficient to offset emissions generated during construction and to secure 767,349 metric tons of carbon credits to offset the net increase in emissions generated during project operation through purchasing voluntary carbon credits issued by an accredited carbon registry to fully offset these identified construction and operational GHG emissions;

WHEREAS, the applicant has committed to explore feasible GHG emissions reduction measures according to the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions; and (4) purchase voluntary carbon offsets issued by an accredited carbon registry in an amount sufficient to offset the net increase in operation-related GHG emissions. The Applicant has committed to execute contracts to offset the net increase in GHG emissions generated during project operation for any phase of the project prior to issuance of the Temporary Certificate of Occupancy for any building in the Project;

WHEREAS, enforcement of compliance for GHG emissions reduction measures and procurement of offsets will be outlined in the terms of the Development Agreement between the lead agency and the Applicant, and those conditions will be fully monitored and enforced by the lead agency for the life of the obligation, pursuant to Public Resources Code section 21183, subdivision (e).

WHEREAS, CARB staff reviewed and evaluated the application in consultation with the lead agency (the City of Elk Grove);

WHEREAS, CARB staff conducted an evaluation of the GHG emission estimates and voluntary mitigation included in the application submitted by the applicant and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the proposed project;

WHEREAS, CARB's review and determination on the proposed project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900 and should not be construed as meeting any other requirement under State or federal law, including CEQA; the lead agency remains responsible for full CEQA compliance for this project;

NOW, THEREFORE, based on CARB Staff's Evaluation (Attachment 1) of the documentation submitted by the Applicant (Attachment 2), I determine that the California Northstate University Medical Center Project will not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed at Sacramento, California this 17th day of December 2019.

Richard W. Corey
Executive Officer

Attachments

1. CARB Staff Evaluation of AB 900 Application for California Northstate University Medical Center Project
2. California Northstate University Medical Center Project Greenhouse Gas Emissions Analysis Methodology Documentation for AB 900 Application

CARB Staff Evaluation of AB 900 Application for
California Northstate University Medical Center Project

November 15, 2019

I. Executive Summary

CARB staff reviewed the projected GHG emissions provided by California Northstate University (Applicant) and confirmed the GHG emission factors used to estimate construction and operational emissions of the California Northstate University (CNU) Medical Center Campus Project. Staff concurs with the GHG quantification in the Applicant's proposal (Attachment 2).

Based on an evaluation of the documentation provided by the Applicant found in Attachment 2, CARB staff concludes that, with commitments to implement feasible GHG emissions reduction measures and/or purchase voluntary carbon credits documented in Attachment 2, the proposed project would not result in any net additional GHG emissions relative to the baseline as summarized in Tables 1 and 2 below. CARB staff confirms that the proposed project would meet the GHG emissions requirements of the Jobs and Economic Improvement through Environmental Leadership Act (Pub. Resources Code, §21178 et seq.). A detailed description of emissions by source is reviewed in subsequent sections.

Table 1 shows project GHG emissions generated by construction activities. Project construction is expected to be completed in three phases over a total of 10 years, with demolition activities beginning in 2020. The Applicant has committed to offset the GHG emissions generated during project construction. The Applicant will provide courtesy copies of the calculations to CARB and the Governor's Office. Additionally, the Applicant has agreed to enter into one or more contracts, incorporated as a condition of approval and prior to issuance of any Temporary Certificate of Occupancy for any building in the Project, to purchase voluntary carbon credits issued by an accredited carbon registry in an amount sufficient to offset the construction emissions, and to submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office.

Table 1: Project Construction-Generated GHG Emissions[1]

Construction Year	GHG Emissions (MT CO2e/year)
2020	1,267
2021	1,810
2022	1,245
2023	86
2024	1,976
2025	787
2026	47
2027	500
2028	321
2029	232
Total	**8,273**
GHG Offsets Required[2]	**8,273**

Notes:
GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent;
[1] Source: as documented in Attachment 2, and confirmed by CARB staff.
[2] Applicant committed to purchase carbon credits in an amount sufficient to offset net increases in construction-related GHG emissions. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions; and (4) offset credits issued by an accredited carbon registry.

Table 2 summarizes the net increase in project operation-related GHG emissions through the lifetime of the proposed project (defined as 30 years). The continued operation of the existing land uses that would be demolished under the proposed project serves as the reference point for the purpose of defining a baseline.

The Applicant has committed to explore feasible GHG emissions reduction measures according to the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions; and (4) purchase voluntary carbon offsets issued by an accredited carbon registry in an amount sufficient to offset the net increase in operation-related GHG emissions.

The Applicant has committed to execute contracts to offset the net increase in GHG emissions generated during project operation for any building in the project prior to issuance of any Temporary Certificate of Occupancy for any building in the Project. Enforcement of compliance will be outlined in the terms of the Development Agreement between the lead agency and the Applicant.

Table 2: Comparison of Baseline and Project Operation-Related GHG Emissions[1]

Year[2]	GHG Emissions (MT CO2e/year)			
	Baseline	Proposed Project	Difference	GHG Credits Required[3]
2023	2,521	17,347	14,825	14,825
2024	2,521	17,347	14,825	14,825
2025	2,521	17,347	14,825	14,825
2026	7,771	26,449	18,678	18,678
2027	7,771	26,449	18,678	18,678
2028	7,771	26,449	18,678	18,678
2029	7,771	26,449	18,678	18,678
2030	8,583	30,185	21,602	21,602
2031	8,583	30,185	21,602	21,602
2032	8,583	30,185	21,602	21,602
2033	8,583	30,185	21,602	21,602
2034	8,583	30,185	21,602	21,602
2035	8,583	30,185	21,602	21,602
2036	8,583	30,185	21,602	21,602
2037	8,583	30,185	21,602	21,602
2038	8,583	30,185	21,602	21,602
2039	8,583	30,185	21,602	21,602
2040	8,583	30,185	21,602	21,602
2041	8,583	30,185	21,602	21,602
2042	8,583	30,185	21,062	21,062
2043	8,583	30,185	21,602	21,602
2044	8,583	30,185	21,602	21,602
2045	8,583	30,185	21,602	21,602
2046	8,583	30,185	21,602	21,602
2047	8,583	30,185	21,602	21,602
2048	8,583	30,185	21,602	21,602
2049	8,583	30,185	21,602	21,602
2050	8,583	30,196	21,613	21,613
2051	8,583	30,196	21,613	21,613
2052	8,583	30,196	21,613	21,613
2053	8,583	30,196	21,613	21,613
2054	8,583	30,196	21,613	21,613
2055	8,583	30,196	21,613	21,613
2056	8,583	30,196	21,613	21,613
2057	8,583	30,196	21,613	21,613
2058	8,583	30,196	21,613	21,613
2059	8,583	30,196	21,613	21,613
Total				**767,349**

Notes: GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent.

[1] Source: as documented in Attachment 2 of the application, and confirmed by CARB staff.

[2] Applicant uses an analysis horizon of 30 years, with first year of occupancy for initial project phases as early as January 2023. The first year of full project operation would be as early as 2030 at the completion of Phase 3.

[3] Applicant commits to purchase carbon credits in an amount sufficient to offset net increase in operation-related GHG emissions. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions; and (4) offset credits issued by an accredited carbon registry.

I. Introduction

California Northstate University (Applicant) proposed a new medical center campus project (Project) on an approximately 24-acre site bordered by Elk Grove Boulevard to the north, Interstate 5 to the west, West Taron Drive to the east, and the Laguna Stone Lake subdivision to the south (Project Site) within the City of Elk Grove (the City).

The Applicant is seeking certification for the project under Assembly Bill 900 (AB 900), the Jobs and Economic Improvement through Environmental Leadership Act.

AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the proposed project does not result in any net additional greenhouse gas (GHG) emissions as determined by the California Air Resources Board (CARB). This is the only condition that involves a determination by CARB. As part of this determination, CARB staff prepared this technical evaluation of the GHG emissions from the proposed project.

This evaluation includes an executive summary, an overview of the AB 900 net zero additional GHG emissions requirement, a brief description of the proposed project, a technical review and assessment of GHG emissions information provided by the Applicant in its AB 900 application, and CARB staff's recommendation on the AB 900 GHG emissions determination for the proposed project.

II. Overview of AB 900

AB 900, as amended by SB 743 (2013), SB 734 (2016), and AB 246 (2017) provides streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emissions of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code" (Pub. Resources Code, §21183, subd. (c)).

The Governor's Guidelines for AB 900 applications require Applicants to submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code section 21183, subdivision (e).

The role of CARB in reviewing AB 900 applications for purposes of the Governor's certification is limited to an evaluation of the quantification methods and documentation

submitted by the Applicant to determine whether the project would result in no net additional emissions of GHG emissions. CARB staff evaluated the technical elements of the project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions used for emissions and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

III. Existing Conditions

The proposed project site is located in the City of Elk Grove in a currently developed area bordered by Elk Grove Boulevard to the north, Interstate 5 to the west, West Taron Drive to the east, and the Laguna Stone Lake subdivision to the south. The approximately 24-acre currently contains a total of nine structures that encompass a total of 282,246 square feet of building space for a number of different uses, including buildings for the CNU School of Medicine and Psychology College, office space, eating establishments, a brewery, an animal hospital, and other commercial and retail uses. Vehicular access to the Project site is provided from West Taron Drive and Riparian Drive to the east.

IV. Proposed Project Description

CNU is proposing to expand its existing facilities to provide emergency and other medical-related services through redevelopment of several CNU-owned parcels adjacent to the existing CNU School of Medicine. At buildout, the Project would consist of an expanded pharmacy and medical college, a medical center with a helistop, an outpatient clinic, a medical office building, two public parking structures with accessory retail, a dormitory, one student parking structure with rooftop sports facilities, a central plant and mechanical yard, public gathering spaces, and surface parking. The Project would include the demolition of existing buildings and the construction of the various uses over three phases.

Under Phase 1, the Project would include construction of a 596,790-square-foot hospital with 250 beds. The proposed hospital would include an 8-story 150-patient-bed tower atop a 4-story 100-patient-bed main hospital building with one basement level providing underground parking for up to 230 vehicles. A two story, 22,850-square-foot central plant would house support equipment for the hospital and a 15,000-square-foot exterior mechanical yard, and include a basement parking level with 80 spaces. A total of 1,426 parking spaces would be provided under Phase 1 of development, consisting of 1,116 surface parking spaces and 310 structure parking spaces to be provided in the lower levels of the hospital and central plant buildings.

Phase 2 of the proposed Project would include a second patient bed tower atop the main hospital, an out-patient clinic, a medical office building, and the first of two public parking structures. The 8-story patient-bed tower would be 103,210 square feet and

would add 150 beds for a total of 400 beds at the hospital. The 168,500-square-foot out-patient clinic would include four stories above ground and a basement floor parking level with 170 parking spaces. The 100,000-square-foot medical office building would include five stories above ground and contain out-patient medical clinics and hospital administration facilities. The parking structure would be 257,000 square feet and include four stories above ground and one basement level. The ground floor would include 51,400 square feet of retail, medical offices, and other supporting uses. The remaining three floors and basement level would provide parking for 1,500 vehicles.

Lastly, Phase 3 of construction would incorporate a second parking structure, a dormitory, and a separate parking structure for medical student use with sports facilities on the roof. The main parking structure would be 207,000 square feet and include four stories above ground and one basement level. The ground floor would include approximately 41,400 square feet of retail, medical offices, and other supporting uses. The remaining three floors and basement level would provide parking for 1,000 vehicles. The 120,000 square-foot, 5-story dormitory would be located adjacent to the existing 109,800 square-foot 2-story school facilities building. A 70,000 square-foot structure intended to provide parking and recreational facilities for medical students would also be constructed under this phase. This student parking structure would include one story above-ground and a basement level that would accommodate 200 standard parking spaces. The roof would be occupied by basketball, tennis, and volleyball courts.

The baseline and proposed land uses are summarized in Table 3.

Table 3: Baseline and Proposed Land Uses

Land Use	Existing Uses	Proposed Project	Unit
General Office Building	76,000	24,000	Square feet
Retail	58,946	92,800	Square feet
Hospital	--	733,290	Square feet
Central Plant	--	22,850	Square feet
Out-Patient Clinic	--	168,500	Square feet
Medical Office Building	--	100,000	Square feet
Dormitory	--	96,000	Square feet
Enclosed Parking with Elevator	--	680	Spaces
Unenclosed Parking with Elevator	--	2,500	Spaces
Mechanical Yard	--	15,500	Square feet
Surface Parking Lot	95,323	26,040	Square feet
Source: Ascent Environmental as documented in Attachment 2			

V. Technical Review and Assessment

Ascent Environmental, on behalf of the Applicant, prepared a GHG emissions assessment for the proposed project to demonstrate that the requirements of AB 900 can be met. A full copy of this proposal can be found in Attachment 2.

The Applicant relied upon a variety of sources for activity data and emission factors to quantify GHG emissions. This CARB staff evaluation is focused on reviewing the data sources, emission factors, emission calculations, and assumptions used for the application, and determining whether these sources and assumptions are reasonable.

The Applicant utilized version 2016.3.2 of the California Emissions Estimator Model (CalEEMod), a widely-used emissions quantification model developed in coordination with local air districts to quantify criteria pollutant and GHG emissions from land use development projects in California. CalEEMod uses widely-accepted sources for emission estimates combined with appropriate default data that can be used if site-specific information is not available. CalEEMod is populated with data from the United States Environmental Protection Agency AP-42 emission factors, CARB's on-road and off-road equipment emission models such as the EMission FACtor 2014 model (EMFAC2014), and the Off-road Emissions Inventory Program model (OFFROAD). The Applicant used the latest CalEEMod model, along with project-specific adjustment factors to reflect renewable electricity standards and on-road mobile source emission factors from CARB's EMFAC2017 model, to calculate GHG emissions from project operations.

VI. Project Construction Emissions

Construction-related GHG emissions, including demolition-related emissions, are one-time, direct emissions and would occur over an approximately 10-year multi-phase construction period. The Applicant estimated GHG emissions associated with project construction by using the CalEEMod model. With some exceptions, the Applicant used CalEEMod default settings to generate construction-related GHG emissions. The Applicant estimates a total of 8,273 metric tons carbon dioxide equivalent (MT CO_2e) over the project construction period, as shown in Table 1. Construction-related GHG emissions reflect the types of equipment expected and the number of hours of operation anticipated over the construction schedule. This includes heavy-duty equipment, such as refuse hauling trucks, excavators, cranes, and conventional work vehicles.

CARB staff concluded that the methodology and estimated GHG emissions provided by the Applicant for construction are appropriate.

VII. Baseline Operational Emissions

Operational emissions from land uses at the existing project site that would be demolished and removed as part of the project represent the baseline conditions. Operational emissions in year 2020 serve as the baseline for purposes of this analysis, which represents existing conditions at the time demolition and project construction would begin. GHG emissions were quantified for mobile, electricity, natural gas, area, solid waste, water, and wastewater-related sources. As summarized in Attachment 2, GHG emissions associated with existing conditions are estimated as 8,583 MT CO_2e per year for all site operations replaced in all three phases combined.

CARB staff evaluated the Applicant's GHG emission estimations, demand factors, and assumptions used in the Applicant's baseline calculations, summarized in Table 2. CARB staff concluded that the methodology and estimated baseline GHG emissions provided by the Applicant are appropriate.

VIII. Proposed Project Operational Emissions

Operational GHG emission sources from the proposed project include mobile, electricity, natural gas, area, stationary, solid waste, water, and wastewater sources. Operational GHG emissions from the proposed project were assumed to begin in 2023, after the completion of Phase 1 construction.

Mobile source emissions were estimated based on the Project's daily trip generation and VMT of on-road vehicles provided in the traffic impact analysis prepared by Fehr & Peers (Attachment 2). The Project's trip generation and VMT by phase were estimated based on the typical weekday operations of all proposed land uses under each phase. Mobile-source emissions were estimated using composite emission factors for the 2023 fleet mix in Sacramento County provided by EMFAC2017 for Phase 1, 2026 fleet mix for Phase 2, and 2030 fleet mix for Phase 3. The Project's mobile emissions also include helicopter activity associated with hospital operations. Helicopter emissions were estimated using emission factors for jet fuel derived from the Climate Registry's 2017 Default Emission Factors and average fuel consumption from helicopter activity. These emissions are based on the number of landing and take-offs (LTO) cycles, number of cruising hours per day, and the helicopter engine model type and fuel used.

Energy-related GHG emissions include the direct emissions associated with natural gas consumption as well as the indirect emissions associated with electricity consumption. Energy demand factors applicable to the Project were provided in CalEEMod based on Project land use types. Emissions associated with on-site natural gas combustion were quantified using consumption estimates provided by the Project applicant and emission factors provided in the Climate Registry's 2017 Default Emission Factors. As the

Project site will also include existing buildings which were constructed to the 2008 California Energy Code, the option to use historical data was employed in CalEEMod's energy module to represent the energy consumption associated with these buildings.

Indirect emissions associated with electricity generation were quantified using consumption estimates provided by the Project applicant and emissions factors for the Sacramento Municipal Utility District (SMUD), the site's electricity provider. The default GHG intensity factor in CalEEMod was replaced with an updated factor which reflects the utility's compliance with the California Renewables Portfolio Standard (RPS), which requires utilities to procure at least 33 percent of their electricity from renewable sources by 2020. Future year GHG emission factors were adjusted proportionately based on the future year renewable energy targets of 50 percent by 2026 and 60 percent by 2030 and used for the Phase 2 and 3 buildout years, respectively. Emission factors for methane (CH_4) and nitrous oxide (N_2O) were obtained from the Emissions & Generation Resource Integrated Database version 2012 (eGRID 2012).

Emissions from solid waste disposal were estimated using CalEEMod, which considers disposal rates based on land use types and their size, along with annual solid waste disposal rate data provided by CalRecycle. The Project would also comply with the requirements for commercial recycling and organic waste diversion pursuant to California's Public Resources Code Section 42649, and is anticipated to divert at least 50 percent of its solid waste generation.

Emissions from indoor and outdoor water usage and wastewater generation were estimated using anticipated consumption provided by the Project applicant, including efficiency features. GHG emissions are associated with the indirect electricity used to pump, treat, and convey water to and from the existing buildings, as well as methane and nitrous oxide emissions associated with wastewater treatment. CalEEMod was used to estimate the GHG emissions associated with water consumption using SMUD's adjusted electricity intensity as discussed above for the operational years of each Project phase. CalEEMod was also used to estimate the GHG emissions associated with wastewater treatment, using the default assumption of all aerobic facilities with anaerobic digesters.

Area sources emissions for the Project type include those from landscape maintenance equipment, which are considered direct emissions because they are generated on-site from activities associated with the proposed land uses. CalEEMod was used to estimate emissions using equipment defaults based upon the Project's land uses. Emission factors used in CalEEMod for this category are based on CARB's OFFROAD2011 model using average horsepower and load factors applicable to the equipment types.

Stationary source emissions from the periodic maintenance and testing operations of on-site emergency generators were also estimated. The Project would install four 536 horsepower back-up diesel-powered generators. Hours of operations and resulting fuel consumptions were estimated using operational activity estimates provided by the Applicant consistent with National Fire Protection Association codes and standards. Emissions were then quantified using diesel emission factors provided by the Climate Registry's 2017 Default Emission Factors.

The Applicant has committed to achieving a U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Gold version 4 certification for Healthcare, at a minimum. At this time, the exact LEED credits and project features that will be selected to achieve at least a LEED Gold certification have not yet been finalized. However, some of the design features that are anticipated for contributing to the achievement of LEED Gold certification are:

- The Project is located on a previously developed site.
- Parking for the newly constructed buildings will have preferred parking areas for electric vehicles and charging infrastructure.
- Rooftops and landscaping will use light colored materials meeting solar reflectance and low albedo requirements to reduce heat island effects.
- A reduction in water use by 30 to 40 percent compared to a typical healthcare development will be achieved through the use of low-flow fixtures, cooling tower efficiency, and drought-tolerant landscaping.
- Water metering to track the highest demand end uses will help maintenance and operations staff detect malfunctions.
- Use of higher efficiency condensing boilers, variable frequency drives (VFD) cooling tower fan controls, light-emitting diode (LED) lighting, and other energy conservation measures will reduce of energy use by an estimated 7 percent compared to a typical healthcare development
- Construction and demolition waste management strategies will divert at least 50 percent of total construction and demolition materials from landfills.
- A whole building life-cycle assessment will be conducted to identify strategies to reduce environmental impacts embodied in materials, such as reducing the amount of cement in concrete.

A transportation demand management (TDM) program would also be implemented to reduce the use of single occupant vehicles by increasing the number of trips by walking, bicycle, carpool, vanpool, and transit. The combined effect of the various strategies implemented as part of the TDM program would result in a 15 percent reduction in daily trip generation by offering services, actions, and facilities aimed at encouraging use of

alternative transportation modes. The TDM program, detailed in the Transportation Analysis prepared by Fehr & Peers (Attachment 2), will include the following strategies:

- Commuter services and incentives that encourage employees to commute using modes other than single-occupancy vehicles, including a shuttle bus service and vanpool, carpool, bikeshare and 'Guaranteed Ride Home' programs.
- Subsidized transit passes to incentivize on-site employees to use transit as their primary commute mode
- Convenient on-site amenities tailored to bike commuters, such as improved access to the bike network, short- and long-term bicycle storage, and shower and locker room facilities.
- A full-menu on-site cafe to help reduce single-occupancy vehicle trips during the workday.
- Providing unbundled parking lease agreements and offering tenants a parking cash out program in order to discourage private single-occupancy vehicle trips by limiting the supply of accessory parking spaces.
- Transportation marketing services to ensure employees are informed of all available transportation amenities, services, and incentives under the TDM plan.

Additionally, a summary of key non-TDM characteristics resulting in further GHG emission reductions beyond the default CalEEMod estimates are:

- Installing solar photovoltaics on the roofs of the existing School of Medicine building, out-patient clinic, medical office building, dormitory and Parking Garages 1 and 2 totaling 192,600 square feet and producing an estimated 5,443,331 kWh per year of electricity.
- Purchase 100 percent renewable energy provided through SMUD's Greenergy program for the remaining Project electricity demands, effectively offsetting all electricity-related GHG emissions associated with the Project
- Installing 84 Level 2 electric vehicle (EV) charging stations serving 166 parking spaces.
- Preserving 83 existing trees and gaining a net of 21 additional trees on the Project site after construction

The Applicant's assumptions and inputs are reasonably conservative, and represent an upper-bound for the net increase in GHG emissions that could occur. CARB staff evaluated the proposed project's emission calculations, demand factors, and assumptions used to estimate operational GHG emissions and concluded that the methodology and estimated operational GHG emissions provided by the Applicant are appropriate.

Based on the Applicant's proposal, annual project operational emissions would exceed baseline throughout the lifetime of the project, as summarized in Table 2.

IX. Method to Offset Emissions

Under the GHG quantification methodology used by the Applicant, the proposed project would result in a one-time net GHG emissions increase of 8,273 MT CO_2e during project construction, and an estimated net increase of 21,602 MT CO_2e during the first year of full project operation (2030).

Operational emissions would be on-going for the project analysis horizon (defined as 30 years from the first year of full occupancy), and would be expected to decline over the life of the project as emission factors decline with the adoption of lower-GHG-emitting vehicle technologies and renewable sources of electricity. The Applicant chose to hold operational emissions estimates constant after 2030 which is the more conservative approach. The slight increase in operational emissions in 2050 is a result of carbon sequestration offsets from planted vegetation reaching the end of the assumed 20-year active growing period.

The Applicant has agreed to meet the requirement set forth in California Public Resources Code section 21183, subdivision (c) to demonstrate that the proposed project would result in no net additional GHG emissions through adoption of feasible GHG emission reduction measures according to the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions; and (4) offset credits issued by a recognized and reputable carbon registry, consistent with policy recommendations included in CARB's 2017 Climate Change Scoping Plan Update[1]. To the extent carbon offsets are used to mitigate GHG emissions from the project, the Applicant will purchase voluntary carbon credits issued by an accredited carbon registry for the net increase in construction and operational emissions prior to issuance of any Temporary Certificate of Occupancy for the project.

Any identified project design features/on-site reduction measures, off-site local or regional GHG emission reduction measures used to mitigate GHG emissions and any commitments to enter into contracts to offset net additional GHG emission will be incorporated as conditions of Project approval under Public Resources Code Section 21183(e), which shall be binding and enforceable by the lead agency.

The improvement measure commitments proposed by the Applicant in its AB 900 application will be incorporated into the Project's Final Environmental Impact Report (FEIR) as Project Design Features or mitigation measures. The Applicant agrees to comply with all Project Design Features and mitigation measures contained in the FEIR

[1] https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement with the Project's lead agency, the City of Elk Grove, and will be outlined in the terms of the Development Agreement between the City and the Applicant.

X. Conclusions and Recommendations

Based on an evaluation of the documentation provided by the Applicant and its commitment to purchase voluntary carbon credits issued by an accredited carbon registry, CARB staff concludes that the proposed project would not result in any net additional GHG emissions relative to the baseline.

Draft Technical Report

for the

California Northstate University Medical Center Campus

Greenhouse Gas Emissions Analysis under Assembly Bill 900

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California Northstate University

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LIST OF ABBREVIATIONS

CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recovery and Recycling
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH_4	methane
CNU	California Northstate University
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
EDLP	Environmental Leadership Development Project
EV	electric vehicle
GHG	greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
kWh	kilowatt-hour
LEED	U.S. Green Building Council's Leadership in Energy and Environmental Design
LTO	landing and take-off
$MTCO_2e$	metric tons of carbon dioxide equivalent
MWh	megawatt-hour
N_2O	nitrous oxide
OPR	Governor's Office of Planning and Research
PG&E	Pacific Gas and Electric Company
PRC	Public Resources Code
RPS	Renewables Portfolio Standard
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Municipal Utility District
VMT	vehicle miles traveled

1 INTRODUCTION

Ascent Environmental (Ascent) is conducting a comprehensive greenhouse gas (GHG) emissions assessment for the California Northstate University (CNU) Medical Center Campus Project (Project) to demonstrate that the Project meets the GHG requirements of the Jobs and Economic Improvement Through Environmental Leadership Act (the Act) (Public Resources Code [PRC] Section 21178 et seq.). The Governor's Office of Planning and Research (OPR) has provided approved guidelines for submitting applications for streamlined environmental review pursuant to the Act. With respect to GHG emissions, a Project must demonstrate to the California Air Resources Board (CARB) that it would not result in any net additional GHGs including GHG emissions from employee transportation in accordance with PRC Section 21183(c). The GHG emissions associated with construction of the Project are also to be considered in the analysis.

This submittal describes the methodology used to estimate the GHG emissions from baseline and Project conditions and describes the methodology used to quantify GHG emission reductions from Project design features and mitigation measures.

1.1 ASSEMBLY BILL 900

In September 2011, Governor Brown signed the Act, which required the Governor to establish procedures for applying for streamlined environmental review under the California Environmental Quality Act (CEQA) for projects that meet certain requirements. OPR has provided approved guidelines for submitting applications for streamlined environmental review pursuant to the Act. With respect to GHG emissions, a Project must demonstrate that it would not result in any net additional GHGs, including GHG emissions from employee transportation in accordance with PRC Section 21183(c). For purposes of PRC Section 21183(c), the following process applies, as quoted from OPR:

a. The applicant shall submit electronically to AB900@arb.ca.gov a proposed methodology for quantifying the Project's net additional greenhouse gas emissions. The Air Resources Board will review and comment on the methodology, at its discretion, within 30 days of submission.

b. At the same time, the applicant shall submit to AB900@arb.ca.gov, documentation that the Project does not result in any net additional greenhouse gas emissions. The documentation must at least quantify:

i. Both direct and indirect greenhouse gas emissions associated with the Project's construction and operation, including emissions from the Project's projected energy use and transportation related emissions: and

ii. The net emissions of the Project after accounting for any mitigation measures that will be monitored and enforced consistent with PRC Section 21183(d).

c. Within 60 days of receiving the documentation in section b above, the Board will determine whether the conditions specified in PRC Section 21183(c) has been met or, if more time is needed, notify the applicant of the expected completion date.

d. The Board will determine and report to the Governor in writing that a Project does not result in any net additional emissions of GHGs if the Project demonstrates through a combination of Project design features, compliance with (or exceeding minimum requirements of) existing regulations, and mitigation that it would result in zero additional GHG emissions.

2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

The Project site consists of approximately 24 acres along the western boundary of the City of Elk Grove (City) in Sacramento County. The Project site consists of 12 parcels (assessor parcel numbers 132-2480-001, -002, -003, -004, -005, -007, -008, -010, -011, 132-2160-001, -002, 132-0460-076) and is bordered by Elk Grove Boulevard to the north, Interstate 5 to the west, West Taron Drive to the east, and the Laguna Stone Lake subdivision to the south. The Project location is shown in Figure 1). The area is fully developed except one approximately 0.5-acre undeveloped parcel on the southwest corner of Riparian Court and West Taron Drive.

2.2 EXISTING CONDITIONS

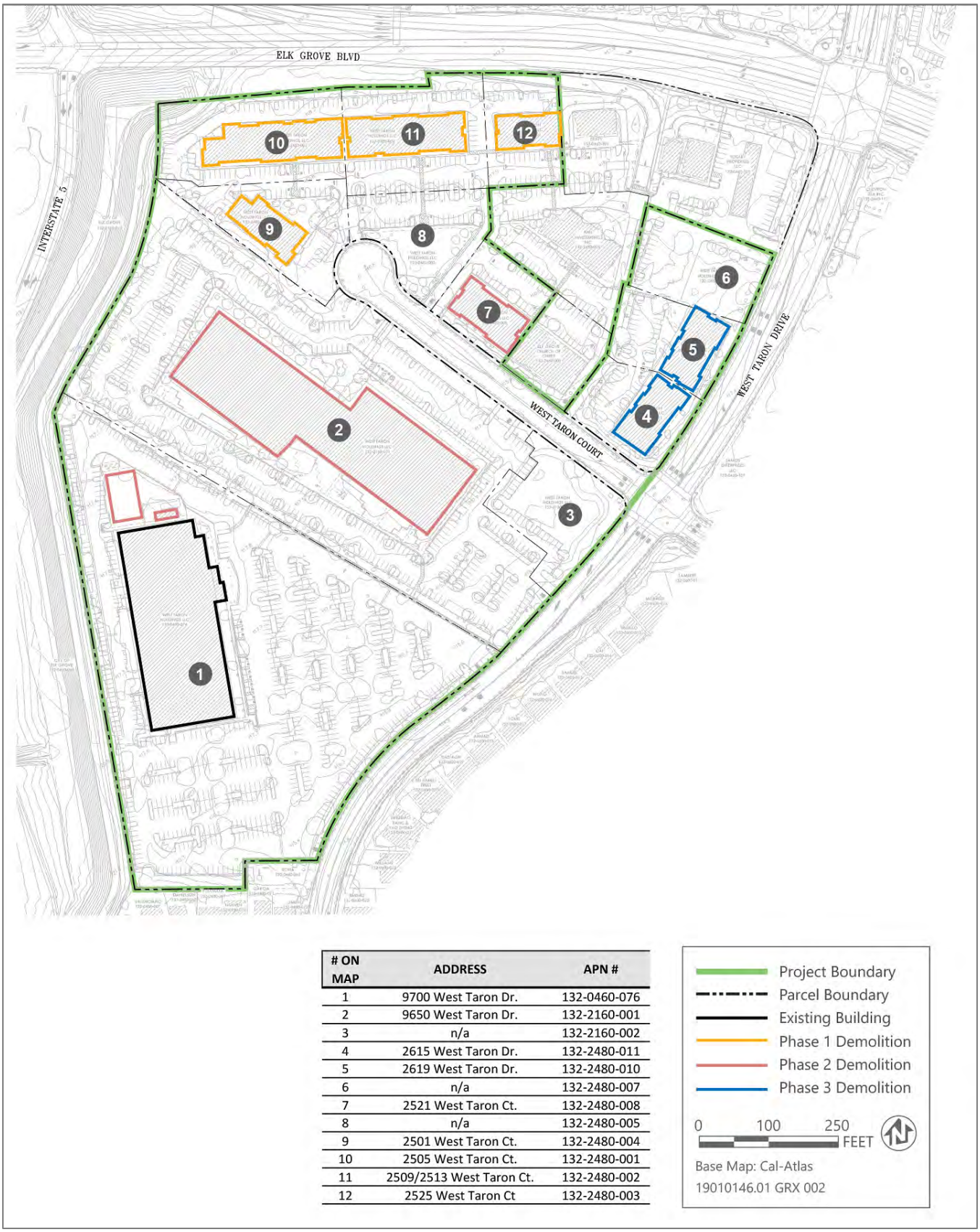
The Project site is currently occupied by a total of nine structures that encompass a total of 282,246 square feet of building space. This includes the 109,800-square-foot, 2-story School of Medicine building at 9700 West Taron Drive, a 76,000-square-foot office building at 9650 West Taron Drive currently occupied by All Data, and seven additional buildings comprising 2501 through 2619 West Taron Drive currently occupied by a number of different uses, including eating establishments, a brewery, an animal hospital, the CNU Psychology College, and other commercial and retail uses. A gas station, fast-food restaurants, and a church are adjacent to the site. Roadway access to the Project site is provided from West Taron Drive and Riparian Drive.

2.3 PROPOSED PROJECT

Development of the proposed CNU Medical Center Campus would be guided by its District Development Plan, which would provide for overall site plan approval and establish development elements including, but not limited to, parking, landscaping, pedestrian improvements, and other features that are common across the site. Development would be completed over three phases.

The Project would include the demolition of existing buildings and the construction of the various uses over three phases. Under Phase 1, the Project would include construction of a 596,790-square-foot hospital with 250 beds. The proposed hospital would include an 8-story 150-patient-bed tower atop a 4-story 100-patient-bed main hospital building with one basement level providing underground parking for up to 230 vehicles using a semi-automatic stacked parking system. A 22,850-square-foot central plant is also proposed under Phase 1 of development. This facility would be two stories, including a basement parking level with 80 spaces, and would house support equipment for the hospital and a 15,000-square-foot exterior mechanical yard. A total of 1,426 parking spaces would be provided under Phase 1 of development. This would consist of 1,116 surface parking spaces and 310 structure parking spaces to be provided in the lower levels of the hospital and central plant buildings. This phase would require the demolition of the buildings and parking lots occupying 2501, 2505, 2513, and 2525 West Taron Court, and part of 9650 West Taron Drive.

Phase 2 of the proposed Project would include a second 150-patient-bed tower atop the main hospital, an out-patient clinic, a medical office building, and the first of two public parking structures (Parking Structure 1). The additional 8-story patient-bed tower would be 103,210 square feet and would add 150 beds for a total of 400 beds at the hospital. The 168,500-square-foot out-patient clinic would include four stories above ground and a basement floor parking level with 170 parking spaces. This building would contain outpatient medical services and ambulatory care. The 100,000-square-foot medical office building would include five stories above ground and contain out-patient medical clinics and hospital administration. Parking Structure 1 would be 257,000 square feet and include four stories above ground and one basement level. The ground floor would include 51,400 square feet of retail, medical offices, and other supporting uses. The remaining three floors and basement level would provide parking for 1,500 vehicles. A semi-automatic stacked parking system would be used on the three above-ground parking levels and the basement level would be standard parking. This phase would require demolition of the buildings and parking lots occupying 2521 West Taron Court and part of 9650 West Taron Drive.



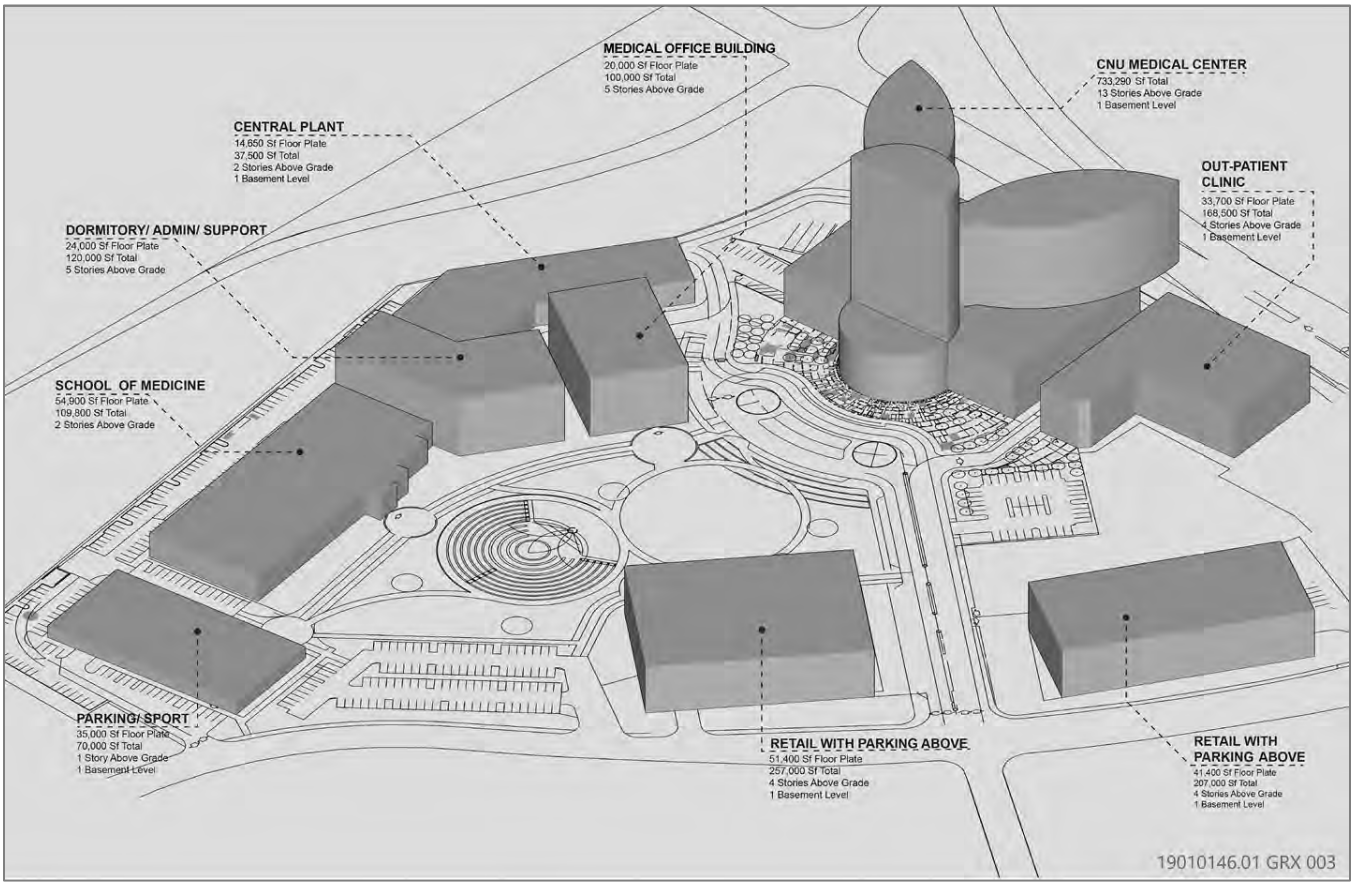
# ON MAP	ADDRESS	APN #
1	9700 West Taron Dr.	132-0460-076
2	9650 West Taron Dr.	132-2160-001
3	n/a	132-2160-002
4	2615 West Taron Dr.	132-2480-011
5	2619 West Taron Dr.	132-2480-010
6	n/a	132-2480-007
7	2521 West Taron Ct.	132-2480-008
8	n/a	132-2480-005
9	2501 West Taron Ct.	132-2480-004
10	2505 West Taron Ct.	132-2480-001
11	2509/2513 West Taron Ct.	132-2480-002
12	2525 West Taron Ct	132-2480-003

Source: Image provided by Fong & Chan Architects in 2019

Figure 1 California North State University Demolition Phases

Lastly, Phase 3 of construction would incorporate a second parking structure (Parking Structure 2), a dormitory, and a parking structure for medical student use with sports facilities on the roof. Parking Structure 2 would be 207,000 square feet and include four stories above ground and one basement level. The ground floor would include approximately 41,400 square feet of retail, medical offices, and other supporting uses. The remaining three floors and basement level would provide parking for 1,000 vehicles. A semi-automatic stacked parking system would be used on the three above-ground stories and the basement level would be standard parking. The proposed 120,000 square-foot, 5-story dormitory is also proposed under Phase 3, to be located in the southern portion of the Project site, adjacent to the school facilities (the 109,800 square-foot 2-story school building would remain onsite). A 70,000 square-foot structure intended to provide parking and recreational facilities for medical students would also be constructed under this phase. This student parking structure would include one story above-ground and a basement level that would accommodate 200 standard parking spaces. The roof would be occupied by basketball, tennis, and volleyball courts. This phase would require demolition of the buildings and parking lots occupying 2615 and 2619 West Taron Court, and 9700 West Taron Drive.

The Project would also include streetscape modifications to Riparian Court (also known as West Taron Court), modifications to existing parking areas, driveway improvements to West Taron Drive, and construction of new landscaped public gathering areas. The site plan for the proposed Project is shown in Figure 2.



Source: Image provided by Fong & Chan Architects in 2019

Figure 2 CNU Center Final Buildout Massing

The proposed Project is being designed to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Gold version 4 certification for Healthcare. For details about how the Project will achieve this certification, refer to Attachment A.

Land uses for the proposed Project and existing conditions are shown in Table 1 below.

Table 1 Land Uses Associated with Existing Site and Proposed Project

Land Use	Existing Site Size	Proposed Project Size	Unit
General Office Building	76,000	24,000	Square feet
Retail	58,946	92,800	Square feet
Hospital	0	733,290	Square feet
Central Plant	0	22,850	Square feet
Out-Patient Clinic	0	168,500	Square feet
Medical Office Building	0	100,000	Square feet
Dormitory	0	96,000	Square feet
Enclosed Parking with Elevator	0	680	Spaces
Unenclosed Parking with Elevator	0	2,500	Spaces
Mechanical Yard	0	15,500	Square feet
Surface Parking Lot	95,323	26,040	Square feet

Source: Data compiled by Ascent Environmental in 2019

3 GREENHOUSE GAS EMISSIONS

3.1 CONSTRUCTION EMISSIONS

The Project would demolish and remove five of the nine existing structures from the Project site. The existing uses will be vacated prior to construction and all uses would cease to operate. Construction of the Project would result in one-time GHG emissions during the period of construction activity. Construction of the Project would be completed over three phases lasting approximately 10 years total, with emissions estimated for each year of construction. After the three phases of construction are completed, the Project would become fully operational in 2030. Therefore, Project-generated construction emissions would occur contemporaneously with segmented Project operational emissions, as detailed in the construction schedules for each phase below.

Phase 1 of construction would commence with the demolition of the buildings located at 2501, 2505, 2509/2513, and 2525 West Taron Court. Construction of Phase 1 is expected to begin in May 2020 and end in November 2022. Structural components of Phase 1 will include a hospital building of 596,790 square feet in size, 13 stories tall, with a basement level of 230 parking spaces; a campus central plant of 22,850 square feet with 80 parking spaces at the basement level; and a mechanical yard of 15,500 square feet in size.

Phase 2 demolition and construction would succeed Phase 1 and is expected to begin in December 2023 and end in October 2025. The existing buildings to be demolished include buildings at 2521 and 9650 West Taron Court. Building construction would include the patient bed tower of 103,210 square feet in size; the out-patient clinic of 134,800 square feet in size and four stories tall with 170 parking spaces at the basement level; the medical office building of 100,000 square feet in size and five stories tall; and Parking Structure 1 of 257,000 square feet in size and 1,500 parking spaces.

Phase 3 demolition and construction would follow Phase 2 and is anticipated to begin December 2026 and end in October 2029. The remaining buildings to be demolished on the Project site include buildings at 2615 and 2619 West Taron Court. Phase 3 building construction would include Parking Structure 2 with 1,000 parking spaces; a 150-unit

dormitory building; a parking and sports structure approximately 70,000 square feet in size and 200 parking spaces; and a 24,000-square-foot expansion of the existing School of Medicine building for administrative services.

To be consistent with other Environmental Leadership Development Projects (ELDP), Project-generated construction emissions were estimated on an annual, calendar year, basis to estimate GHG emissions generated during the construction phases. To meet Project application standards, the Project's emissions are required to be offset fully to meet the requirements of net zero increase in GHG emissions. Based on the construction schedule provided by the applicant, construction of Phase 2 would occur during operation of Phase 1, and construction of Phase 3 would occur during operation of Phases 1 and 2.

Table 2 shows the Project's anticipated construction schedule by phase and subphases. For details about construction subphases, refer to Attachment B.

Table 2 Project Construction Schedule

Phase	Start Date	End Date
1	5/1/2020	11/30/2022
2A	12/1/2023	12/31/2024
2B	4/1/2024	3/31/2025
2C	12/1/2023	5/30/2025
2D	5/1/2025	10/31/2025
3A	12/1/2026	11/30/2027
3B	11/1/2027	12/29/2028
3C	1/1/2029	10/31/2029

Source: Fong & Chan Architects 2019

Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2, a computer software developed by the California Air Pollution Control Officers Association (CAPCOA). Quantifying Project-generated GHG emissions with CalEEMod is recommended by the local Sacramento Metropolitan Air Quality Management District (SMAQMD). CalEEMod construction emissions modeling is based on data from CARB's OFFROAD2011 off-road equipment emissions tool and EMFAC2014 on-road vehicle emissions tool. CalEEMod was manually programmed with Project-specific data provided by the applicant such as construction activities and phasing, number of haul truck trips, amount of excavated material, and number of construction workers by phase. Where construction information was not available from the Applicant, CalEEMod default values were used. For details on construction modeling inputs, refer to Attachment B.

Each of the three construction phases would include demolition, site preparation, excavation, building construction, paving, and architectural coating. During demolition, building waste would be hauled off-site. Site preparation and excavation phases would involve the import and export of soil. Phases 2 and 3 were separated into several subphases based on the order in which buildings are anticipated to be constructed. For details on construction phasing, refer to Attachment B.

Table 3 Project Land Uses by Construction Phase

Land Use	Phase 1	Phase 2	Phase 3	Unit
General Office Building	0	0	24,000	Square feet
Retail	0	51,400	41,400	Square feet
Hospital	596,790	103,210	0	Square feet
Central Plant	22,850	0	0	Square feet
Out-Patient Clinic	0	168,500	0	Square feet
Medical Office Building	0	100,000	0	Square feet
Dormitory	0	0	96,000	Square feet
Enclosed Parking with Elevator	310	170	200	Spaces
Unenclosed Parking with Elevator	0	1,500	1,000	Spaces

Mechanical Yard	15,500	0	0	Square feet
Surface Parking Lot	27,606	26,040	0	Square feet

Source: Data compiled by Ascent Environmental in 2019

3.1.1 Emissions from Diesel-Fueled Construction Equipment

Emissions associated with diesel-fueled construction equipment were estimated using CalEEMod Version 2016.3.2, in accordance with SMAQMD recommendations. Emissions were calculated based on the number and type of equipment, the length of each construction phase, and the hours per day each piece of equipment would be used. The amount and types of diesel-fueled equipment was based on the land uses input into the model as shown in Table 3 above. CalEEMod's default equipment list was used based on these land uses, which is derived from a construction survey conducted by South Coast Air Quality Management District. All construction equipment used in the modeling was assumed to have CalEEMod default diesel engines without any mitigation.

Emissions associated with the use of diesel-fueled equipment include only running exhaust emissions because starting and evaporative emissions are considered to be de minimis (CAPCOA 2016:A-7). The running exhaust emissions are based on CARB's OFFROAD2011 methodology, as follows:

$$Emissions\ (MTCO_2e) = \sum_i (EF_i\ x\ Pop_i\ x\ AvgHp_i\ x\ Load_i\ x\ Activity_i\ x\ GWP_i)$$

Where:

EF = emission factor in grams per brake horsepower-hour (g/bhp-hr) as processed from OFFROAD2011

Pop = population, or the number of pieces of equipment

AvgHp = maximum rated average horsepower

Load = load factor

Activity = hours of operation

i = equipment type

GWP_i = global warming potential of each GHG pollutant

GHG emissions associated with diesel-fueled equipment were estimated by construction phase and year based on the phasing schedule provided by the Project applicant. Refer to Attachment B for additional details on construction phasing. Estimated emissions are shown in Table 4 below.

3.1.2 Emissions from On-Road Construction Trips

On-road construction trips include those of construction workers for commuting and haul trucks exporting and delivering materials to the Project site. GHG emissions were quantified based on the number of trips, distance of trips, and EMFAC2014 emission factors that are included in CalEEMod. The number of trips is based on the anticipated number of construction workers for each phase of construction and the number of haul truck trips for each phase of construction based on the amount of demolished and excavated material to be transported off-site, as well as building materials imported to the site. For details on the maximum number of construction workers and haul trips by phase, refer to Attachment B. Default trip lengths for haul trucks and worker commutes from CalEEMod were used to quantify construction-generated vehicle miles traveled (VMT). Worker commute vehicles were assumed to be a default mix provided by CalEEMod of 50 percent light-duty autos, 25 percent light-duty truck type 1, and 25 percent light-duty truck type 2. Haul trucks were assumed to be all heavy heavy-duty trucks. Exhaust running and running loss emissions were estimated in CalEEMod using EMFAC2014 (as contained in CalEEMod) and direct methane emission factors provided by CARB for CalEEMod as follows:

$$Emissions\ (MTCO_2e) = \left(VMT\ x\ EF_{running\ pollutant}\right)\ x\ GWP_i$$

Where:

VMT = vehicle miles traveled

$EF_{running\ pollutant}$ = emission factor for running emissions from EMFAC2014

GWP_i = global warming potential of each GHG pollutant

Evaporative, starting, and idling emissions were also estimated in CalEEMod by multiplying the number of trips by the respective emission factor for each GHG pollutant as provided in EMFAC2014.

3.1.3 Summary of Construction Emissions

The total construction-generated emissions are shown by source and by year in Table 4 below. The total GHG emissions for Project construction from off-road construction equipment and on-road travel over the 10-year buildout period would be 8,273 metric tons of carbon dioxide equivalent ($MTCO_2e$).

Table 4 Construction-Generated GHG Emissions by Source ($MTCO_2e$)

Construction Year	Off-Road Construction Equipment	On-Road Travel[1]	Total GHG Emissions
2020	607	453	1,267[2]
2021	417	1,394	1,810
2022	30	1,215	1,245
2023	71	15	86
2024	709	1,267	1,976
2025	292	495	787
2026	39	8	47
2027	290	210	500
2028	141	180	321
2029	134	98	232
Total	**2,732**	**5,334**	**8,273**

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent; GHG = greenhouse gas.

[1] Includes worker commute trips and haul truck trips.

[2] Includes loss of carbon sequestration from removal of 292 trees.

For calculation details, refer to Attachment B.

Source: Data compiled by Ascent Environmental in 2019

3.2 OPERATIONAL EMISSIONS

Operation of the existing uses and Project uses results in annual GHG emissions from mobile sources, building energy use, water demand and wastewater treatment, and solid waste generation. The Project's annual, calendar year, operational emissions were compared to the baseline annual operational GHG emissions to determine the net change in GHG emissions. Emissions were estimated for a 30-year land use Project lifetime.

Operational emissions were estimated using a variety of sources and models. The CalEEMod (Version 2016.3.2) software was used to estimates emissions from water and wastewater, solid waste disposal, and area sources such as landscaping equipment. Operational GHG emissions were estimated using Project-specific information, where available, and default values in CalEEMod based on the Project's location, size, and land use type. Mobile source emissions associated with on-road VMT was estimated using EMFAC2017 emission factors for the default fleet mix in Sacramento County for each applicable year (i.e., existing emissions in 2020 and Project-generated emissions by phase in 2023, 2026, and 2030) and Project-specific VMT provided in Appendix B. Helicopter emissions were calculated using Climate Registry emission factors and project-specific data. Energy-related emissions associated with electricity, natural gas, and diesel fuel were estimated using utility-specific and Climate Registry emission factors.

Operational emissions are shown in terms of carbon dioxide equivalents (CO_2e). The CO_2e metric translates each GHG to an equivalent volume of carbon dioxide (CO_2) by weighing its relative global warming potential (GWP). Per the Intergovernmental Panel on Climate Change's (IPCC's) Fourth Assessment Report, methane (CH_4) and nitrous oxide (N_2O) are approximately 25 and 298 times more potent, respectively, than CO_2 in their abilities to trap heat in the atmosphere (IPCC 2007). The GHG emissions quantified herein use the IPCC's Fourth Assessment Report values to maintain consistency with the statewide GHG emissions inventory prepared by CARB.

3.2.1 Existing Site Emissions

Emissions associated with land uses currently operating at the Project site were quantified by Project phase for buildings which would be demolished in each Phase. Under Phase 1, the buildings at 2501, 2505, 2509/2513, and 2525 West Taron Court would be demolished in 2020. Total GHG emissions associated with existing land uses under Phase 1 would be 2,521 $MTCO_2e$ per year. Under Phase 2, the buildings at 2521 and 9650 West Taron County would be demolished in 2023. Total GHG emissions associated with existing land uses under Phase 1 would be 5,249 $MTCO_2e$ per year. Under Phase 3, the buildings at 2615 and 2619 West Taron Court would be demolished in 2026. Total GHG emissions associated with existing land uses under Phase 3 would be 813 $MTCO_2e$ per year. Mobile-source emissions account for the largest portion of the site's emissions, followed by energy use (both electricity and natural gas). Table 5 below shows GHG emissions associated with existing land uses by Project phase.

To quantify emissions from the existing land uses, CalEEMod was used for operational years of 2020, 2023, and 2026 based on the buildings types and sizes that would be demolished under each Project phase. Water demand for existing uses was provided by the Project applicant and existing VMT was provided by the traffic impact analysis conducted for the Project (see Appendix B). A backup diesel-powered generator was assumed to be used 96 hours per year for the All Data building located at 9650 West Taron Drive, based on data provided by the applicant. For all other GHG emissions sources, default values in CalEEMod were used. The lifetime of a building is assumed to be 30 years from the first year of full operation. Full buildout of the Project was assumed to occur in 2030, after completion of Phase 3 of the Project. The corresponding operational lifetime emissions were estimated through the year 2059. GHG emissions associated with the existing land uses were assumed to remain constant over each Project phase for an operational lifetime of 30 years from completion of Phase 3 of the Project. Existing buildings under Phase 1 were assumed to remain constant from 2020 through 2059, existing buildings under Phase 2 were assumed to remain constant from 2023 through 2059, and existing buildings under Phase 3 were assumed to remain constant from 2026 through 2059. Details on the modeling inputs for the existing land uses can be found in Attachment C.

AREA SOURCES

Area-source emissions estimated for the existing site only include fossil fuel–powered landscape maintenance equipment. CalEEMod landscape equipment defaults were used based upon the existing land uses at the Project site. Landscape equipment emissions are considered as direct because they are generated on-site due to activities from the existing land uses. Emissions factors used in CalEEMod are generated from CARB's OFFROAD2011 model using average horsepower and load factors according to equipment types. These emissions are shown in Table 5 below and the methodology used in CalEEMod is as follows:

$$Annual\ Emissions\ (MTCO_2e) = \sum (\ Units\ x\ EF_{LE}\ x\ A_{LE}\ x\ GWP_i)$$

Where:

Units = number of land use units (1,000 square feet)

EF_{LE} = GHG emission factor for landscape equipment ($MTCO_2e$/1000 sq. ft./day)

A_{LE} = number of landscaping days per year

GWP_i = global warming potential of each GHG pollutant

ENERGY

Energy-related GHG emissions include the indirect emissions associated with electricity consumption and the direct emissions associated with natural gas consumption, which were quantified using CalEEMod. Electricity is provided to the Project site by the Sacramento Municipal Utility District (SMUD) and natural gas is provided by the Pacific Gas & Electric Company (PG&E). The existing buildings on the Project site were constructed to the 2008 California Energy Code (i.e., California Code of Regulations Title 24, Part 6). Electricity and natural gas demand factors are provided in CalEEMod based on land use types. Historical data was selected on the Energy tab of CalEEMod to represent the project's energy consumption associated with compliance with the 2008 California Energy Code, which is less stringent than later iterations of the code.

The GHG intensity factor associated with electricity provided by SMUD was used for the year 2020. The default value provided in CalEEMod for SMUD was replaced with an adjusted factor based on the utility's compliance with the California Renewables Portfolio Standard (RPS) in 2020. The RPS requires all utilities to procure at least 33 percent of their electricity from renewable sources by 2020. For details on the adjustment of the electricity intensity factor, refer to Attachment C. Electricity-related emissions were calculated in CalEEMod using the following methodology:

$$Annual\ Emissions\ (MTCO_2e) = \sum_i (\ Utility\ x\ Energy\ Intensity\ x\ Size\ x\ CF)$$

Where:

Energy Intensity = electricity energy intensity for a land use (kilowatt-hour [kWh] per square foot)

Utility = electricity intensity factor for SMUD adjusted for 2020 RPS ($MTCO_2e$/megawatt-hour [MWh])

Size = square feet of existing land uses

i = land use type

CF = conversion factor

Natural gas-related GHG emissions were quantified using default emission factors provided in CalEEMod. Energy-related GHG emissions from the existing site are shown in Table 5 below. Natural gas-related emissions were calculated in CalEEMod using the following methodology:

$$Annual\ Emissions\ (MTCO_2e) = \sum_j (\ EF_i\ x\ Energy\ Intensity\ x\ Size\ x\ CF\ x\ GWP_i)$$

Where:

Energy Intensity = natural gas energy intensity for a land use (thousand British thermal units [kBTU] per square foot)

EF = emission factor based on AP-42 or Climate Registry (pounds CO_2e per kBTU)

Size = square feet of existing land uses

i = each GHG pollutant

j = land use type

CF = conversion factor

GWP_i = global warming potential of each GHG pollutant

MOBILE SOURCES

Mobile source-related GHG emissions were estimated based on the existing site's daily trip generation and VMT of on-road vehicles provided in the traffic impact analysis prepared by Fehr & Peers (see Appendix B). The existing site's daily trip generation and daily VMT were estimated based on all existing land uses during a typical weekday. Annual VMT was based on multiplying the daily VMT by a factor 347, which takes into account reduced VMT from weekends

and holidays (CARB N.d.:14). Mobile-source emissions were estimated using EMFAC2017 emissions factors for Sacramento County in 2020. The mobile-source emissions were estimated using the following methodology:

$$Annual\ Emissions\ (MTCO_2e) = VMT\ x\ P_{mix}\ x\ \sum(\ EF_v\ x\ GWP_i)$$

Where:

VMT = Existing uses-generated annual vehicle miles traveled

P_{mix} = percent mode of total vehicle mix

EF_v = composite emission factor for EMFAC2017 fleet mix in Sacramento in 2020

GWP_i = global warming potential of each GHG

For details of the existing VMT calculation, refer to Attachment C.

Mobile sources associated with the existing land uses are the largest source of GHG emissions, as shown in Table 5 below.

SOLID WASTE

Solid waste-related GHG emissions were estimated in CalEEMod based on waste generation rates for each land use type as reported by the California Department of Resources Recovery and Recycling (CalRecycle). Emission estimates include the indirect methane emissions associated with the decomposition of waste and the carbon dioxide emissions associated with the combustion of methane, as follows:

$$Annual\ Emissions\ (MTCO_2e) = DOC\ x\ DANF\ x\ 0.5$$

Where:

DOC = degradable organic carbon

DANF = degradable anaerobic fraction (0.5)

0.5 = assumes half anaerobic carbon is methane and half is carbon dioxide

GHG emissions associated with solid waste from the existing site are shown in Table 5 below.

WATER AND WASTEWATER

Water consumption associated with the existing land uses was provided by the Project applicant. Water consumption includes both water demand for water fixtures and landscaping, as well as wastewater generation. GHG emissions are associated with the indirect electricity used to pump, treat, and convey water to and from the existing buildings, as well as methane and nitrous oxide emissions associated with wastewater treatment. CalEEMod was used to estimate the GHG emissions associated with water consumption using SMUD's adjusted electricity intensity as discussed above, and the gallons of water per year required by the existing land uses. CalEEMod was also used to estimate the GHG emissions associated with wastewater treatment, assuming all aerobic facilities with anaerobic digesters, which is the CalEEMod default assumption. The methodology for water and wastewater emissions is as follows:

$$Indoor\ Water\ Emissions\ (MTCO_2e) = Water_{Indoor}\ x\ Electricity_{Indoor}\ x\ Utility\ x\ CF$$

$$Outdoor\ Water\ Emissions\ (MTCO_2e) = Water_{Outdoor}\ x\ Electricity_{Outdoor}\ x\ Utility\ x\ CF$$

$$Wastewater\ Emissions\ (MTCO_2e) = Water_{Indoor}\ x\ R_T\ x\ EF_T\ x\ CF$$

$$Annual\ Emissions\ (MTCO_2e) = Indoor\ Water\ Emissions + Outdoor\ Water\ Emissions + Wastewater\ Emissions$$

Where:

$Water_{Indoor}$ = total water used indoors (million gallons)

$Water_{Outdoor}$ = total water used outdoors (million gallons)

$Electricity_{Indoor}$ = electricity required to supply, treat, and distribute water and resulting wastewater (kWh/million gallons)

$Electricity_{Outdoor}$ = electricity required to supply, treat, and distribute water (kWh/million gallons)

R_T = percent of indoor water resulting in wastewater

EF_T = emission factor for wastewater treatment process ($MTCO_2e$/MWh)

CF = conversion factor

Utility = electricity intensity factor for SMUD adjusted for 2020 RPS ($MTCO_2e$/kWh)

Emissions associated with water and wastewater from the existing site are shown in Table 5 below.

STATIONARY SOURCES

The existing All Data building has a back-up diesel generator with a kilowatt rating of 400. It was assumed that the back-up generator is used 96 hours per year based on estimates of Project-related back-up generator use, as provided by the Applicant. Because it was unknown how much fuel is consumed annually by the generator, emissions associated with the generator were calculated using CalEEMod and are shown in Table 5 below. The methodology used in CalEEMod is as follows:

$$Annual\ Emissions\ (MTCO_2e) = EF\ x\ n\ x\ HP\ x\ Load\ x\ Activity$$

Where:

EF = emission factor ($MTCO_2e$/hp-hr)

n = number of generators

HP = maximum rated horsepower

Load = load factor

Activity = hours of operation per year

SUMMARY

GHG emissions associated with the existing land uses at the Project site are shown in Table 5 below for each Project phase by emissions source.

Table 5 Existing Site Operational GHG Emissions by Phase in Demolition Years ($MTCO_2e$/year)

Emissions Source	Greenhouse Gas Emissions		
	Phase 1	Phase 2	Phase 3
Area	<1	<1	<1
Energy	114	340	34
Mobile	2,381	4,843	771
Solid Waste	20	39	8
Stationary	0	20	0
Water & Wastewater	6	8	0
Total	**2,521**	**5,249**	**813**

Notes: GHG = greenhouse gas; $MTCO_2e$/year = metric tons of carbon dioxide equivalent per year.

Totals may not sum exactly due to rounding

For calculation details, refer to Attachment C.

Source: Modeling conducted by Ascent Environmental in 2019

3.2.2 Proposed Project Emissions

AREA SOURCES

Area-source emissions estimated for the Project type only include landscape maintenance equipment. CalEEMod landscape equipment defaults were used based upon the land uses that will be included in the Project. Landscape equipment emissions are considered as direct because they are generated on-site due to activities from the proposed land uses. Emissions factors used in CalEEMod are generated from CARB's OFFROAD2011 model using average horsepower and load factors according to equipment types. Area-source emissions are shown by phase in Table 6 below and the CalEEMod methodology is as follows:

$$Annual\ Emissions\ (MTCO_2e) = \sum (\ Units\ x\ EF_{LE}\ x\ A_{LE}\ x\ GWP_i)$$

Where:

Units = number of land use units (1,000 square feet or dwelling units)

EF_{LE} = GHG emission factor for landscape equipment ($MTCO_2e$/1000 sq. ft./day)

A_{LE} = number of landscaping days per year

GWP_i = global warming potential of each GHG pollutant

ENERGY

The Project's on-site central plant would supply natural gas to the hospital, as well as provide heating and cooling capabilities to other Project buildings. Energy emissions were quantified by Project phase for both natural gas and electricity. Indirect emissions associated with electricity generation were quantified using consumption estimates provided by the Project applicant and emissions factors for SMUD that were adjusted for RPS compliance for each phase's buildout year (i.e., 2023, 2026, and 2030). There is no RPS target for 2023 so the 2020 target of 33 percent renewable was used. Pursuant to Senate Bill 100 of 2018, the RPS targets for 2026 and 2030 are 50 and 60 percent renewables, respectively, which were applied for Phases 2 and 3. The methodology used to quantify electricity-related emissions is as follows:

$$Annual\ Emissions\ (MTCO_2e) = \sum (\ Utility_{RPS}\ x\ Energy\ Intensity_P\ x\ CF)$$

Where:

Energy $Intensity_P$ = electricity energy intensity for each Project phase (kWh per year)

Utility = electricity intensity factor for SMUD ($MTCO_2e$/MWh)

RPS = adjustment for RPS target years for each Project phase

CF = conversion factor

Emissions associated with the use of on-site natural gas combustion were quantified using consumption estimates provided by the Project applicant and emission factors provided in the Climate Registry's 2017 Default Emission Factors. These emissions factors were not anticipated to change over the project buildout period. The methodology used to quantify natural gas-related emissions is as follows:

$$Annual\ Emissions\ (MTCO_2e) = \sum (\ EFx\ Energy\ Intensity\ x\ CF)$$

Where:

Energy Intensity = natural gas energy intensity for each Project phase (cubic feet per year)

EF = emission factor provided by Climate Registry (kg CO_2e/MMBTU)

CF = conversion factor

All energy-related GHG emissions associated with the Project are shown by phase in Table 6 below.

MOBILE SOURCES

Mobile source emissions were estimated based on the Project's daily trip generation and VMT of on-road vehicles provided in the traffic impact analysis prepared by Fehr & Peers (see Appendix B). The Project's daily trip generation and daily VMT by phase were estimated based on the operation of all proposed land uses under each phase during a typical weekday. Annual VMT by phase was based on multiplying the daily VMT by a factor 347, which takes into account reduced VMT from weekends and holidays (CARB N.d.:14). Mobile-source emissions were estimated using EMFAC2017 emissions factors for Sacramento County in 2023 for Phase 1, 2026 for Phase 2, and 2030 for Phase 3. For details of the existing VMT calculation, refer to Attachment C. The methodology for quantifying mobile-source emissions by phase is as follows:

$$Annual\ Emissions\ (MTCO_2e) = VMT_{Phase}\ x\ P_{mix}\ x\ \sum_{Phase}(\ EF_v\ x\ GWP_i)$$

Where:

VMT_{Phase} = Project-generated annual vehicle miles traveled by Project phase

P_{mix} = percent mode of total vehicle mix

EF_v = composite emission factor for fleet mix provided in EMFAC2017 for Sacramento County for each operational year

GWP_i = global warming potential for each GHG pollutant

Mobile emissions for helicopter activity associated with the Project were estimated using emission factors for jet fuel derived from the Climate Registry's 2017 Default Emission Factors and average fuel consumption from helicopter activity. Emissions from helicopter use are based on the number of landing and take-offs (LTO) cycles, number of cruising hours per day, and the helicopter engine model type and fuel used. For details about helicopter use assumptions, refer to Attachment C. The methodology for quantifying helicopter emissions is as follows:

$$LTO\ Emissions\ (MTCO_2e) = Fuel_{LTO}\ x\ Hours\ x\ Days\ x\ EF_{CO2}$$

$$Cruising\ Emissions\ (MTCO_2e) = Fuel_C\ x\ Hours\ x\ Days\ x\ (EF_{CO2} + (EF_{N2O}\ x\ GWP))$$

$$Annual\ Emissions\ (MTCO_2e) = LTO\ Emissions + Cruising\ Emissions$$

Where:

$Fuel_{LTO}$ = gallons of jet fuel used per LTO

$Fuel_C$ = gallons of jet fuel used per hour

Hours = average hours per day of use

Days = average days per year of use

EF_{CO2} = carbon dioxide emission factor provided by Climate Registry (kg CO_2/gallon)

EF_{N2O} = nitrous oxide emission factor provided by Climate Registry* (kg N_2O/gallon)

GWP = global warming potential for N_2O

*Note that CH_4 emission factors are not available for jet fuel

All mobile source-related GHG emissions are shown in Table 6 by Project phase.

SOLID WASTE

Solid waste emissions occur from the decomposition of waste that has been disposed of in landfills. Project-generated solid waste was estimated using CalEEMod defaults, which consider disposal rates based on land use types and their size. Annual disposal rate data is gathered from CalRecycle. The Project would comply with the requirements for commercial recycling and organic waste diversion pursuant to PRC Section 42649 and is anticipated to divert at least 50 percent of its solid waste generation. CalEEMod's mitigation module was used to reduce solid waste disposal by 50 percent. Solid waste emission factors depend on characteristics of landfills and gas capture assumed in the CARB GHG emissions inventory. GHG emissions associated with solid waste are shown in Table 6 below and the methodology for quantifying solid waste emissions is as follows:

$$Annual\ Emissions\ (MTCO_2e) = (DOC\ x\ DANF\ x\ 0.5)\ x\ W_D$$

Where:

DOC = degradable organic carbon

DANF = degradable anaerobic fraction (0.5)

0.5 = assumes half anaerobic carbon is methane and half is carbon dioxide

W_D = waste diversion rate (50 percent)

WATER AND WASTEWATER

Emissions from water usage and wastewater generation were estimated using anticipated consumption provided by the Project applicant for indoor and outdoor water use by Project phase. GHG emissions are associated with the indirect electricity used to pump, treat, and convey water to and from the existing buildings, as well as methane and nitrous oxide emissions associated with wastewater treatment. CalEEMod was used to estimate the GHG emissions associated with water consumption using SMUD's adjusted electricity intensity as discussed above for the operational years of each Project phase (i.e., Phase 1 in 2023, Phase 2 in 2026, and Phase 3 in 2030). CalEEMod was also used to estimate the GHG emissions associated with wastewater treatment, assuming all aerobic facilities with anaerobic digesters, which is the CalEEMod default assumption. Water efficiency features included in the Project were factored in to the anticipated water consumption provided by the Project applicant. These features include reduced turf and increased native and drought-tolerant landscaping, low-flow fixtures, water-efficient dishwashers and clothes washers, and water metering. The methodology used to quantify water and wastewater emissions is as follows:

$$Indoor\ Water\ Emissions\ (MTCO_2e) = Water_{Indoor}\ x\ Electricity_{Indoor}\ x\ Utility_{RPS}\ x\ CF$$

$$Outdoor\ Water\ Emissions\ (MTCO_2e) = Water_{Outdoor}\ x\ Electricity_{Outdoor}\ x\ Utility_{RPS}\ x\ CF$$

$$Wastewater\ Emissions\ (MTCO_2e) = Water_{Indoor}\ x\ R_T\ x\ EF_T\ x\ CF$$

$$Annual\ Emissions\ (MTCO_2e) = Indoor\ Water\ Emissions + Outdoor\ Water\ Emissions + Wastewater\ Emissions$$

Where:

$Water_{Indoor}$ = total water used indoors by Project phase (million gallons)

$Water_{Outdoor}$ = total water used outdoors by Project phase (million gallons)

$Electricity_{Indoor}$ = electricity required to supply, treat, and distribute water and resulting wastewater (kWh/million gallons)

$Electricity_{Outdoor}$ = electricity required to supply, treat, and distribute water (kWh/million gallons)

R_T = percent of indoor water resulting in wastewater

EF_T = emission factor for wastewater treatment process ($MTCO_2e$/MWh)

CF = conversion factor

Utility = electricity intensity factor for SMUD ($MTCO_2e$/kWh)

RPS = adjustment for RPS target years for each Project phase

STATIONARY SOURCE EMISSIONS

Stationary source emissions from the maintenance and operation of on-site emergency generators were also estimated. The Project would install four back-up diesel-powered generators that would be anticipated to run for 96 hours per year, consuming 89,376 gallons of diesel per year, as provided by the Applicant. Fuel consumption was estimated by multiplying the consumption rate (175 gallons per hour) by 96 hours per year by 4 generators by 133 percent (per National Fire Protection Association codes and standards). All generators would be installed under Phase 1 of the Project. Emissions were quantified using diesel emission factors provided by the Climate Registry's 2017 Default Emission Factors. Emissions associated with stationary sources are included in Table 6 below. The methodology used to quantify stationary source-related emissions is as follows:

$$Annual\ Emissions\ (MTCO_2e) = EF\ x\ Fuel$$

Where:

EF = emission factor for diesel provided by Climate Registry (kg CO_2e/gallon)

Fuel = annual gallons of diesel consumed

SUMMARY

GHG emissions associated with the Project's operation by phase are shown in Table 6 below by emissions source.

Table 6 Project-Generated GHG Emissions by Source at Full Buildout ($MTCO_2e$/year)

Emissions Source	Phase 1[1] Emissions	Phase 2[2] Emissions	Phase 3[3] Emissions
Area	<1	<1	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Solid Waste	3,256	2,046	68
Stationary	925	0	0
Water & Wastewater	82	45	12
Total	**26,553**	**14,061**	**5,071**

Notes: GHG = greenhouse gas; $MTCO_2e$/year = metric tons of carbon dioxide equivalent per year; SMUD = Sacramento Municipal Utility District.

[1] First year of operation for Phase 1 would be 2023.

[2] First year of operation for Phase 2 would be 2026.

[3] First year of operation for Phase 3 would be 2030.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

For calculation details, refer to Attachment C.

4 MEASURES FOR OFFSETTING NET INCREASE IN GHG EMISSIONS

SOLAR REDUCTION

The Project would install solar photovoltaics on Project building roofs. Phase 1 would include solar installations on the existing CNU School of Medicine building, covering approximately 47,000 square feet. Phase 2 would include solar installations on the out-patient clinic, medical office building, and Parking Garage 1, covering approximately 89,000 square feet. Phase 3 would include solar installations on the dormitory and Parking Garage 2, covering approximately 56,600 square feet. The National Renewable Energy Laboratory's PVWatts Calculator was used to estimate the

amount of electricity generated by the system based on the roof size, Project location, and a premium module type (see Attachment D). The PVWatts Calculator estimated approximately 1,327,446 kWh per year would be generated by the system under Phase 1; 2,537,432 kWh per year under Phase 2; and 1,578,453 kWh per year under Phase 3. The adjusted SMUD electricity intensity factors for 2020, 2026, and 2030 were used to quantify GHG emissions that would be reduced as a result of each phase's solar systems. The GHG reductions are shown in Table 6 below.

SMUD GREENERGY REDUCTION

After installation of the solar systems described above, the Project would still consume electricity provided by SMUD. The Project would purchase 100 percent renewable energy provided through SMUD's Greenergy program for the remaining electricity demands of the Project, rather than using SMUD's average renewable mix for the operational years of each phase. This would effectively offset all electricity-related GHG emissions associated with the Project. The GHG reductions from the Greenergy program are shown in Table 7 below by phase.

ELECTRIC VEHICLE CHARGING REDUCTION

The Project would install Level 2 electric vehicle (EV) charging stations as part of each phase. Under Phase 1, 37 Level 2 EV chargers would be installed, serving 74 parking spaces. Under Phase 2, 36 additional Level 2 EV chargers would be installed, serving and additional 70 parking spaces. Under Phase 3, 11 additional Level 2 EV chargers would be installed, serving an additional 22 parking spaces. The GHG reductions associated with the use of EV chargers was calculated using average fuel efficiency of gas-powered light duty vehicles in each of the Project phase buildout years, the efficiency of EVs, the charging power of a Level 2 EV charger, and the SMUD electricity intensity factor for each of the Project phase buildout years. Table 7 below shows the GHG reductions associated with the installation of EV chargers by phase.

TRANSPORATION DEMAND MANAGEMENT PLAN REDUCTION

The Project would include a Transportation Demand Management (TDM) Plan consistent with the *City of Elk Grove Climate Action Plan: 2019 Update* and the *City of Elk Grove Transportation Demand Management Plan Guidelines* that aims to reduce VMT by 15 percent. The TDM Plan developed for the Project would include required and optional measures that the Project could implement to achieve a 15 percent reduction in VMT. The measure categories include marketing and promotion, bike facilities, on-site amenities, transit, commuter benefits, and parking facilities. Attachment B of this application identifies up to 28 possible points the Project could achieve through design features. Ten points would be required to meet the 15 percent VMT reduction goal. As specified in the commitment letter, the TDM Plan would be incorporated as a mitigation measure in the environmental impact report prepared for the Project. All mitigation measures will be enforceable through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement between the Applicant and the lead agency (City of Elk Grove). Table 7 below shows the GHG reduction associated with implementation of the TDM Plan by phase.

VEGETATION CHANGE

The Project would preserve 83 existing trees on the Project site and remove 292 trees. After Project construction, 313 new trees would be planted. The carbon sequestration associated with the net increase in trees was quantified in CalEEMod and is shown in Table 7 below as part of Phase 3.

SUMMARY

Table 7 below shows the Project's operational emissions by phase with the reduction measures identified above.

Table 7 Project-Generated GHG Emissions by Source at Full Buildout with Reduction Measures ($MTCO_2e$ per year)

Emissions Source	Phase 1[1] Emissions	Phase 2[2] Emissions	Phase 3[3] Emissions
Area	<1	<1	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Solid Waste	1,628	1,023	34
Stationary	925	0	0
Water & Wastewater	82	45	12
Solar Reduction	-319	-456	-227
SMUD Greenergy Reduction	-4,950	-2,076	-338
Electric Vehicle Charging Reduction	-335	-353	-113
TDM Plan	-1,974	-1,050	-613
Vegetation Change	0	0	-11
Total	**17,347**	**9,103**	**3,736**

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMUD = Sacramento Municipal Utility District; TDM = Transportation Demand Management.

[1] First year of operation for Phase 1 would be 2023.

[2] First year of operation for Phase 2 would be 2026.

[3] First year of operation for Phase 3 would be 2030.

Totals may not sum exactly due to rounding.

For calculation details, refer to Attachment C.

Source: Modeling conducted by Ascent Environmental in 2019

4.1 OVERALL YEAR-BY-YEAR EMISSIONS

Table 8 below shows the summary of construction emissions associated with the project. Table 9 below shows the year-by-year comparison of GHG emissions from the baseline and the operational emissions associated with the Project. Once Phase 1 is operational in 2023, Project-generated emissions would exceed the baseline emissions. The amount by which the Project exceeds the baseline emissions would increase in 2026 when Phase 2 becomes operational, and again in 2030 when Phase 3 becomes operational. All three phases' lifetime operation would overlap from 2030 through 2059.

Total construction emissions associated with the Project would be 8,273 $MTCO_2e$ and are shown in Table 8 below. Total baseline emissions over the Project's lifetime (i.e., 2023 through 2059) would be 296,152 $MTCO_2e$. The Project's net increase in operational emissions over the baseline would be 767,349 $MTCO_2e$ over the Project's lifetime, as shown in Table 9 below. Combining the construction emissions and net increase in operational emissions, the Project would be required to purchase carbon offset credits for a total of 775,622 $MTCO_2e$.

The Applicant has agreed to meet the requirement set forth in PRC Section 21183(c) to demonstrate that the Project would result in no net additional GHG emissions through the purchase of voluntary carbon offset credits sufficient to offset all projected additional GHG emissions. A copy of the commitment letter is provided in Appendix H.

Notably, the commitments to enter into contract(s) to offset net additional GHG emissions will be incorporated as a mitigation measure in the environmental impact report prepared for the Project. All mitigation measures will be enforceable through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement between the Applicant and the lead agency (City of Elk Grove).

Table 8 Summary of Construction-Generated GHG Emissions ($MTCO_2e$)

Year	Construction Emissions
2020	1,267
2021	1,810
2022	1,245
2023	86
2024	1,976
2025	787
2026	47
2027	500
2028	321
2029	232
Total	8,273

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

Table 9 Year-by-Year Comparison of GHG Emissions ($MTCO_2e$)

Year	Baseline Emissions	Project Operational Emissions	Project Operational Difference
2023[1]	2,521	17,347	14,825
2024	2,521	17,347	14,825
2025	2,521	17,347	14,825
2026[2]	7,771	26,449	18,678
2027	7,771	26,449	18,678
2028	7,771	26,449	18,678
2029	7,771	26,449	18,678
2030[3]	8,583	30,185	21,602
2031	8,583	30,185	21,602
2032	8,583	30,185	21,602
2033	8,583	30,185	21,602
2034	8,583	30,185	21,602
2035	8,583	30,185	21,602
2036	8,583	30,185	21,602
2037	8,583	30,185	21,602
2038	8,583	30,185	21,602
2039	8,583	30,185	21,602
2040	8,583	30,185	21,602
2041	8,583	30,185	21,602
2042	8,583	30,185	21,062
2043	8,583	30,185	21,602
2044	8,583	30,185	21,602
2045	8,583	30,185	21,602
2046	8,583	30,185	21,602
2047	8,583	30,185	21,602
2048	8,583	30,185	21,602
2049	8,583	30,185	21,602
2050	8,583	30,196	21,613
2051	8,583	30,196	21,613
2052	8,583	30,196	21,613
2053	8,583	30,196	21,613
2054	8,583	30,196	21,613
2055	8,583	30,196	21,613
2056	8,583	30,196	21,613
2057	8,583	30,196	21,613
2058	8,583	30,196	21,613
2059	8,583	30,196	21,613
Total	**296,152**	**1,063,501**	**767,349**

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent.

[1] First year of operation for Phase 1 would be 2023.

[2] First year of operation for Phase 2 would be 2026.

[3] First year of operation for Phase 3 would be 2030.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

The Project would not result in any net additional GHG emissions after the purchase of carbon offset credits, in accordance with PRC Section 21183(c). Therefore, the Project would meet the GHG emission requirements for streamlined environmental review under CEQA.

5 LIST OF PREPARERS

Ascent Environmental

Poonam Boparai, Principal

Pat Angell, Project Director

Hannah Kornfeld, AICP, Technical Analyst

6 REFERENCES

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California Air Resources Board. No date. *Climate Change Draft Scoping Plan Measure Documentation Supplement*. Available: https://ww3.arb.ca.gov/cc/scopingplan/document/measure_documentation.pdf. Accessed September 16, 2019.

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Attachment A

LEED Checklist

LEED Checklist for New Construction / Healthcare v4

Project: California Northstate University Hospital, Elk Grove, CA
Last Updated: 6/18/2019
Goal: Gold

ARUP

Yes	Maybe?+	Maybe?-	No				
50	21	19	20	110	**Project Totals** (pre-certification estimates)	110	Points Possible

Certified 40-49 **Silver** 50-59 points **Gold** 60-79 points **Platinum** 80-110 points

Project Information Form

d = Design Submittal
C = Construction Submittal

Yes	Maybe?+	Maybe?-	No			Points		Responsible Party	Status
1	0	0	0		**Integrative Process (IP)** - 1 Points Available	1			
Y					**Integrative Project Planning and Design** Prepare an Owner's Project Requirements (OPR) document; conduct a preliminary LEED meeting with a minimum of four key project team members and the owner or owner's representative; assemble an integrated project team and include as many of the professionals as feasible (minimum of four), in addition to the owner or owner's representative; conduct a minimum four-hour, integrated design charrette with the project team	P		All	
1				IPc1	**Integrative Process** (1) Beginning in pre-design and continuing throughout the design phases, identify and use opportunities to achieve synergies across disciplines and building systems described below. Use the analyses described below to inform the owner's project requirements (OPR), basis of design (BOD), design documents, and construction documents	1	d	Fong & Chan/Arup	

Yes	Maybe?+	Maybe?-	No			Points		Responsible Party	Status
4	1	0	4		**Location and Transportation (LT)** - 16 Points Available	9			
			9	LTc1	**LEED for Neighborhood Development location** (5-9) Locate the project in within the boundary of a development certified under LEED for Neighborhood Development: Points are awarded according to Certification level (BD+C): Certified-5pts, Silver-6pts, Gold-7pts, Platinum-9pts Projects attempting this credit are not eligible to earn points under other Location and Transportation credits.	9	d	n/a	N/A
1				LTc2	**Sensitive land protection** (1) Locate the development footprint on land that has been previously developed. OR Locate the development footprint on land that has been previously developed or that does not meet the criteria for sensitive land: -Prime farmland -Floodplains -Habitat for threatened or endangered species -Water bodies -Wetlands	1	d	Fong & Chan	Previously developed land (currently retail + parking)
			2	LTc3	**High Priority Site** (1-2) **Option 1. Historic district**(1 point): Locate the project on an infill location in a historic district OR **Option 2. Priority designation**(1 point): Locate the project on one of following listed sites: EPA National Priorities List, Federal Empowerment Zone, Federal Enterprise Community, Federal Renewal Community, Department of Justice Weed and Seed Strategy Community, Department of the Treasury Community Development Financial Institutions Fund Qualified Low-Income Community (a subset of the New Markets Tax Credit Program), U.S. Department of Housing and Urban Development's Qualified Census Tract (QCT) or Difficult Development Area (DDA), or local equivalent for projects outside the United States. OR **Option 3. Brownfield remediation** (2 points): Locate on a project site where soil or groundwater contamination has been identified, and where the local, state, or national authority (whichever has jurisdiction) requires its remediation. Perform remediation to the satisfaction of that authority.	2	d	Fong & Chan	
1				LTc4	**Surrounding density and diverse uses** (1) **Option 1. Surrounding density (1 point):**Locate on a site whose surrounding existing density within a ¼-mile [400-meter] radius of the project boundary meets the values in Table 1. Use eith the "separate residential and non-residential densities" or the "combined density" values OR **Option 2. Diversity of uses (1 point):**Construct or renovate a building or a space within a building such that the building's main entrance is within a ½-mile (800-meter) walking distance of the main entrance at least seven existing and publicly available diverse uses (listed in Appendix 1).	1	d	Arup/Fong & Chan	
			2	LTc5	**Access to quality transit** (1-2) Locate any functional entry of the project within a ¼-mile (400-meter) walking distance of existing or planned bus, streetcar, or rideshare stops, or within a ½-mile (800-meter) walking distance of existing or planned bus rapid transit stops, light or heavy rail stations, commuter rail stations or ferry terminals. The transit service at those stops and stations in aggregate must meet the minimums listed in Tables 1 and 2. Planned stops and stations may count if they are sited, funded, and under construction by the date of the certificate of occupancy and are complete within 24 months of that date. Both weekday and weekend trip minimums must be met. Projects served by two or more transit routes such that no one route provides more than 60% of the prescribed levels may earn one additional point, up to the maximum number of points. If existing transit service is temporarily rerouted outside the required distances for less than two years, the project may meet the requirements, provided the local transit agency has committed to restoring the routes with service at or above the prior level.	2	d	Arup/Fong & Chan	

1				LTc6	**Bicycle facilities** (1) **Bicycle network:** Design or locate the project such that a functional entry and/or bicycle storage is within a 200-yard (180-meter) walking distance or bicycling distance from a bicycle network that connects to at least one of the following: at least 10 diverse uses (see Appendix 1); a school or employment center, if the project total floor area is 50% or more residential; or a bus rapid transit stop, light or heavy rail station, commuter rail station, or ferry terminal. All destinations must be within a 3-mile (4800-meter) bicycling distance of the project boundary. **Bicycle Storage and Shower Rooms: Case 1.** commercial or institutional projects Provide short-term bicycle storage for at least 2.5% of all peak visitors, but no fewer than four storage spaces per building. Provide long-term bicycle storage for at least 5% of all full-time equivalent (FTE) occupants, but no fewer than four storage spaces per building in addition to the short-term bicycle storage spaces. Provide at least one on-site shower with changing facility for the first 100 FTE occupants and one additional shower for every 150 FTE occupants thereafter. **Case 2. residential projects:** Provide short-term bicycle storage for at least 2.5% of all peak visitors but no fewer than four storage spaces per building. Provide long-term bicycle storage for at least 30% of all FTE occupants, but no less than one storage space per residential unit in addition to the short-term bicycle storage spaces. **Case 3. mixed-use projects:** Meet the Case 1 and Case 2 storage requirements for the non-residential and residential portions of the project, respectively. **For all projects:** Short-term bicycle storage must be within 100 feet (30 meters) walking distance of any main entrance. Long-term bicycle storage must be within 100 feet (30 meters) walking distance of any functional entry. Bicycle storage capacity may not be double-counted: storage that is fully allocated to the occupants of non-project facilities cannot also serve project occupants. Core & Shell projects should refer to Appendix 2, Default Occupancy Counts, for occupancy count requirements and guidance.	1	d	Fong & Chan	
	1			LTc7	**Reduced parking footprint** (1) Do not exceed the minimum local code requirements for parking capacity. Provide parking capacity that is a percentage reduction below the base ratios recommended by the Parking Consultants Council, as shown in the Institute of Transportation Engineers' Transportation Planning Handbook, 3rd edition, Tables 18-2 through 18-4. **Case 1.** Baseline location Projects that have not earned points under LT Credit Surrounding Density and Diverse Uses or LT Credit Access to Quality Transit must achieve a 20% reduction from the base ratios. **Case 2.** Dense and/or transit-served location Projects earning 1 or more points under either LT Credit Surrounding Density and Diverse Uses or LT Credit Access to Quality Transit must achieve a 40% reduction from the base ratios. **For all projects:** The credit calculations must include all existing and new off-street parking spaces that are leased or owned by the project, including parking that is outside the project boundary but is used by the project. On-street parking in public rights-of-way is excluded from these calculations. **For projects that use pooled parking**, calculate compliance using the project's share of the pooled parking. Provide preferred parking for carpools for 5% of the total parking spaces after reductions are made from the base ratios. Preferred parking is not required if no off-street parking is provided. **Mixed-use projects** should determine the percentage reduction by first aggregating the parking amount of each use (as specified by the base ratios) and then determining the percentage reduction from the aggregated parking amount.. Do not count parking spaces for fleet and inventory vehicles unless these vehicles are regularly used by employees for commuting as well as business purposes.	1	d	Fong & Chan	Architect to confirm
1				LTc8	**Green vehicles** (1) Designate 5% of all parking spaces used by the project as preferred parking for green vehicles. These spaces must be clearly identified and enforced for sole use by these vehicles. If the parking is sectioned according to use (e.g. between short-term and long-term spaces), the preferred parking spaces must be proportionally distributed among the spaces. Green vehicles must achieve a minimum green score of 45 on the American Council for an Energy Efficient Economy (ACEEE) annual vehicle rating guide (or local equivalent for projects outside the U.S.) A discounted parking rate of at least 20% for green vehicles is an acceptable substitute for preferred parking. The discounted rate must be publicly posted at the entrance of the parking area and permanently available to every qualifying vehicle. In addition to preferred parking for green vehicles, meet one of the following two options for alternative-fuel fueling stations: **Option 1.** Electric vehicle recharging: Install electrical vehicle supply equipment (EVSE) in 2% of all parking spaces used by the project. Clearly identify and reserve these spaces for the sole u by plug-in electric vehicles. . Parking spaces that include EVSE must be provided separate from and in addition to preferred parking spaces for green vehicles. OR **Option 2.** Liquid, gas, or battery facilities: Install liquid or gas alternative fuel fueling facilities or a battery switching station capable of refueling a number of vehicles per day equal to at least 2% of all parking spaces.	1	d	Fong & Chan/Owner	Discuss with team at LEED kick-off

Yes	Maybe?+	Maybe?-	No			Points			
4	3	2	0		**Sustainable Sites (SS)** - 10 Points Available	9		Responsible Party	Status
Y				SSp1	**Construction Activity Pollution Prevention** (P) Create and implement an erosion and sedimentation control plan for all construction activities associated with the project. The plan must conform to the erosion and sedimentation requirements of the 2012 U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP) or local equivalent, whichever is more stringent. Projects must apply the CGP regardless of size. The plan must describe the measures implemented..	P	c	Contractor	
Y				SSp2	**Environmental Site Assessment** (P) Conduct a Phase I Environmental Site Assessment as described in ASTM E1527–05 (or a local equivalent) to determine whether environmental contamination exists at the site. If contamination is suspected, conduct a Phase II Environmental Site Assessment as described in ASTM E1903–11 (or a local equivalent). If a site is contaminated, remediate the site to meet local, state, or national environmental protection agency region residential (unrestricted) standards, whichever are most stringent.	P	d	Geotech/EnvEngr	
1				SSc1	**Site assessment** (1) Complete and document a site survey or assessment1 that includes the following information: Topography, Hydrology, Climate, Vegetation, Soils, Human use, Human health effects. The survey or assessment should demonstrate the relationships between the site features and topics listed above and how these features influenced the project design; give the reasons for not addressing any of those topics.	1	d	Geotech/EnvEngr	Please fill out form
	1			SSc2	**Site development - protect or restore habitat** (1) Preserve and protect from all development and construction activity 40% of the greenfield area on the site (if such areas exist). AND **Option 1. on-site restoration (1 point):** Using native or adapted vegetation, restore 30% (including the building footprint) of all portions of the site identified as previously developed. Projects that achieve a density of 1.5 floor-area ratio may include vegetated roof surfaces in this calculation if the plants are native or adapted, provide habitat, and promote biodiversity. Restore all disturbed or compacted soils that will be revegetated within the project's development footprint to meet the requirements. Project teams may exclude vegetated landscape areas that are constructed to accommodate rainwater infiltration from the vegetation and soils requirements, provided all such rainwater infiltration areas are treated consistently with SS Credit Rainwater Management. **OR** **Option 2. financial support (1 point)** Provide financial support equivalent to at least $0.40 per square foot (US$4 per square meter) for the total site area (including the building footprint).Financial support must be provided to a nationally or locally recognized land trust or conservation organization within the same EPA Level III ecoregion or the project's state (or within 100 miles of the project [160 kilometers] for projects outside the United States). For U.S. projects, the land trust must be accredited by the Land Trust Alliance	1	d	Landscape Architect/Owner	Confirm Option 1 is not planned. If so, Is there a budget for Option 2?

		1		SSc3	**Open space** (1) Provide outdoor space greater than or equal to 30% of the total site area (including building footprint). A minimum of 25% of that outdoor space must be vegetated (turf grass does not count as vegetation) or have overhead vegetated canopy. The outdoor space must be physically accessible and be one or more of the following: a pedestrian-oriented paving or turf area with physical s elements that accommodate outdoor social activities; a recreation-oriented paving or turf area with physical site elements that encourage physical activity; a garden space with a diversity of vegetation types and species that provide passive recreation opportunities and/or year-round visual interest; a garden space dedicated to community gardens or urban food production; preserved or created habitat that meets the criteria of SS Credit Site Development—Protect or Restore Habitat and also includes elements of human interaction. **For projects that achieve a density of 1.5 floor-area ratio (FAR), and are physically accessible,**extensive or intensive vegetated roofs can be used toward the minimum 25% vegetation requirement, and qualifying roof-based physically accessible paving areas can be used toward credit compliance. Wetlands or naturally designed ponds may count as open space if the side slope gradients average 1:4 (vertical: horizontal) or less and are vegetated. **For projects that are part of a multitenant complex only**: Open space can be either adjacent to the building or at another location in the site master plan. The open space may be at another master plan development site as long as it is protected from development. If the open space is not adjacent to the building, provide documentation showing that the requirements have been met and the land is in a natural state or has been returned to a natural state and conserved for the life of the building.	1	d	Landscape Architect	Confirm not feasible
1	1			SSc4	**Rainwater management** (2) **Option 1. Path 1. 95th percentile (2 points):** In a manner best replicating natural site hydrology processes, manage on site the runoff from the developed site for the 95th percentile of regional or local rainfall events using low-impact development (LID) and green infrastructure. Use daily rainfall data and the methodology in the U.S. Environmental Protection Agency (EPA) Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act to determine the 95th percentile amount. **OR** **Path 2. 98th percentile (2 points):** Achieve Path 1 but for the 98th percentile of regional or local rainfall events, using LID and green infrastructure. **OR** **Path 3. Zero lot line projects only (2 points):** The following requirement applies to zero lot line projects in urban areas with a minimum density of 1.5 FAR. In a manner best replicating natural site hydrology processes, manage on site the runoff from the developed site for the 85th percentile of regional or local rainfall events, using LID and green infrastructure. **OR** **Option 2. Natural land cover conditions (2 points):** Manage on site the annual increase in runoff volume from the natural land cover condition to the post-developed condition. **Projects that are part of a multitenant complex only:** The credit requirements may be met using a coordinated approach affecting the defined project site that is within the master plan boundary. Distributed techniques based on a watershed approach are then required.	2	d	Civil Engineer	Confirm with Civil; Regional Priority
1				SSc5	**Heat island reduction** (1) **Option 1. Non-roof and Roof (1 point):** Meet the minimum area of high reflectance roof, vegetated roof and non-roof paving as calculated in the reference guide. Alternatively, a weighted SRI average approach may be used to calculate compliance. High reflectance roof is considered low sloped roof with an initial SRI of 82 and a 3-year aged SRI of 64 or a steep sloped roof with an initial SRI of 39 and a 3-year aged SRI of 32. OR **Option 2. Parking under cover (1 point):** Place 75% of the parking under a high SRI roof, vegetated roof or energy generation system.	1	c	Landscape Architect/Civil Engineer	
1				SSc6	**Light pollution reduction** (1) Meet uplight and light trespass requirements, using either the backlight-uplight-glare (BUG) method (Option 1) or the calculation method (Option 2). Projects may use different options for uplight and light trespass. Meet these requirements for all exterior luminaires located inside the project boundary (except those listed under "Exemptions"), based on the following: -the photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and -the lighting zone of the project property (at the time construction begins). Classify the project under on lighting zone using the lighting zones definitions provided in the Illuminating Engineering Society and International Dark Sky Association (IES/IDA) Model Lighting Ordinance (MLO) User Guide. Additionally, meet the internally illuminated signage requirement. **Option 1. BUG Rating Method** Do not exceed the luminaire uplight ratings, based on the specific light source installed in the luminaire, as defined in IES TM-15-11, Addendum A. **OR** **Option 2. Calculation Method** Do not exceed the percentages of total lumens emitted above horizontal	1	d	Lighting Designer	Confirm if feasible? Fountain area lit? Included?
	1			SSc7	**Places of Respite** (1) - Provide places of respite that are accessible to patients and visitors, equal to 5% of the net usable program area of the building. - Provide additional dedicated places of respite for staff, equal to 2% of the net usable program area of the building. - Places of respite must be outdoors, or be located in interior atria, greenhouses, solaria, or conditioned spaces; such interior spaces may be used to meet up to 30% of the required area if 90% of each qualifying space's gross floor area achieves a direct line of sight to unobstructed views of nature. All areas must meet requirements as listed in credit library, and outdoor areas must meet additional requirements listed in the credit library	1	d	Fong & Chan	Roof area? For garden, etc.
		1		SSc8	**Direct Exterior Access** (1) - Provide direct access to an exterior courtyard, terrace, garden, or balcony. The space must be at least 5 square feet (0.5 square meters) per patient for 75% of all inpatients and 75% of qualifying outpatients whose clinical length of stay (LOS) exceeds four hours. - Patients whose length of stay exceeds four hours, and whose treatment makes them unable to move, such as emergency, stage 1 surgical recovery, and critical care patients, may be excluded. - Places of respite outside the building envelope that meet the requirements of SS Credit Places of Respite that are immediately adjacent to clinical areas or with direct access from inpatient units may be included. - Qualifying spaces must be designated as nonsmoking The spaces must also meet the requirements for outdoor air contaminant concentrations enumerated in EQ Credit Enhanced Indoor Air Quality Strategies, Option 2 and be located more than 100 feet (30 meters) from building exhaust air locations, loading docks, and roadways with idling vehicles.	1	d	Fong & Chan	

Yes	Maybe?+	Maybe?-	No			Points			
4	4	3	0	**Water Efficiency (WE) - 11 Points Available**		11		**Responsible Party**	
Y				WEp1	**Outdoor water use reduction** (P) Reduce outdoor water use through one of the following options. Non-vegetated surfaces, such as permeable or impermeable pavement, should be excluded from landscape area calculations. Athletic fields and playgrounds (if vegetated) and food gardens may be included or excluded at the project team's discretion. Option 1. No irrigation required: Show that the landscape does not require a permanent irrigation system beyond a maximum two-year establishment period. **OR** **Option 2. Reduced irrigation:** Reduce the project's landscape water requirement by at least 30% from the calculated baseline for the site's peak watering month. Reductions must be achieved through plant species selection and irrigation system efficiency, as calculated by the Environmental Protection Agency (EPA) WaterSense Water Budget Tool.	P	d	Landscape Architect	

Y				WEp2	**Indoor water use reduction,** 20% (P) For the fixtures and fittings listed in Table 1, as applicable to the project scope, reduce aggregate water consumption by 20% from the baseline. Base calculations on the volumes and flow rates shown in Table 1. All newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling must be WaterSense labeled (or a local equivalent for projects outside the United States). Appliance and process water use: Install appliances, equipment, and processes within the project scope that meet the requirements listed in the tables below. Appliances and processes included in tables are: Residential clothes washers, commercial clothes washers, residential dishwashers, pre-rinse spray valves, ice machines, heat rejection and cooling, cooling towers and evaporative condensers	P	d	Mechanical Engineer/Fong & Chan/Owner	
Y				WEp3	**Building-level water metering** (P) Install permanent water meters that measure the total potable water use for the building and associated grounds. Meter data must be compiled into monthly and annual summaries; meter readings can be manual or automated. Commit to sharing with USGBC the resulting whole-project water usage data for a five-year period beginning on the date the project accepts LEED certification or typical occupancy, whichever comes first. This commitment must carry forward for five years or until the building changes ownership or lessee.	P	d	Owner	
1				WEc1	**Outdoor water use reduction** (1) Reduce outdoor water use through one of the following options. Non-vegetated surfaces, such as permeable or impermeable pavement, should be excluded from landscape area calculations. Athletic fields and playgrounds (if vegetated) and food gardens may be included or excluded at the project team's discretion. **Option 1. No irrigation required (1 point):**Show that the landscape does not require a permanent irrigation system beyond a maximum two-year establishment period. **OR** **Option 2. Reduced irrigation (1 point):**Reduce the project's landscape water requirement (LWR) by at least 50% from the calculated baseline for the site's peak watering month. Reductions must first be achieved through plant species selection and irrigation system efficiency as calculated in the Environmental Protection Agency (EPA) WaterSense Water Budget Tool.	1	d	Landscape Architect	
2	2	3		WEc2	**Indoor water use reduction** (1-5) Further reduce fixture and fitting water use from the calculated baseline in WE Prerequisite Indoor Water Use Reduction. Additional potable water savings can be earned above the prerequisite level using alternative water sources. Include fixtures and fittings necessary to meet the needs of the occupants. Some of these fittings and fixtures may be outside the tenant space (for Commercial Interiors) or project boundary (for New Construction). Points are awarded according to Table 1. Healthcare: 25%-1pt; 30%-2pts; 35%-3pts; 40%-4pts; 45%-5pts	7	d	Mechanical Engineer/Fong & Chan/Owner	
	2			WEc3	**Cooling tower water use** (1-2) For cooling towers and evaporative condensers, conduct a one-time potable water analysis, in order to optimize cooling tower cycles. Measure at least the five control parameters listed in Table 1: Maximum concentrations for parameters in condenser water- Ca (as CaCO3) - 1000ppm; Total alkalinity - 1000ppm; SiO2 - 100ppm; Cl - 250ppm; Conductivity - 2000µS/cm Calculate the number of cooling tower cycles by dividing the maximum allowed concentration level of each parameter by the actual concentration level of each parameter found in the potable makeup water. Limit cooling tower cycles to avoid exceeding maximum values for any of these parameters. Maximum number of cycles achieved without exceeding any filtration levels or affecting operation of condenser water system (up to maximum of 10 cycles)-1 pt. Achieve a minimum 10 cycles by increasing the level of treatment in condenser or make-up water OR Achieve the number of cycles for 1 point and use a minimum 20% recycled non-potable water - 2 pts.	2	d	n/a	Discuss with Mech Eng. Look at drift limits - manufacturer
1				WEc3	**Water metering** (1) Install permanent water meters for two or more of the following water subsystems, as applicable to the project: -Irrigation. Meter water systems serving at least 80% of the irrigated landscaped area. Calculate the percentage of irrigated landscape area served as the total metered irrigated landscape area divided by the total irrigated landscape area. Landscape areas fully covered with xeriscaping or native vegetation that requires no routine irrigation may be excluded from the calculation. -Indoor plumbing fixtures and fittings. Meter water systems serving at least 80% of the indoor fixtures and fitting described in WE Prerequisite Indoor Water Use Reduction, either directly or by deducting all other measured water use from the measured total water consumption of the building and grounds. - Domestic hot water. Meter water use of at least 80% of the installed domestic hot water heating capacity (including both tanks and on-demand heaters). -Boiler with aggregate projected annual water use of 100,000 gallons (378 500 liters) or more, or boiler of more than 500,000 BtuH (150 kW). A single makeup meter may record flows for multiple boilers. -Reclaimed water. Meter reclaimed water, regardless of rate. A reclaimed water system with a makeup water connection must also be metered so that the true reclaimed water component can be determined. -Other process water. Meter at least 80% of expected daily water consumption for process end uses, such as humidification systems, dishwashers, clothes washers, pools, and other subsystems using process water.	1	d	Owner/Mechanical Engineer	Discuss with Mech Eng.

Yes	Maybe?+	Maybe?-	No
8	7	6	14

					Energy & Atmosphere (EA) - 33 Points Available	Points 35		Responsible Party	Status
Y				EAp1	**Fundamental commissioning and verification** (P) Complete the following commissioning (Cx) process activities for mechanical, electrical, plumbing, and renewable energy systems and assemblies, in accordance with ASHRAE Guideline 0-2005 and ASHRAE Guideline 1.1–2007 for HVAC&R Systems, as they relate to energy, water, indoor environmental quality, and durability. Requirements for exterior enclosures are limited to inclusion in the owner's project requirements (OPR) and basis of design (BOD), as well as the review of the OPR, BOD and project design. NIBS Guideline 3-2006 for Exterior Enclosures provides additional guidance. By the end of the design development phase, engage a commissioning authority with the appropriate qualifications. **Current Facilities Requirements and Operations and Maintenance Plan** Prepare and maintain a current facilities requirements and operations and maintenance plan that contains the information necessary to operate the building efficiently. The plan must include the following: a sequence of operations for the building; the building occupancy schedule; equipment run-time schedules; setpoints for all HVAC equipment; set lighting levels throughout the building; minimum outside air requirements; any changes in schedules or setpoints for different seasons, days of the week, and times of day; a systems narrative describing the mechanical and electrical systems and equipment; a preventive maintenance plan for building equipment described in the systems narrative; and a commissioning program that includes periodic commissioning requirements, ongoing commissioning tasks, and continuous tasks for critical facilities.	P	c	Owner	

Y				EAp2	**Minimum Energy Performance** (P) **Option 1. Whole-building energy simulation:**Demonstrate an improvement of 5% for new construction, 3% for major renovations, or 2% for core and shell projects in the proposed building performance rating compared with the baseline building performance rating. Calculate the baseline building performance according to ANSI/ASHRAE/IESNA Standard 90.1–2010, Appendix G with errata (or a USGBC-approved equivalent standard for projects outside the United States), using a simulation model. Projects must meet the minimum percentage savings before taking credit for renewable energy systems. **The proposed design must meet the following criteria:** - compliance with the mandatory provisions of ANSI/ASHRAE/IESNA Standard 90.1–2010, with errata (or a USGBC-approved equivalent standard for projects outside the United States); - inclusion of all energy consumption and costs within and associated with the building project; and - comparison against a baseline building that complies with Standard 90.1–2010, Appendix G, with errata (or a USGBC-approved equivalent standard for projects outside the United States). Document the energy modeling input assumptions for unregulated loads. Unregulated loads should be modeled accurately to reflect the actual expected energy consumption of the building. If unregulated loads are not identical for both the baseline and the proposed building performance rating, and the simulation program cannot accurately model the savings, follow the exceptional calculation method (ANSI/ASHRAE/IESNA Standard 90.1–2010, G2.5). Alternatively, use the COMNET Modeling Guidelines and Procedures to document measures that reduce unregulated loads.	P	d	Arup	
Y				EAp3	**Building-level energy metering** (P) Install new or use existing building-level energy meters, or submeters that can be aggregated to provide building-level data representing total building energy consumption (electricity, natural gas, chilled water, steam, fuel oil, propane, biomass, etc.). Utility-owned meters capable of aggregating building-level resource use are acceptable. Commit to sharing with USGBC the resulting energy consumption data and electrical demand data (if metered) for a five-year period beginning on the date the project accepts LEED certification or typical occupancy , whichever comes first. At a minimum, energy consumption must be tracked at one-month intervals. This commitment must carry forward for five years or until the building changes ownership or lessee	P	d	Owner/Electrical Engineer	
Y				EAp4	**Fundamental Refrigerant Management** (P) Do not use chlorofluorocarbon (CFC)-based refrigerants in new heating, ventilating, air-conditioning, and refrigeration (HVAC&R) systems. When reusing existing HVAC&R equipment, complete a comprehensive CFC phase-out conversion before project completion. Phase-out plans extending beyond the project completion date will be considered on their merits. Existing small HVAC&R units (defined as containing less than 0.5 pound (225 grams) of refrigerant) and other equipment, such as standard refrigerators, small water coolers, and any other equipment that contains less than 0.5 pound (225 grams) of refrigerant, are exempt	P	d	Mechanical Engineer	
3	1		2	EAc1	**Enhanced commissioning** (2-6) **Option 1. Enhanced systems commissioning (3-4 points)Path 1: Enhanced commissioning (3 points)**Complete the following commissioning process (CxP) activities for mechanical, electrical, plumbing, and renewable energy systems and assemblies in accordance with ASHRAE Guideline 0–2005 and ASHRAE Guideline 1.1–2007 for HVAC&R systems, as they relate to energy, water, indoor environmental quality, and durability. The commissioning authority must do the following: Review contractor submittals; Verify inclusion of systems manual requirements in construction documents; Verify inclusion of operator and occupant training requirements in construction documents; Verify systems manual updates and delivery; Verify operator and occupant training delivery and effectiveness; Verify seasonal testing; Review building operations 10 months after substantial completion; Develop an on-going commissioning plan; Include all enhanced commissioning tasks in the OPR and BOD. **OR** **Path 2: Enhanced and monitoring-based commissioning (4 points)** **Achieve Path 1. AND** Develop monitoring-based procedures and identify points to be measured and evaluated to assess performance of energy- and water-consuming systems. Include the procedures and measurement points in the commissioning plan. Address the following: roles and responsibilities; measurement requirements (meters, points, metering systems, da access); the points to be tracked, with frequency and duration for trend monitoring; the limits of acceptable values for tracked points and metered values (where appropriate, predictive algorithms may be used to compare ideal values with actual values); the elements used to evaluate performance, including conflict between systems, out-of-sequence operation of systems components, and energy and water usage profiles; an action plan for identifying and correcting operational errors and deficiencies; training to prevent errors; planning for repairs needed to maintain performance; and the frequency of analyses in the first year of occupancy (at least quarterly). Update the systems manual with any modifications or new settings, and give the reason for any modifications from the original design. **AND/OR** **Option 2. Envelope commissioning (2 points):**Fulfill the requirements in EA Prerequisite Fundamental Commissioning and Verification as they apply to the building's thermal envelope in addition to mechanical and electrical systems and assemblies. Complete the following commissioning process (CxP) activities for the building's thermal envelope in accordance with ASHRAE Guideline 0–2005 and the National Institute of Building Sciences (NIBS) Guideline 3–2006, Exterior Enclosure Technical Requirements for the Commissioning Process, as they relate to energy, water, indoor environmental quality, and durability. Commissioning authority must complete the following: Review contractor submittals; Verify inclusion of systems manual requirements in construction documents; Verify inclusion of operator and occupant training requirements in construction documents; Verify systems manual updates and delivery; Verify operator and occupant training delivery and effectiveness; Verify seasonal testing; Review building operations 10 months after substantial completion; Develop an on-going commissioning plan.	6	c	Owner	Recommended Possibility for monitoring-based
3	3	4	10	EAc2	**Optimize energy performance** (3-20) Establish an energy performance target no later than the schematic design phase. The target must be established as kBtu per square foot-year (kW per square meter-year) of source energy use. **Option 1. Whole-building energy simulation (1–20 points):**Analyze efficiency measures during the design process and account for the results in design decision making. Use energy simulation of efficiency opportunities, past energy simulation analyses for similar buildings, or published data (e.g., Advanced Energy Design Guides) from analyses for similar buildings. Analyze efficiency measures, focusing on load reduction and HVAC-related strategies (passive measures are acceptable) appropriate for the facility. Project potential energy savings and holistic project cost implications related to all affected systems. Project teams pursuing the Integrative Process credit must complete the basic energy analysis for that credit before conducting the energy simulation. Follow the criteria in EA Prerequisite Minimum Energy Performance to demonstrate a percentage improvement in the proposed building performance rating compared with the baseline. Points are awarded according to the following percentages (New Construction): 6%-3; 8%-4; 10%-5; 12%-6; 14%-7; 16%-8; 18%-9, 20%-10; 22%-11; 24%-12; 26%-13; 29%-14; 32%-15; 35%-16; 38%-17; 42%-18; 46%-19; 50%-20 **Option 2. Prescriptive compliance: ASHRAE Advanced Energy Design Guide**(1–6 points) ASHRAE 50% Advanced Energy Design Guide for Large Hospitals	20	d	Arup	Call with Arch/Mech Eng to discuss study, EEM options
1				EAc3	**Advanced energy metering** (1) Install advanced energy metering for the following: all whole-building energy sources used by the building; and any individual energy end uses that represent 10% or more of the total annual consumption of the building. The advanced energy metering must have the following characteristics: Meters must be permanently installed, record at intervals of one hour or less, and transmit data to a remote location; Electricity meters must record both consumption and demand. Whole-building electricity meters should record the power factor, if appropriate; The data collection system must use a local area network, building automation system, wireless network, or comparable communication infrastructure; The system must be capable of storing all meter data for at least 36 months; The data mus be remotely accessible; All meters in the system must be capable of reporting hourly, daily, monthly, and annual energy use.	1	d	Owner/Electrical Engineer	Recommended

			2	EAc4	**Demand response** (1-2) Design building and equipment for participation in demand response programs through load shedding or shifting. On-site electricity generation does not meet the intent of this credit. **Case 1. Demand response program available (2 points):** Participate in an existing demand response (DR) program and complete the following activities. Design a system with the capability for real-time, fully-automated DR based on external initiation by a DR Program Provider. Semi-automated DR may be utilized in practice. Enroll in a minimum one-year DR participation amount contractual commitment with a qualified DR program provider, with the intention of multiyear renewal, for at least 10% of the estimated peak electricity demand. Peak demand is determined under EA Prerequisite Minimum Energy Performance. Develop a comprehensive plan for meeting the contractual commitment during a Demand Response event. Include the DR processes in the scope of work for the commissioning authority, including participation in at least one full test of the DR plan. OR **Case 2. Demand response program not available (1 point):** Provide infrastructure to take advantage of future demand response programs or dynamic, real-time pricing programs and complete the following activities. Install interval recording meters with communications and ability for the building automation system to accept an external price or control signal. Develop a comprehensive plan for shedding at least 10% of building estimated peak electricity demand. Peak demand is determined under EA Prerequisite Minimum Energy Performance. Include the DR processes in the scope of work for the commissioning authority, including participation in at least one full test of the DR plan. Contact local utility representatives to discuss participation in future DR programs.	2	d	Owner/Arup	
	1	2		EAc5	**Renewable energy production** (1-3) Use renewable energy systems to offset building energy costs. Calculate the percentage of renewable energy with the following equation: % renewable energy =(Equivalent cost of usable energy produced by the renewable energy system/Total building annual energy cost). Credit is based on the percentage of ownership or percentage of use assigned in the lease agreement. Points are awarded according to Table 1. (New Construction) 1% - 1pt; 5%-2 pts; 10%-3pts.	3	d	Owner/tbd	Question for team
1				EAc6	**Enhanced Refrigerant Management** (1) **Option 1. No refrigerants or low-impact refrigerants (1 point):** Do not use refrigerants, or use only refrigerants (naturally occurring or synthetic) that have an ozone depletion potential (ODP) of zero and a global warming potential (GWP) of less than 50. **OR** **Option 2. Calculation of refrigerant impact (1 point):** Select refrigerants that are used in heating, ventilating, air-conditioning, and refrigeration (HVAC&R) equipment to minimize or eliminate the emission of compounds that contribute to ozone depletion and climate change. The combination of all new and existing base building and tenant HVAC&R equipment that serve the project must comply with the formula provided in the reference guide	1	d	Mechanical Engineer	Confirm/discuss with Mech. Eng.
	2			EAc7	**Green power and carbon offsets** (1-2) Engage in a contract for qualified resources that have come online since January 1, 2005, for a minimum of five years, to be delivered at least annually. The contract must specify the provision at least 50% or 100% of the project's energy from green power, carbon offsets, or renewable energy certificates (RECs). Green power and RECs must be Green-e Energy certified or the equivalent. RECs can only be used to mitigate the effects of Scope 2, electricity use. Carbon offsets may be used to mitigate Scope 1 or Scope 2 emissions on a metric ton of carbon dioxide–equivalent basis and must be Green-e Climate certified, or the equivalent. For U.S. projects, the offsets must be from greenhouse gas emissions reduction projects within the United States. Determine the percentage of green power or offsets based on the quantity of energy consumed, not the cost. Points are awarded according to the following: 50%- 1pt; 100% - 2pts	2	c	Owner	

Yes	Maybe?+	Maybe?-	No			Points			
9	4	4	2	**Materials & Resources (MR)** - 13 Points Available		19		Responsible Party	Status
Y				MRp1	**Storage & Collection of Recyclables** (P) Provide dedicated areas accessible to waste haulers and building occupants for the collection and storage of recyclable materials for the entire building. Collection and storage areas may be separate locations. Recyclable materials must include mixed paper, corrugated cardboard, glass, plastics, and metals. Take appropriate measures for the safe collection, storage, and disposal of two of the following: batteries, mercury-containing lamps, and electronic waste	P	d	Fong & Chan/Andaz	
Y				MRp2	**Construction and demolition waste management planning** (P) Develop and implement a construction and demolition waste management plan: Establish waste diversion goals for the project by identifying at least five materials (both structural and non-structural) targeted for diversion. approximate a percentage of the overall project waste that these materials represent. Specify whether materials will be separated or commingled and describe the diversion strategies planned for the project. Describe where the materials will be taken and how the recycling facility will process the material. Provide a final report detailing all major waste streams generated, including disposal and diversion rates. Alternative daily cover (ADC) does not qualify as material diverted from disposal. Land-clearing debris is not considered construction, demolition, or renovation waste that can contribute to was diversion	P	c	Contractor	
Y				MRp3	**PBT Source Reduction - Mercury** As part of the project's recycling collection system, identify the following: types of mercury-containing products and devices to be collected; criteria governing how they are to be handled by a recycling program; and disposal methods for captured mercury. Comply with the mercury elimination requirements outlined below, from the 2010 FGI Guidelines for Design and Construction of Health Care Facilities, Section A1.3- 4b, Mercury Elimination. - 4.2.1.1. New construction: healthcare facilities may not use mercury-containing equipment, including thermostats, switching devices, and other building system sources. Lamps are excluded. Do not specify or install preheat, T-9, T-10, or T-12 fluorescents or mercury vapor high-intensity discharge (HID) lamps in the project. Do not specify probe-start metal halide HID lamps in any interior spaces. Specify and install illuminated exit signs that do not contain mercury and use less than 5 watts of electricity. Fluorescent and high-pressure sodium lamps must meet the criteria in Table 1.	P	c		Discuss with lighting designer
1	2		2	MRc1	**Building life-cycle impact reduction** (2-5) Demonstrate reduced environmental effects during initial project decision-making by reusing existing building resources or demonstrating a reduction in materials use through life-cycle assessment. Achieve one of the following options:**Option 1. historic building reuse (5 points) OR Option 2. renovation of abandoned or blighted building (5 points) OR Option 3. building and material reuse** (25% - 2 points, 50% - 3 points, 75% - 4 points) **OR Option 4. whole-building life-cycle assessment (3 points)**	5	c	Fong & Chan/Arup	Included in Arup scope as LEED Platinum option

1		1		MRc2	**Building product disclosure and optimization - environmental product declarations** (1-2) Achieve one or more of the options below, for a maximum of 2 points.**Option 1. environmental product declaration (EPD) (1 point):** Use at least 20 different permanently installed products from at least 5 different manufacturers that meet one of the disclosure criteria: Product-specific declaration (1 whole product); Industry-wide (generic) EPD (1 whole product); Product-specific Type III EPD (1.5 whole products); USGBC approved program **AND/OR** **Option 2. Multi-attribute optimization (1 point):**Use products that meet at least one of the attributes below for 10%, by cost, of the total value of permanently install products in the project: **Life Cycle Impact Reduction Action Plan (value at 50% by cost or ½ product)** The manufacturer has produced a product specific LCA using EN 15804 or ISO 21930 for the product and has provided a publicly available action plan to mitigate or reduce life cycle impacts. The action plan must be product-specific using the specified PCR functional unit, be critically reviewed, and must include the following information: Description of the LCA conducted including the dataset, software or platform used by manufacturer to complete the analysis; Identification of the largest life cycle impact areas identified in the analysis and a narrative description of the impact areas targeted for reduction in the action plan; Description of specific steps anticipated in implementation of the action plan. Include proposed changes in formulation or manufacturing processes that are planned as part of impact reduction strategy; Specific dates and a full timeline for completion of all the steps described in the action plan. **Life Cycle Impact Reductions in Embodied Carbon.** Products that have demonstrated environmental impact reductions for the specified functional unit based on a current third-party EPD or verified LCA that conforms to the comparability requirements of ISO 14025 and ISO 21930: The comparative analysis must show impact reduction in the global warming potential (GWP) impact category and must include a narrative describing how reductions in impacts were achieved. The published comparisons must be third-party verified (value at 100% by cost or 1 product); The comparative analysis must show impact reduction(s) of at least 10% in the global warming potential (GWP) impact category and must include a narrative describing how the impact reductions were achieved. The published comparisons must be third-party verified (value at 150% by cost or 1.5 products); The comparative analysis must show impact reduction(s) of at least 20% in the global warming potential (GWP) impact category, and demonstrate at least 5% reduction in two additional impact categories. A narrative describing how the impact reductions were achieved is required. The published comparisons must be third-party verified (value at 200% by cost or 2 products).	2	C	Fong & Chan/Contractor	
1		1		MRc3	**Building product disclosure and optimization - sourcing of raw materials** (1-2) **Responsible Sourcing of Raw Materials (1-2 points):**Use products that meet at least one of the responsible extraction criteria below for at least 20% (1pt) or 40% (2pts), by cost, of the total value of permanently installed building products in the project: Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for extended producer responsibility. Products meeting extended producer responsibility criteria are valued at 50% of their cost for the purposes of credit achievement calculation.; Bio-based products must meet the Sustainable Agriculture Network's Sustainable Agriculture Standard; Wood products must be certified by the Forest Stewardship Council or USGBC-approve equivalent; Materials reuse; Recycled content; Other programs for other material types meeting leadership extraction criteria that become available will be evaluated and added as appropriate. For credit achievement calculation, products sourced (extracted, manufactured, purchased) within 100 miles of the project site are valued at twice their base contributing cost (or number of products), up to a maximum of 200% cost, or 2 products.	2	C	Fong & Chan/Contractor	
1		1		MRc4	**Building product disclosure and optimization - material ingredients** (1-2) **Option 1. material ingredient reporting (1 point):**Use at least 20 different permanently installed products from at least 5 different manufacturers that use any of the approved programs to demonstrate the chemical inventory of the product. Compliant products must have chemicals inventoried to at least 0.1% (1000 ppm). Products must be sourced from at least 5 different manufacturers **AND/OR** **Option 2: material ingredient optimization (1 point):**Use permanently installed products from at least three different manufacturers that document their material ingredient optimization using the paths below. Choose either 10 compliant products, or select products that constitute at least 10%, by cost, of the total value of permanently installed products in the project. **Material Ingredient Screening and Optimization Action Plan (value at 50% by cost or ½ product):**The manufacturer has screened the product to at least 1,000 ppm and has provided a publicly available inventory meeting the requirements of Option 1 and completed a detailed action plan to mitigate or reduce known hazards using the principles of green chemistry. The action plan must be product-specific (not company, manufacturer or brand. **Advanced Inventory & Assessment (value at 100% by cost or 1 product):**The end use product meets the requirements of any of the following:Manufacturer Inventory or Health Product Declaration: The product has demonstrated a chemical inventory to at least 0.01% by weight (100 ppm) with no GreenScreen LT-1 hazards or GHS Category 1 hazards. The HPD or Manufacturer Inventory must be third party verified. Manufacturer Inventory or HPD: The product has demonstrated a chemical inventory to at least 0.01% by weight (100ppm) and at least 75% by weight of product is assessed using GreenScreen Benchmark assessment. The remaining 25% by weight of product has been inventoried. The GreenScreen assessment must be publicly available. The HPD or Manufacturer Inventory must be third-party verified. Declare labels designated as Red List Free that are third-party verified. Cradle to Cradle. Product has Material Health Certificate or is Cradle to Cradle Certified™ under standard version 3 or later with a Material Health achievement level at the Bronze level or higher. **Material Ingredient Optimization (value at 150% by cost or 1.5 products):**The end use product has demonstrated a product inventory and assessment of ingredients using any of the following programs: Manufacturer Inventory or HPD: The product has demonstrated a chemical inventory to at least 0.01% by weight (100ppm) and at least 95% by weight of product is assessed using GreenScreen Benchmark assessment. No Benchmark 1 hazards (BM-1) are present in the end use product. The remaining 5% by weight of product not assessed has been inventoried and screened using GreenScreen List Translator and no GreenScreen LT-1 hazards are present in the end use product. The documents must be third party verified. Cradle to Cradle. Product has Material Health Certificate or is Cradle to Cradle Certified™ under standard version 3 or later with a Material Health achievement level at the Silver level or higher.	2	C	Fong & Chan/Contractor	
1					**PBT Source Reduction - Mercury** (1) Specify and install fluorescent lamps with both low mercury content (MR Prerequisite PBT Source Reduction—Mercury) and long lamp life, as listed in Table 1. Do not specify or install circular fluorescent lamps or probe start metal halide lamps.	1			Discuss with team at kick-off
2					**PBT Source Reduction - Lead, Cadmium, and Copper** (2) Specify substitutes for materials manufactured with lead and cadmium, as follows: Lead: - Meet requirements for plumbing pipes, pipe fittings, plumbing fittings, faucets, solder and flux for water for human consumption; lead-free roofing and flashing, electrical wire and cable with <300ppm lead content - No interior or exterior paints containing lead; for renovation projects - Ensure removal and appropriate disposal of wires with lead stabilizers with the 2002 National Electric Code requirements - Lead used for radiation shielding and copper used for MRI shielding are exempt Cadmium: specify no use of interior or exterior paints containing intentionally added cadmium. Copper: for copper pipe applications, reduce or eliminate joint-related sources of copper corrosion: use mechanically crimped copper joint systems; or specify that all solder joints comply with ASTM B828 2002, and specify and use ASTM B813 2010 for flux.	2			Discuss with team at kick-off
1		1			**Furniture and Medical Furnishings** (2) Use at least 30% (1 point) or 40% (2 points), by cost, of all freestanding furniture and medical furnishings (e.g., mattresses, foams, panel fabrics, cubicle curtains, window coverings, other textiles) that meet the criteria in one of the following three options: - Option 1: minimal chemical content - Option 2: testing and modeling of chemical content - Option 3: multi-attribute assessment of products	2			Discuss with team at kick-off
	1				**Design for Flexibility** (1) Increase building flexibility and ease of adaptive use over the life of the structure by employing at least three of the following strategies. - Use interstitial space - Provide programmed soft space equal to at least 5% of departmental gross area (DGA) - Provide shell space equal to at least 5% of DGA. Locate it such that it can be occupied without displacing occupied space. - Identify horizontal expansion capacity for diagnostic and treatment or other clinical space equal to at least 30% of existing floor area (excluding inpatient units) without demolition of occupied space (other than at the connection point). - Designate space for future above-grade parking structures equal to 50% of existing on-grade parking capacity, with direct access to the main hospital lobby or circulation. - Use demountable partitions for 50% of applicable areas. - Use movable or modular casework for at least 50% of casework and custom millwork. See credit library for additional details	1			Architect to review

1	1			MRc5	**Construction and demolition waste management** (1-2) Recycle and/or salvage non-hazardous construction and demolition materials. Calculations can be by weight or volume but must be consistent throughout.**Option 1. diversion (1-2 points):Path 1. divert 50% and three material streams (1 point):** Divert at least 50% of the total construction and demolition material; diverted materials must include at least three material streams. **OR** **Path 2. divert 75% and four material streams (2 points):**Divert at least 75% of the total construction and demolition material; diverted materials must include at least four material streams. OR **Option 2. reduction of total waste material (2 points):** Do not generate more than 2.5 pounds of construction waste per square foot (12.2 kilograms of waste per square meter) of the building's floor area	2	c	Contractor	Discuss with team - cost estimator if contractor not yet on board

Yes	Maybe?+	Maybe?-	No			Points			
11	1	4	0		**Indoor Environmental Quality (IEQ)** - 16 Points Available	16		Responsible Party	Status
Y				IEQp1	**Minimum IAQ Performance** (P) Meet the requirements for both ventilation and monitoring. **Ventilation** **Mechanically ventilated spaces:** For mechanically ventilated spaces (and for mixed-mode systems when the mechanical ventilation is activated), determine the minimum outdoor air intake flow for mechanical ventilation systems using the ventilation rate procedure from ASHRAE Standard 170–2008, Section 7; the requirements of the 2010 FGI Guidelines for Design and Construction of Health Care Facilities (Table 2.1–2); or a local equivalent, whichever is most stringent. For any area not covered in 170 or the FGI guidelines, follow ASHRAE 62.1 or a local equivalent, whichever is more stringent and meet the minimum requirements of ASHRAE Standard 170–2008, Sections 6–8, Ventilation of Health Care Facilities (with errata) or a USGBC-approved equivalent standard for projects outside the U.S. **Naturally Ventilated Spaces**: For naturally ventilated spaces (and for mixed-mode systems when the mechanical ventilation is inactivated), determine the minimum outdoor air opening and space configuration requirements using the natural ventilation procedure of ASHRAE Standard 62.1–2010 (with errata) or a local equivalent, whichever is more stringent. Confirm that natural ventilation is an effective strategy for the project by following the flow diagram in Figure 2.8 of the Chartered Institution of Building Services Engineers (CIBSE) Applications Manual AM10, March 2005, Natural Ventilation in Nondomestic Buildings. **Monitoring** **Mechanically ventilated spaces:** For mechanically ventilated spaces (and for mixed-mode systems when the mechanical ventilation is activated), provide a direct outdoor airflow measurement device capable of measuring the minimum outdoor air intake flow. This device must measure the minimum outdoor air intake flow with an accuracy of +/–10% of the design minimum outdoor airflow rate defined by the ventilation requirements above. An alarm must alert staff whenever the outdoor airflow value varies by 15% or more from the outdoor airflow setpoint. **Naturally ventilated spaces:** For naturally ventilated spaces (and for mixed-mode systems when the mechanical ventilation is inactivated), comply with at least one of the following strategies. - Provide a direct exhaust airflow measurement device capable of measuring the exhaust airflow. This device must measure the exhaust airflow with an accuracy of +/–10% of the design minimum exhaust airflow rate. An alarm must indicate when airflow values vary by 15% or more from the exhaust airflow setpoint. - Provide automatic indication devices on all natural ventilation openings intended to meet the minimum opening requirements. An alarm must indicate when any one of the openings is closed during occupied hours. - Monitor carbon dioxide (CO2) concentrations within each thermal zone. CO2 monitors must be between 3 and 6 feet (90 and 180 centimeters) above the floor and within the thermal zone. CO monitors must have an audible or visual indicator or alert the building automation system if the sensed CO2 concentration exceeds the setpoint by more than 10%. Calculate appropriate CO2 setpoints using the methods in ASHRAE 62.1–2010, Appendix C.	P	d	Mechanical Engineer	
Y				IEQp2	**Environmental Tobacco Smoke** (ETS) **Control** (P) Prohibit smoking inside the building. Prohibit smoking outside the building except in designated smoking areas located at least 25 feet (7.5 meters) from all entries, outdoor air intakes, and operable windows. Also prohibit smoking outside the property line in spaces used for business purposes. If the requirement to prohibit smoking within 25 feet (7.5 meters) cannot be implemented because of code, provide documentation of these regulations. Signage must be posted within 10 feet (3 meters) of all building entrances indicating the no-smoking policy. Residential only **Option 1.** No Smoking: Meet the requirements above. OR **Option 2.** Compartmentalization of Smoking Areas Prohibit smoking inside all common areas of the building. The prohibition must be communicated in building rental or lease agreements or condo or coop association covenants and restrictions. Make provisions for enforcement. Prohibit smoking outside the building except in designated smoking areas located at least 25 feet (7.5 meters) from all entries, outdoor air intakes, and operable windows. The no-smoking policy also applies to spaces outside the property line used for business purposes. If the requirement to prohibit smoking within 25 feet (7.5 meters) cannot be implemented because of code, provide documentation of these regulations. Signage must be posted within 10 feet (3 meters) of all building entrances indicating the no-smoking policy. Each unit must be compartmentalized to prevent excessive leakage between units	P	d	Owner	
2				IEQc1	**Enhanced indoor air quality strategies** (1-2) **Option 1. Enhanced IAQ strategies (1 point):**Comply with all the following requirements, as applicable: A. Entryway systems: Install permanent entryway systems at least 10 feet (3 meters) long in the primary direction of travel to capture dirt and particulates entering the building at high-volume exterior entrances. Acceptable entryway systems include permanently installed grates, grilles, slotted systems that allow for cleaning underneath, rollout mats, and any other materials manufactured as entryway systems with equivalent or better performance. Maintain all on a weekly basis. B. Interior cross-contamination prevention: Sufficiently exhaust each space where hazardous gases or chemicals may be present or used (e.g., garages, housekeeping and laundry areas, copying and printing rooms), using the exhaust rates determined in EQ Prerequisite Minimum Indoor Air Quality Performance or a minimum of 0.50 cfm per square foot, to create negative pressure with respect to adjacent spaces when the doors to the room are closed. For each of these spaces, provide self-closing doors and deck-to-deck partitions or a hard-lid ceiling. C. Filtration: Each ventilation system that supplies outdoor air to occupied spaces must have particle filters or air-cleaning devices that meet one of the following filtration media requirements: minimum efficiency reporting value (MERV) of 13 or higher, in accordance with ASHRAE Standard 52.2–2007; or Class F7 or higher as defined by CEN Standard EN 779–2002, Particulate Air Filters for General Ventilation, Determination of the Filtration Performance. Replace all air filtration media after completion of construction and before occupancy. D. Natural ventilation design calculations: Demonstrate that the system design for occupied spaces employs the appropriate strategies in Chartered Institution of Building Services Engineers (CIBSE) Applications Manual AM10, March 2005, Natural Ventilation in Non-Domestic Buildings, Section 2.4. **Option 2. Additional Enhanced IAQ strategies (1 point):**Comply with one of the following requirements, as applicable. A. Exterior contamination prevention: Design the project to minimize and control the entry of pollutants into the building. Ensure through the results of computational fluid dynamics modeling, Gaussian dispersion analyses, wind tunnel modeling, or tracer gas modeling that outdoor air contaminant concentrations at outdoor air intakes are below the thresholds listed in Table 1 (projects outside the United States must follow the EPA guideline or local equivalent, whichever is more stringent). B. Increased ventilation: Increase breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates as determined in EQ Prerequisite Minimum Indoor Air Quality Performance. C. Carbon dioxide monitoring: Monitor CO2 concentrations within all densely occupied spaces. CO2 monitors must be between 3 and 6 feet (90 and 180 centimeters) above the floor. CO2 monitors must have an audible or visual indicator or alert the building automation system if the sensed CO2 concentration exceeds the setpoint by more than 10%. Calculate appropriate CO2 setpoints using methods in ASHRAE 62.1–2010, Appendix C. D. Additional source control and monitoring: For spaces where air contaminants are likely, evaluate potential sources of additional air contaminants besides CO2. Develop and implement a materials-handling plan to reduce the likelihood of contaminant release. Install monitoring systems with sensors designed to detect the specific contaminants. An alarm must indicate any unusual or unsafe conditions. E. Natural ventilation room-by-room calculations: Follow CIBSE AM10, Section 4, Design Calculations, to predict that room-by-room airflows will provide effective natural ventilation.	2	d	Fong & Chan/Mechanical Engineer	

3				IEQc2	**Low-Emitting Materials (1-3)** This credit includes requirements for product manufacturing as well as project teams. It covers volatile organic compound (VOC) emissions into indoor air and the VOC content of materials, as well as the testing methods by which indoor VOC emissions are determined. Different materials must meet different requirements to be considered compliant for this credit. The building interior and exterior are organized in seven categories, each with different thresholds of compliance. The building interior is defined as everything within the waterproofing membrane. The building exterior is defined as everything outside and inclusive of the primary and secondary weatherproofing system, such as waterproofing membranes and air- and water-resistive barrier materials. **Option 1. Product Category Calculations:** Achieve the threshold level of compliance with emissions and content standards for the number of product categories listed in Table 2. Table 2 includes: paints, coatings, sealants, adhesives, flooring, composite wood, ceilings, walls, thermal and acoustic insulation and furniture. For NC projects without furniture achieving 2 category awards 1 point, 4 categories awards 2 points, and 5 categories awards 3 points. **Option 2. Budget Calculation Method:** If some products in a category do not meet the criteria, project teams may use the budget calculation method (Table 3)≥ 50% and < 70%=1 point; ≥ 70% and < 90%=2 points; ≥ 90%= 3 points The budget method organizes the building interior into six assemblies: flooring; ceilings; walls; thermal and acoustic insulation; furniture Include furniture in the calculations if it is part of the scope of work. Walls, ceilings, and flooring are defined as building interior products; each layer of the assembly, including paints, coatings, adhesives, and sealants, must be evaluated for compliance. Insulation is tracked separately.	3	c	Fong & Chan/Contractor	
1				IEQc3	**Construction IAQ Management Plan** (1) Develop and implement an indoor air quality (IAQ) management plan for the construction and preoccupancy phases of the building. The plan must address all of the following: - *Moisture* - Protect absorptive materials stored on-site and installed from moisture damage. Particulates - Use MERV 8 filters, minimum, if operating permanently installed air-handling equipment during construction. Immediately before occupancy, replace all filtration media with the final design filtration media, installed in accordance with the manufacturer's recommendations. - *VOCs* - Schedule construction procedures to minimize exposure of absorbent materials to VOC emissions. - Outdoor emissions - For renovation projects involving waterproofing, repairing asphalt roofing, sealing parking lots, or other outdoor activities that generate high VOC emissions, develop a plan to manage fumes and avoid infiltration to occupied spaces. Comply with the procedures established by NIOSH, Asphalt Fume Exposures during the Application of Hot Asphalt to Roofs (Publication 2003–112). - *Tobacco* - Prohibit the use of tobacco products inside the building and within 25 feet (8 meters) of the building entrance during construction. - *Noise and Vibration* - Develop a plan based on the British Standard (BS 5228) to reduce noise emissions and vibrations from construction equipment and other nonroad engines by specifying low-noise emission design or the lowest decibel level available that meets performance requirements in the British Standard. Construction crews must wear ear protection in areas where sound levels exceed 85 dB for extended periods. - *Infection Control* - For renovations and additions adjacent to occupied facilities or phased occupancy in new construction, follow the FGI 2010 Guidelines for Design and Construction of Health Care Facilities and the Joint Commission on Standards to establish an integrative infection control team comprising the owner, designer, and contractor to evaluate infection control risk and document the required precautions in a project-specific plan. Use the infection control risk assessment standard published by the American Society of Healthcare Engineering and the U.S. Centers for Disease Control and Prevention (CDC) as a guideline to assess risk and to select mitigation procedures for construction activities	1	c	Contractor	
2				IEQc4	**Indoor Air Quality Assessment** (1-2) **Option 1. Flush-out (1 point):** **Path 1. Before occupancy:** Install new filtration media and perform a building flush-out by supplying a total air volume of 14,000 cubic feet of outdoor air per square foot (4270 cubic meters of outdoor air per square meter) of gross floor area while maintaining an internal temperature of at least 60°F (15°C) and no higher than 80°F (27°C) and relative humidity no higher than 60%.**OR** **Path 2. During occupancy:** If occupancy is desired before the flush-out is completed, the space may be occupied only after delivery of a minimum of 3,500 cubic feet of outdoor air per square foot (1065 cubic meters of outdoor air per square meter) of gross floor area while maintaining an internal temperature of at least 60°F (15°C) and no higher than 80°F (27°C) and relative humidity no higher than 60%. Once the space is occupied, it must be ventilated at a minimum rate of 0.30 cubic foot per minute (cfm) per square foot of outdoor air (1.5 liters of outside air per second per square meter) or the design minimum outdoor air rate determined in EQ Prerequisite Minimum Indoor Air Quality Performance, whichever is greater. During each day of the flush-out period, ventilation must begin at least three hours before occupancy and continue during occupancy. These conditions must be maintained until a total of 14,000 cubic feet per square foot of outdoor air (4270 cubic meters of outdoor air per square meter) has been delivered to the space. **OR** **Option 2. Air testing (2 points):**After construction ends and before occupancy, but under ventilation conditions typical for occupancy, conduct baseline IAQ testing using protocols consistent with the methods listed in Table 1 for all occupied spaces. Use current versions of ASTM standard methods, EPA compendium methods, or ISO methods, as indicated. Laboratories that conduct the tests for chemical analysis of formaldehyde and volatile organic compounds must be accredited under ISO/IEC 17025 for the test methods they use. Retail projects may conduct the testing within 14 days of occupancy. Conduct all measurements before occupancy but during normal occupied hours, with the building ventilation system started at the normal daily start time and operated at the minimum outdoor airflow rate for the occupied mode throughout the test. For each sampling point where the concentration exceeds the limit, take corrective action and retest for the noncompliant contaminants at the same sampling points. Repeat until all requirements are met.	2	c	Contractor/Mechanical Engineer	Discuss with team
1				IEQc5	**Thermal comfort** (1) Meet the requirements for both thermal comfort design and thermal comfort control. Thermal comfort design **Option 1. ASHRAE Standard 55-2010:** Design heating, ventilating, and air-conditioning (HVAC) systems and the building envelope to meet the requirements of ASHRAE Standard 55–2010, Thermal Comfort Conditions for Human Occupancy, with errata or a local equivalent. Demonstrate design compliance in accordance with Section 6.2, Documentation. For natatoriums, demonstrate compliance with ASHRAE HVAC Applications Handbook, 2011 edition, Chapter 5, Places of Assembly, Typical Natatorium Design Conditions, with errata. **OR** **Option 2. ISO and CEN Standards:** Design HVAC systems and the building envelope to meet the requirements of the following two standards: ISO 7730, Ergonomics of the Thermal Environment, Analytical Determination and Interpretation of Thermal Comfort, using calculation of the PMV and PPD indices and local thermal comfort criteria; and CEN Standard EN 15251, Indoor Environmental Input Parameters for Design and Assessment of Energy Performance of Buildings, addressing indoor air quality, thermal environment, lighting, and acoustics. **Thermal comfort control** Provide individual thermal comfort controls for at least 50% of individual occupant spaces. Provide group thermal comfort controls for all shared multi-occupant spaces, and for any individual occupant spaces without individual controls. Thermal comfort controls allow occupants, whether in individual spaces or shared multi-occupant spaces, to adjust at least one of the following in their local environment: air temperature, radiant temperature, air speed, and humidity. **Guest rooms are assumed to provide adequate thermal comfort controls and therefore are not included in the credit calculations.**	1	d	Mechanical Engineer	
1				IEQc6	**Interior lighting** (1) Provide individual lighting controls for at least 90% of individual occupant spaces in staff areas. For at least 90% of patient positions, provide lighting controls that are readily accessible from the patient's bed. In multioccupant patient spaces, the controls must be individual lighting controls. In private rooms, also provide exterior window shades, blinds, or curtain controls that are readily accessible from the patient's bed. Exceptions include in-patient critical care, pediatric, and psychiatric patient rooms. For all shared multioccupant spaces, provide multizone control systems that enable occupants to adjust the lighting to meet group needs and preferences, with at least three lighting levels or scenes (on, off, midlevel). Midlevel is 30% to 70% of the maximum illumination level (not including daylight contributions).	1	d	Lighting Designer	

		2		IEQc7	**Daylight** (1-2) Provide manual or automatic (with manual override) glare-control devices for all regularly occupied spaces. Select one of the following three options: **Option 1. Simulation: Spatial Daylight Autonomy (2–3 points):**Demonstrate through annual computer simulations that spatial daylight autonomy 300/50% (sDA300/50%) of at least 55%, 75%, or 90% is achieved. Use regularly occupied floor area. Healthcare projects should use the perimeter area determined under EQ Credit Quality Views. Points are awarded according to percentage: 55%=2 points, 75%=3 points **AND** Demonstrate through annual computer simulations that annual sunlight exposure1000,250 (ASE1000,250) of no more than 10% is achieved. Use the regularly occupied floor area that is daylit per the sDA300/50% simulations. The sDA and ASE calculation grids should be no more than 2 feet (60 cm) square and laid out across the regularly occupied area at a work plane height of 30 inches (76 cm) above finished floor (unless otherwise defined). Use an hourly time-step analysis based on typical meteorological year data, or an equivalent, for the nearest available weather station. Include any permanent interior obstructions. Movable furniture and partitions may be excluded. **Option 2. Simulation: Illuminance Calculations (1–2 points):**Demonstrate through computer modeling that illuminance levels will be between 300 lux and 3,000 lux for 9 a.m. and 3 p.m., both on a clear-sky day at the equinox, for the floor area indicated in Table 2 (75%=1 point, 90%=2 points) Use regularly occupied floor area. Healthcare projects should use the perimeter area determined under EQ Credit Quality Views. **Option 3. Measurement (2-3 points):** Achieve illuminance levels between 300 lux and 3,000 lux. Points are awarded according to percentage: 75%=2 points, 90%=3 poir	2	d	Lighting Designer/Fong & Chan	
		2		IEQc8	**Quality views** (2) Achieve a direct line of sight to the outdoors via vision glazing for 75% of all regularly occupied floor area. View glazing in the contributing area must provide a clear image of the exterior, not obstructed by frits, fibers, patterned glazing, or added tints that distort color balance. Additionally, 75% of all regularly occupied floor area must have at least two of the following four kinds of views: multiple lines of sight to vision glazing in different directions at least 90 degrees apart; views that include at least two of the following: (1) flora, fauna, or sky; (2) movement; and (3) objects at least 25 feet from the exterior of the glazing; unobstructed views located within the distance of three times the head height of the vision glazing; and views with a view factor of 3 or greater, as defined in "Windows and Offices; A Study of Office Worker Performance and the Indoor Environment. "Include in the calculations any permanent interior obstructions (e.g., lab hoods, fixed partitions, demountable opaque full- or partial-height partitions). Movable furniture and partitions may be excluded. Views into interior atria may be used to meet up to 30% of the required area. - For inpatient units (IPUs), meet the requirements above (1 point). - For other areas, configure the building floor plates such that the floor area within 15 feet (4.5 meters) of the perimeter exceeds the perimeter area requirement (Table 1), and meet the requirements above for the perimeter area (1 point).	2	d	Fong & Chan	
1	1			IEQc9	**Acoustic performance** (2) Design the facility to meet or exceed the sound and vibration criteria outlined below, which are adapted from the 2010 FGI Guidelines for Design and Construction of Health Care Facilities ("20 FGI Guidelines") and the reference document on which it is based, Sound and Vibration Design Guidelines for Health Care Facilities ("2010 SV Guidelines"). **Option 1. Speech Privacy, Sound Isolation, and Background Noise**(1 point) **Speech Privacy and Sound Isolation** Design the facility to meet the criteria outlined in the sections of Table 1.2-3, Design Criteria for Minimum Sound Isolation Performance between Enclosed Rooms, and Table 1.2-4 Speech Privacy for Enclosed Room and Open-Plan Spaces (in the 2010 FGI Guidelines and 2010 SV Guidelines). Calculate or measure sound isolation and speech privacy descriptors achieved for representative adjacencies as necessary to confirm compliance with the criteria in the 2010 FGI Guidelines, Sections1.2-6.1.5 and 1.2-6.1.6, and the 2010 SV Guidelines (including the appendix). **Background Noise:** Design the facility to meet the 2010 FGI Guidelines, Table 1.2-2 Minimum-Maximum Design Criteria for Noise in representative interior rooms and spaces. Calculate or measure sound levels in representative rooms and spaces of each type to confirm compliance with criteria in the above-referenced table using a sound level meter that conforms to ANSI S1.4 for type 1 (precision) or type 2 (general purpose) sound measurement instrumentation. For spaces not listed in Table 1.2-2, refer to ASHRAE 2011 Handbook, Chapter 48, Sound and Vibration Control, Table 1. **Option 2. Acoustical Finishes and Site Exterior Noise**(1 point) **Acoustical Finishes** Specify materials, products systems installation details, and other design features to meet the 2010 FGI Guidelines, Table 1.2-1, Design Room Sound Absorption Coefficients (including associated sections of the appendix) and the 2010 SV Guidelines. Calculate or measure the average sound absorption coefficients for representative unoccupied rooms of each type in the building to confirm conformance with the requirements. **Site Exterior Noise**: Comply with the 2010 FGI Guidelines as specifie	2	d	Fong & Chan	Discuss with team at kick-off

Yes	Maybe?+	Maybe?-	No			Points		Responsible Party	Status
6	**0**	**0**	**0**	**Innovation & Design Process (ID)** - 6 Points Available		**6**			
1				IDc1.1	**Innovation in Design: Green Building Education Program**	1	d/c	Arup/Owner	
1				IDc1.2	**Innovation in Design: Low Mercury Lighting**	1	d/c	Arup/Lighting Designer/Owner	
1				IDc1.3	**Innovation in Design: tbd**	1	d/c	Arup/tbd	
1				IDc1.4	**Innovation in Design: tbd**	1	d/c	Arup/tbd	
1				IDc1.5	**Pilot credit: tbd**	1	d/c	Arup/tbd	
1				IDc2	**LEED® Accredited Professional** (1) At least one principal participant of the project team must be a LEED Accredited Professional (AP) with a specialty appropriate for the project	1	d/c	Arup	

Yes	Maybe?+	Maybe?-	No			Points		Responsible Party	Status
3	**1**	**0**	**0**	**Regional Priority (RP)** - 4 Points Available		**4**			
1				RPc1.1	**Regional Priority**: MRc3 BPDO - Sourcing of Raw Materials must achieve 1 point	1	d/c	see above	
1				RPc1,2	**Regional Priority**: SSc4 Rainwater Management must achieve 3 points	1	d/c	see above	
1				RPc1.3	**Regional Priority**: WEc1 Outdoor Water Use Reduction must achieve 1 points	1	d/c	see above	
	1			RPc1.4	**Regional Priority**: WEc2 Indoor Water Use Reduction must achieve 4 points	1	d/c	see above	
				Alt.	**Regional Priority**: EAc2 Optimize Energy Performance must achieve 10 points	0	d/c	see above	
				Alt.	**Regional Priority**: LTc5 Access to Quality Transit must achieve 2 points	0	d/c	see above	

LEED v4 for BD+C: Healthcare

Project Checklist

Project Name: California Northstate University Hospital, Elk Grove, CA
Date: 6/18/2019

Y	?	N			
Y			Prereq	Integrative Project Planning and Design	Required
1			Credit	Integrative Process	1

4	1	4	Location and Transportation		9
		9	Credit	LEED for Neighborhood Development Location	9
1			Credit	Sensitive Land Protection	1
		2	Credit	High Priority Site	2
1			Credit	Surrounding Density and Diverse Uses	1
		2	Credit	Access to Quality Transit	2
1			Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

4	5		Sustainable Sites		9
Y			Prereq	Construction Activity Pollution Prevention	Required
Y			Prereq	Environmental Site Assessment	Required
1			Credit	Site Assessment	1
	1		Credit	Site Development - Protect or Restore Habitat	1
	1		Credit	Open Space	1
1	1		Credit	Rainwater Management	2
1			Credit	Heat Island Reduction	1
1			Credit	Light Pollution Reduction	1
	1		Credit	Places of Respite	1
	1		Credit	Direct Exterior Access	1

4	7		Water Efficiency		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1			Credit	Outdoor Water Use Reduction	1
2	5		Credit	Indoor Water Use Reduction	7
	2		Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

8	13	14	Energy and Atmosphere		35
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
3	1	2	Credit	Enhanced Commissioning	6
3	7	10	Credit	Optimize Energy Performance	20
1			Credit	Advanced Energy Metering	1
		2	Credit	Demand Response	2
	3		Credit	Renewable Energy Production	3
1			Credit	Enhanced Refrigerant Management	1
	2		Credit	Green Power and Carbon Offsets	2

9	8	2	Materials and Resources		19
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
Y			Prereq	PBT Source Reduction- Mercury	Required
1	2	2	Credit	Building Life-Cycle Impact Reduction	5
1	1		Credit	BPDO - Environmental Product Declarations	2
1	1		Credit	BPDO - Sourcing of Raw Materials	2
1	1		Credit	BPDO - Material Ingredients	2
1			Credit	PBT Source Reduction- Mercury	1
2			Credit	PBT Source Reduction- Lead, Cadmium, and Copper	2
1	1		Credit	Furniture and Medical Furnishings	2
	1		Credit	Design for Flexibility	1
1	1		Credit	Construction and Demolition Waste Management	2

11	5		Indoor Environmental Quality		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
2			Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1			Credit	Interior Lighting	1
	2		Credit	Daylight	2
	2		Credit	Quality Views	2
1	1		Credit	Acoustic Performance	2

6			Innovation		6
5			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

3	1		Regional Priority		4
1			Credit	Regional Priority: BPDO - Sourcing of Raw Materials (1)	1
1			Credit	Regional Priority: Rainwater Management (3)	1
1			Credit	Regional Priority: Outdoor Water Use Reduction (1)	1
	1		Credit	Regional Priority: Indoor Water Use Reduction (4)	1
				Alternate: Optimize Energy Performance (10)	
				Alternate: Access to Quality Transit (2)	

50	40	20	TOTALS	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

Attachment B

Construction Emissions Modeling

Summary of Construction GHG Emissions

Construction

Phase	Year	Off-Road Equipment	On-Road Travel	MTCO2e
1	2020	607	453	1,267
1	2021	417	1,394	1,810
1	2022	30	1,215	1,245
2A	2023	36	7	43
2A	2024	297	223	520
2B	2024	164	615	779
2B	2025	56	112	168
2C	2023	35	7	43
2C	2024	247	429	676
2C	2025	14	335	349
2D	2025	223	49	271
3A	2026	39	8	47
3A	2027	214	195	409
3B	2027	76	15	91
3B	2028	141	180	321
3C	2029	134	98	232
Total		**2,732**	**5,334**	**8,273**

Total by Year				
	Year	Off-Road Equipment	On-Road Travel	MTCO2e
	2020	607	453	1,267
	2021	417	1,394	1,810
	2022	30	1,215	1,245
	2023	71	15	86
	2024	709	1,267	1,976
	2025	292	495	787
	2026	39	8	47
	2027	290	210	500
	2028	141	180	321
	2029	134	98	232
Total				**8,273**

Construction Modeling Inputs

Phase 1 - Hospital	CalEEMod Land Use	Land Use Size	Unit
Hospital	Hospital	596,790	sq ft
		250	beds
Hospital Parking Garage	Enclosed Parking Garage with Elevator	230	spaces
		33,290	sq ft
Central Plant	General Light Industry	22,850	sq ft
Central Plant Parking Garage	Enclosed Parking Garage with Elevator	80	spaces
		14,650	sq ft
Mechanical Yard	Parking Lot	15,500	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation/Demolition	5/1/2020	12/31/2020	20	8	37,199	-	Demolition of State Farm/CNU Psychology College, Dreaming Dog Brewery, Stone Bake Oven/PK Pizza/++, Flaming Grill/Miyabi/Marie's
Excavation	7/1/2020	10/15/2020	30	25	0	45,000	
Foundation	10/16/2020	2/28/2021	75	125	0	-	
Structural Framing	12/1/2020	6/30/2021	50	30	0	-	
Exterior Enclosure/Arch Coating	5/1/2021	10/31/2021	35	20	0	-	
Hospital Interior	5/1/2021	11/30/2022	450	100	0	-	

Phase 2A - Retail/Parking Garage 1	CalEEMod Land Use	Land Use Size	Unit
Parking Garage 1	Unenclosed Parking Garage with Elevator	205,600	sq ft
		1,500	spaces
Retail	Strip Mall	51400	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation/Demolition	12/1/2023	1/15/2024	20	8	83,201		Demolition of All-Data building and Stonelake Animal Hospital/Results Transformation
Excavation	1/31/2024	3/15/2024	20	15	0	22,844	51,400 SF – 12 Ft deep
Foundation	3/16/2024	5/15/2024	50	30	0	0	
Structural Framing	5/16/2024	7/15/2024	30	20	0	0	
Exterior Enclosure/Arch Coating	7/16/2024	9/15/2024	20	20	0	0	
Interior	9/16/2024	12/31/2024	100	20	0	0	

Phase 2B - Patient Tower 2	CalEEMod Land Use	Land Use Size	Unit
Hospital	Hospital	103,210	sq ft
		150	beds

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	7/1/2024	8/15/2024	20	8	0	0	
Structural Framing	8/16/2024	1/15/2025	45	30	0	0	
Exterior Enclosure/Arch Coating	1/16/2025	3/31/2025	30	20	0	0	
Interior	4/1/2024	1/31/2025	100	60	0	0	

Phase 2C - MOB/Out-Patient Clinic	CalEEMod Land Use	Land Use Size	Unit
Medical Office Building	Medical Office Building	100,000	sq ft
Out-Patient Clinic	Hospital	134,800	sq ft
Parking Garage	Enclosed Parking Garage with Elevator	170	spaces
		33,700	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	12/1/2023	1/15/2024	20	8	0	0	
Excavation	1/16/2024	2/15/2024	20	15	0	21,219	33,700 SF – 17 Ft deep
Foundation	2/16/2024	4/15/2024	50	30	0	0	
Structural Framing	4/16/2024	7/15/2024	30	20	0	0	
Exterior Enclosure/Arch Coating	7/16/2024	10/15/2024	30	20	0	0	
Interior	10/16/2024	5/30/2025	80	20	0	0	

Phase 2D - Central Quad Landscape Area	CalEEMod Land Use	Land Use Size	Unit
Landscape Area	City Park	140,000	sq ft
		3.2139	acre

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	5/1/2025	10/31/2025	30	8	0	0	

Phase 3A - Retail/Parking Garage 2	CalEEMod Land Use	Land Use Size	Unit
Parking Garage 2	Unenclosed Parking Garage with Elevator	165,600	sq ft
		1,000	spaces
Retail	Strip Mall	41,400	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation/Demolition	12/1/2026	1/15/2027	20	8	14,546	0	
Excavation	1/16/2027	2/15/2027	20	15	0	18,400	41,400 SF – 12 Ft deep
Foundation	2/16/2027	4/15/2027	50	30	0	0	
Structural Framing	4/16/2027	6/15/2027	30	20	0	0	
Exterior Enclosure/Arch Coating	6/16/2027	8/15/2027	20	20	0	0	
Interior	8/16/2027	11/30/2027	30	20	0	0	

Phase 3B - Dormitory/Admin Support Building	CalEEMod Land Use	Land Use Size	Unit
Dormitory	Apartments Mid-Rise	96,000	sq ft
		150	dwelling units
Admin Support	General Office Building	24,000	sq ft

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	11/1/2027	1/15/2028	20	8	0	0	
Foundation	1/16/2028	2/15/2028	50	30	0	0	
Structural Framing	2/16/2028	3/31/2028	30	20	0	0	
Exterior Enclosure/Arch Coating	6/1/2028	8/15/2028	20	20	0	0	
Interior	8/16/2028	12/31/2028	60	20	0	0	

Phase 3C - Parking /Sport Building	CalEEMod Land Use	Land Use Size	Unit
Parking Structure	Enclosed Parking Garage with Elevator	70,000	sq ft
		200	spaces

Construction Activities	Start Date	End Date	Maximum Workers	Maximum Haul Truck Trips (per day)	Demolition Debris (sq ft)	Export Material (cy)	Notes
Site Preparation	1/1/2029	2/15/2029	20	10	0	0	
Excavation	2/16/2029	4/15/2029	20	10	0	15,556	35,000 SF – 12 Ft deep
Foundation	4/16/2029	6/15/2029	30	20	0	0	
Structural Framing	6/16/2029	7/15/2029	20	20	0	0	
Exterior Enclosure/Arch Coating	7/16/2029	9/15/2029	20	5	0	0	
Interior	9/16/2029	10/31/2029	20	5	0	0	

Vegetation Change Calculation

	Number of trees	MTCO2e
Trees Removed for Construction	292	207

Notes

Assumed all trees removed are fully mature

Assumed new planted trees are miscellaneous mix of species

Source: CalEEMod 2016.3.2

Proposed Project Phasing and Land Uses

PHASE	ADDRESS	APN	PARCEL SIZE (Sq Ft)	EXISTING						DEMOLISH	PROPOSED					
				USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)		USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)
Phase 1	2501 West Taron Court	132-2480-004	39,890	Dreaming Dog Brewery	6,449	6,449	1	0	1	Y	CNU Med Center (Hospital Podium/West Tower w/Helistop)	85,000	596,790	13	1	14
	2505 West Taron Court	132-2480-001	52,238	Stone Bake Oven/PK Pizza/++	13,598	13,598	1	0	1	Y						
	No Address	132-2480-005	95,323	Parking Lot	-	-	0	0	0	Y						
	2509/2513 West Taron Court	132-2480-002	50,825	Flaming Grill/Miyabi/Marie's	12,000	12,000	1	0	1	Y						
	2521 West Taron Court	132-2480-008	26,040	Stonelake Animal Hospital/Results Transformation	7,201	7,201	1	0	1	N	Stonelake Animal Hospital/Results Transformation	7,201	7,201	1	0	1
	2525 West Taron Court	132-2480-003	27,606	State Farm/CNU Psychology College	5,152	5,152	1	0	1	Y	Surface Parking Lot	0	0	0	0	0
	2615 West Taron Court	132-2480-011	28,886	Vacant Bldg	7,354	7,354	1	0	1	N	Dreaming Dog Brewery	7,354	7,354	1	0	1
	2619 West Taron Court	132-2480-010	29,083	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1	N	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1
	No Address	132-2160-002	35,511	Vacant Land	-	-	0	0	0	N	Vacant Land	0	0	0	0	0
	9650 West Taron Drive	132-2160-001	374,256	All-Data	76,000	76,000	1	0	1	N	All-Data	76,000	76,000	1	0	1
					14,650	22,000	2	0	2	N	Central Plant	14,650	37,500	2	1	3
					15,500	15,500	1	0	1	N	Mechanical Yard	15,500	15,500	1	0	1
	9700 West Taron Drive	132-0460-076	303,200	CNU School	54,900	109,800	2	0	2	N	CNU School	54,900	109,800	2	0	2

Proposed Project Phasing and Land Uses

PHASE	ADDRESS	APN	PARCEL SIZE (Sq Ft)	EXISTING						DEMOLISH	PROPOSED					
				USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)		USE	FLOOR PLATE AREA (Sq Ft)	TOTAL BLDG AREA (Sq Ft)	LEVELS ABOVE GRADE (#)	BASEMENT LEVELS (#)	TOTAL LEVELS (#)
Phase 2	2501 West Taron Court	132-2480-004	39,890	CNU Med Center (Hospital Podium/West Tower w/Helistop)	85,000	566,500	13	1	14	N	CNU Med Center (Hospital Podium/West Tower w/Helistop/East Tower)	85,000	733,290	13	1	14
	2505 West Taron Court	132-2480-001	52,238													
	No Address	132-2480-005	95,323													
	2509/2513 West Taron Court	132-2480-002	50,825													
	2521 West Taron Court	132-2480-008	26,040	Stonelake Animal Hospital/Results Transformation	7,201	7,201	1	0	1	Y	Surface Parking Lot	0	0	0	0	0
	2525 West Taron Court	132-2480-003	27,606	Surface Parking Lot	-	-	0	0	0	Y	Out-Patient Clinic	33,700	168,500	4	1	5
	2615 West Taron Court	132-2480-011	28,886	Dreaming Dog Brewery	7,354	7,354	1	0	1	N	Dreaming Dog Brewery	7,354	7,354	1	0	1
	2619 West Taron Court	132-2480-010	29,083	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1	N	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1
	9650 West Taron Drive	132-2160-001	374256	Central Plant	14,650	22,000	2	0	2	N	Central Plant	14,650	37,500	2	1	3
				Mechanical Yard	15,500	15,500	1	0	1	N	Mechanical Yard	15,500	15,500	1	0	1
				All-Data	76,000	76,000	1	0	1	Y	Medical Office Building	20,000	100,000	5	0	5
											Open Space	0	0	0	0	0
											Parking Garage/Retail South	51,400	257,000	4	1	5
	9700 West Taron Drive	132-0460-076	303,200	CNU School	54,900	109,800	2	0	2	N	CNU School	54,900	109,800	2	0	2

Proposed Project Phasing and Land Uses

PHASE	ADDRESS	APN	PARCEL SIZE (Sq Ft)	EXISTING USE	EXISTING FLOOR PLATE AREA (Sq Ft)	EXISTING TOTAL BLDG AREA (Sq Ft)	EXISTING LEVELS ABOVE GRADE (#)	EXISTING BASEMENT LEVELS (#)	EXISTING TOTAL LEVELS (#)	DEMOLISH	PROPOSED USE	PROPOSED FLOOR PLATE AREA (Sq Ft)	PROPOSED TOTAL BLDG AREA (Sq Ft)	PROPOSED LEVELS ABOVE GRADE (#)	PROPOSED BASEMENT LEVELS (#)	PROPOSED TOTAL LEVELS (#)
Phase 3	2501 West Taron Court	132-2480-004	39,890	CNU Med Center (Hospital Podium/West Tower w/Helistop/East Tower)	85,000	733,290	13	1	14	N	CNU Med Center (Hospital Podium/West Tower w/Helistop/East Tower)	85,000	733,290	13	1	14
	2505 West Taron Court	132-2480-001	52,238													
	No Address	132-2480-005	95,323													
	2509/2513 West Taron Court	132-2480-002	50,825													
	2521 West Taron Court	132-2480-008	26,040	Surface Parking Lot	-	-	0	0	0	N	Surface Parking Lot	0	0	0	0	0
	2525 West Taron Court	132-2480-003	27,606	Out-Patient Clinic	33,700	168,500	4	1	5	N	Out-Patient Clinic	33,700	168,500	4	1	5
	2615 West Taron Court	132-2480-011	28,886	Dreaming Dog Brewery	7,354	7,354	1	0	1	Y	Parking Garage/Retail North	41,400	207,000	4	1	5
	2619 West Taron Court	132-2480-010	29,083	Hea Tea/Authentic Sole/India Kitchen/Stonelake Wine & Spirits	7,192	7,192	1	0	1	Y						
	9650 West Taron Drive	132-2160-001	374,256	Medical Office Building/Open Space	20,000	100,000	5	0	5	N	Medical Office Building/Open Space	20,000	100,000	5	0	5
				Open Space	-	-	0	0	0	N	Open Space	0	0	0	0	0
				Central Plant	14,650	22,000	2	0	2	N	Central Plant	14,650	37,500	2	1	3
				Mechanical Yard	15,500	15,500	1	0	1	N	Mechanical Yard	15,500	15,500	1	0	1
	9700 West Taron Drive	132-0460-076	303,200	CNU School	54,900	109,800	2	0	2	N	CNU School	54,900	109,800	2	0	2
				CNU School Surface Parking	-	-	0	0	0	Y	Dormitory/Admin Support	24,000	120,000	5	0	5
											Student Parking/Sport Courts	35,000	70,000	2*	1	2

* = 1 STORY WITH ROOFTOP SPORT COURTS

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	596.79	1000sqft	13.70	596,790.00	0
General Light Industry	22.85	1000sqft	0.52	22,850.00	0
Enclosed Parking with Elevator	230.00	Space	2.07	33,290.00	0
Enclosed Parking with Elevator	80.00	Space	0.72	14,650.00	0
Parking Lot	15.50	1000sqft	0.36	15,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2022
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading - 45,000 CY exported under excavation phase

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	309820	0
tblAreaCoating	Area_Nonresidential_Interior	929460	0
tblAreaCoating	Area_Parking	3806	0
tblConstructionPhase	NumDays	20.00	175.00
tblConstructionPhase	NumDays	10.00	77.00
tblConstructionPhase	NumDays	30.00	96.00
tblConstructionPhase	NumDays	300.00	152.00
tblConstructionPhase	NumDays	20.00	130.00
tblConstructionPhase	NumDays	20.00	413.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	4.57	0.00
tblEnergyUse	LightingElect	4.98	0.00

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tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	7.20	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24NG	12.42	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	3.41	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24NG	23.39	0.00
tblEnergyUse	T24NG	57.91	0.00
tblGrading	AcresOfGrading	240.00	75.00
tblGrading	MaterialExported	0.00	45,000.00
tblLandUse	LandUseSquareFeet	92,000.00	33,290.00
tblLandUse	LandUseSquareFeet	32,000.00	14,650.00
tblSolidWaste	SolidWasteGenerationRate	28.33	0.00
tblSolidWaste	SolidWasteGenerationRate	6,445.33	0.00
tblTripsAndVMT	HaulingTripNumber	169.00	0.00
tblTripsAndVMT	HaulingTripNumber	5,625.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	25.00

tblTripsAndVMT	VendorTripNumber	0.00	125.00
tblTripsAndVMT	VendorTripNumber	112.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	100.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblTripsAndVMT	WorkerTripNumber	20.00	75.00
tblTripsAndVMT	WorkerTripNumber	227.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	35.00
tblTripsAndVMT	WorkerTripNumber	45.00	450.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblWater	IndoorWaterUseRate	5,284,062.50	0.00
tblWater	IndoorWaterUseRate	74,885,530.01	0.00
tblWater	OutdoorWaterUseRate	14,263,910.48	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2020	0.6560	7.7177	4.3112	0.0116	1.0572	0.3083	1.3655	0.5173	0.2855	0.8028	0.0000	1,055.3404	1,055.3404	0.2058	0.0000	1,060.4854
2021	1.7948	6.9927	4.8657	0.0193	0.7495	0.1704	0.9198	0.2302	0.1591	0.3893	0.0000	1,805.4865	1,805.4865	0.1869	0.0000	1,810.1598
2022	1.9372	3.1536	2.1487	0.0131	0.5940	0.0217	0.6156	0.1597	0.0210	0.1807	0.0000	1,243.9729	1,243.9729	0.0609	0.0000	1,245.4960
Maximum	**1.9372**	**7.7177**	**4.8657**	**0.0193**	**1.0572**	**0.3083**	**1.3655**	**0.5173**	**0.2855**	**0.8028**	**0.0000**	**1,805.4865**	**1,805.4865**	**0.2058**	**0.0000**	**1,810.1598**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2020	0.6560	7.7177	4.3112	0.0116	1.0572	0.3083	1.3655	0.5173	0.2855	0.8028	0.0000	1,055.3397	1,055.3397	0.2058	0.0000	1,060.4847
2021	1.7948	6.9927	4.8657	0.0193	0.7495	0.1704	0.9198	0.2302	0.1591	0.3893	0.0000	1,805.4860	1,805.4860	0.1869	0.0000	1,810.1593
2022	1.9372	3.1536	2.1487	0.0131	0.5940	0.0217	0.6156	0.1597	0.0210	0.1807	0.0000	1,243.9729	1,243.9729	0.0609	0.0000	1,245.4959
Maximum	**1.9372**	**7.7177**	**4.8657**	**0.0193**	**1.0572**	**0.3083**	**1.3655**	**0.5173**	**0.2855**	**0.8028**	**0.0000**	**1,805.4860**	**1,805.4860**	**0.2058**	**0.0000**	**1,810.1593**

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	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2020**	**7-31-2020**	1.8748	1.8748
2	**8-1-2020**	**10-31-2020**	3.2695	3.2695
3	**11-1-2020**	**1-31-2021**	4.4478	4.4478
4	**2-1-2021**	**4-30-2021**	1.6709	1.6709
5	**5-1-2021**	**7-31-2021**	2.7114	2.7114
6	**8-1-2021**	**10-31-2021**	2.1123	2.1123
7	**11-1-2021**	**1-31-2022**	1.4733	1.4733
8	**2-1-2022**	**4-30-2022**	1.3596	1.3596
9	**5-1-2022**	**7-31-2022**	1.3851	1.3851
10	**8-1-2022**	**9-30-2022**	0.9184	0.9184
		Highest	4.4478	4.4478

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	2.4252	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.4252**	**1.1000e-004**	**0.0121**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0235**	**0.0235**	**6.0000e-005**	**0.0000**	**0.0250**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	2.4252	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.4252**	**1.1000e-004**	**0.0121**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0235**	**0.0235**	**6.0000e-005**	**0.0000**	**0.0250**

	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	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 1 Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2020	12/31/2020	5	175	
2	Excavation	Site Preparation	7/1/2020	10/15/2020	5	77	
3	Foundation	Grading	10/16/2020	2/26/2021	5	96	
4	Structural Framing	Building Construction	12/1/2020	6/30/2021	5	152	
5	Exterior Enclosure	Paving	5/1/2021	10/29/2021	5	130	
6	Hospital Interior	Architectural Coating	5/1/2021	11/30/2022	5	413	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.15

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 929,460; Non-Residential Outdoor: 309,820; Striped Parking Area: 3,806 (Architectural Coating – sqft)

OffRoad Equipment

Phase 1 Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Excavation	Rubber Tired Dozers	3	8.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Foundation	Excavators	2	8.00	158	0.38
Foundation	Graders	1	8.00	187	0.41
Foundation	Rubber Tired Dozers	1	8.00	247	0.40
Foundation	Scrapers	2	8.00	367	0.48
Foundation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structural Framing	Welders	1	8.00	46	0.45
Exterior Enclosure	Pavers	2	8.00	130	0.42
Exterior Enclosure	Paving Equipment	2	8.00	132	0.36
Exterior Enclosure	Rollers	2	8.00	80	0.38
Hospital Interior	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase 1 Construction - Sacramento County, Annual

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
Demolition	6	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	7	30.00	25.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	8	75.00	125.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	50.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosure	6	35.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Hospital Interior	1	450.00	100.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

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	tons/yr										MT/yr					
Fugitive Dust					0.0191	0.0000	0.0191	2.8900e-003	0.0000	2.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2898	2.9051	1.9034	3.4000e-003		0.1451	0.1451		0.1349	0.1349	0.0000	297.4878	297.4878	0.0840	0.0000	299.5873
Total	**0.2898**	**2.9051**	**1.9034**	**3.4000e-003**	**0.0191**	**0.1451**	**0.1642**	**2.8900e-003**	**0.1349**	**0.1378**	**0.0000**	**297.4878**	**297.4878**	**0.0840**	**0.0000**	**299.5873**

3.2 Demolition - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.3800e-003	0.2011	0.0455	5.5000e-004	0.0118	7.2000e-004	0.0125	3.2400e-003	6.9000e-004	3.9300e-003	0.0000	53.5587	53.5587	3.1100e-003	0.0000	53.6366
Worker	6.5100e-003	4.4200e-003	0.0484	1.3000e-004	0.0129	9.0000e-005	0.0130	3.4200e-003	9.0000e-005	3.5000e-003	0.0000	11.3879	11.3879	3.2000e-004	0.0000	11.3959
Total	**0.0119**	**0.2055**	**0.0939**	**6.8000e-004**	**0.0247**	**8.1000e-004**	**0.0255**	**6.6600e-003**	**7.8000e-004**	**7.4300e-003**	**0.0000**	**64.9466**	**64.9466**	**3.4300e-003**	**0.0000**	**65.0325**

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	tons/yr										MT/yr					
Fugitive Dust					0.0191	0.0000	0.0191	2.8900e-003	0.0000	2.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2898	2.9051	1.9034	3.4000e-003		0.1451	0.1451		0.1349	0.1349	0.0000	297.4875	297.4875	0.0840	0.0000	299.5869
Total	**0.2898**	**2.9051**	**1.9034**	**3.4000e-003**	**0.0191**	**0.1451**	**0.1642**	**2.8900e-003**	**0.1349**	**0.1378**	**0.0000**	**297.4875**	**297.4875**	**0.0840**	**0.0000**	**299.5869**

3.2 Demolition - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.3800e-003	0.2011	0.0455	5.5000e-004	0.0118	7.2000e-004	0.0125	3.2400e-003	6.9000e-004	3.9300e-003	0.0000	53.5587	53.5587	3.1100e-003	0.0000	53.6366
Worker	6.5100e-003	4.4200e-003	0.0484	1.3000e-004	0.0129	9.0000e-005	0.0130	3.4200e-003	9.0000e-005	3.5000e-003	0.0000	11.3879	11.3879	3.2000e-004	0.0000	11.3959
Total	**0.0119**	**0.2055**	**0.0939**	**6.8000e-004**	**0.0247**	**8.1000e-004**	**0.0255**	**6.6600e-003**	**7.8000e-004**	**7.4300e-003**	**0.0000**	**64.9466**	**64.9466**	**3.4300e-003**	**0.0000**	**65.0325**

3.3 Excavation - 2020

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	tons/yr										MT/yr					
Fugitive Dust					0.7002	0.0000	0.7002	0.3830	0.0000	0.3830	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1569	1.6331	0.8283	1.4600e-003		0.0846	0.0846		0.0778	0.0778	0.0000	128.7081	128.7081	0.0416	0.0000	129.7488
Total	**0.1569**	**1.6331**	**0.8283**	**1.4600e-003**	**0.7002**	**0.0846**	**0.7848**	**0.3830**	**0.0778**	**0.4609**	**0.0000**	**128.7081**	**128.7081**	**0.0416**	**0.0000**	**129.7488**

3.3 Excavation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.4000e-003	0.2766	0.0625	7.6000e-004	0.0162	9.9000e-004	0.0172	4.4600e-003	9.5000e-004	5.4100e-003	0.0000	73.6433	73.6433	4.2800e-003	0.0000	73.7503
Worker	4.3000e-003	2.9200e-003	0.0320	8.0000e-005	8.4800e-003	6.0000e-005	8.5400e-003	2.2600e-003	6.0000e-005	2.3100e-003	0.0000	7.5160	7.5160	2.1000e-004	0.0000	7.5213
Total	**0.0117**	**0.2795**	**0.0945**	**8.4000e-004**	**0.0247**	**1.0500e-003**	**0.0258**	**6.7200e-003**	**1.0100e-003**	**7.7200e-003**	**0.0000**	**81.1593**	**81.1593**	**4.4900e-003**	**0.0000**	**81.2716**

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	tons/yr										MT/yr					
Fugitive Dust					0.7002	0.0000	0.7002	0.3830	0.0000	0.3830	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1569	1.6331	0.8283	1.4600e-003		0.0846	0.0846		0.0778	0.0778	0.0000	128.7080	128.7080	0.0416	0.0000	129.7486
Total	**0.1569**	**1.6331**	**0.8283**	**1.4600e-003**	**0.7002**	**0.0846**	**0.7848**	**0.3830**	**0.0778**	**0.4609**	**0.0000**	**128.7080**	**128.7080**	**0.0416**	**0.0000**	**129.7486**

3.3 Excavation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.4000e-003	0.2766	0.0625	7.6000e-004	0.0162	9.9000e-004	0.0172	4.4600e-003	9.5000e-004	5.4100e-003	0.0000	73.6433	73.6433	4.2800e-003	0.0000	73.7503
Worker	4.3000e-003	2.9200e-003	0.0320	8.0000e-005	8.4800e-003	6.0000e-005	8.5400e-003	2.2600e-003	6.0000e-005	2.3100e-003	0.0000	7.5160	7.5160	2.1000e-004	0.0000	7.5213
Total	**0.0117**	**0.2795**	**0.0945**	**8.4000e-004**	**0.0247**	**1.0500e-003**	**0.0258**	**6.7200e-003**	**1.0100e-003**	**7.7200e-003**	**0.0000**	**81.1593**	**81.1593**	**4.4900e-003**	**0.0000**	**81.2716**

3.4 Foundation - 2020

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	tons/yr										MT/yr					
Fugitive Dust					0.2054	0.0000	0.2054	0.0953	0.0000	0.0953	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1224	1.3804	0.8789	1.7100e-003		0.0598	0.0598		0.0550	0.0550	0.0000	149.8318	149.8318	0.0485	0.0000	151.0433
Total	**0.1224**	**1.3804**	**0.8789**	**1.7100e-003**	**0.2054**	**0.0598**	**0.2652**	**0.0953**	**0.0550**	**0.1503**	**0.0000**	**149.8318**	**149.8318**	**0.0485**	**0.0000**	**151.0433**

3.4 Foundation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0264	0.9877	0.2232	2.7100e-003	0.0580	3.5300e-003	0.0615	0.0159	3.3800e-003	0.0193	0.0000	263.0117	263.0117	0.0153	0.0000	263.3939
Worker	7.6800e-003	5.2100e-003	0.0571	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003	0.0000	13.4214	13.4214	3.8000e-004	0.0000	13.4309
Total	**0.0341**	**0.9929**	**0.2803**	**2.8600e-003**	**0.0732**	**3.6400e-003**	**0.0768**	**0.0200**	**3.4800e-003**	**0.0234**	**0.0000**	**276.4331**	**276.4331**	**0.0157**	**0.0000**	**276.8248**

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	tons/yr										MT/yr					
Fugitive Dust					0.2054	0.0000	0.2054	0.0953	0.0000	0.0953	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1224	1.3804	0.8789	1.7100e-003		0.0598	0.0598		0.0550	0.0550	0.0000	149.8316	149.8316	0.0485	0.0000	151.0431
Total	**0.1224**	**1.3804**	**0.8789**	**1.7100e-003**	**0.2054**	**0.0598**	**0.2652**	**0.0953**	**0.0550**	**0.1503**	**0.0000**	**149.8316**	**149.8316**	**0.0485**	**0.0000**	**151.0431**

3.4 Foundation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0264	0.9877	0.2232	2.7100e-003	0.0580	3.5300e-003	0.0615	0.0159	3.3800e-003	0.0193	0.0000	263.0117	263.0117	0.0153	0.0000	263.3939
Worker	7.6800e-003	5.2100e-003	0.0571	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003	0.0000	13.4214	13.4214	3.8000e-004	0.0000	13.4309
Total	**0.0341**	**0.9929**	**0.2803**	**2.8600e-003**	**0.0732**	**3.6400e-003**	**0.0768**	**0.0200**	**3.4800e-003**	**0.0234**	**0.0000**	**276.4331**	**276.4331**	**0.0157**	**0.0000**	**276.8248**

3.4 Foundation - 2021

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	tons/yr										MT/yr					
Fugitive Dust					0.1632	0.0000	0.1632	0.0722	0.0000	0.0722	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0859	0.9512	0.6330	1.2700e-003		0.0407	0.0407		0.0374	0.0374	0.0000	111.7147	111.7147	0.0361	0.0000	112.6180
Total	**0.0859**	**0.9512**	**0.6330**	**1.2700e-003**	**0.1632**	**0.0407**	**0.2039**	**0.0722**	**0.0374**	**0.1096**	**0.0000**	**111.7147**	**111.7147**	**0.0361**	**0.0000**	**112.6180**

3.4 Foundation - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0183	0.6762	0.1546	1.9900e-003	0.0432	2.3200e-003	0.0455	0.0119	2.2200e-003	0.0141	0.0000	193.7852	193.7852	0.0112	0.0000	194.0647
Worker	5.3200e-003	3.4800e-003	0.0389	1.1000e-004	0.0113	8.0000e-005	0.0114	3.0000e-003	7.0000e-005	3.0800e-003	0.0000	9.6644	9.6644	2.5000e-004	0.0000	9.6707
Total	**0.0236**	**0.6797**	**0.1935**	**2.1000e-003**	**0.0545**	**2.4000e-003**	**0.0569**	**0.0149**	**2.2900e-003**	**0.0172**	**0.0000**	**203.4496**	**203.4496**	**0.0114**	**0.0000**	**203.7355**

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	tons/yr										MT/yr					
Fugitive Dust					0.1632	0.0000	0.1632	0.0722	0.0000	0.0722	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0859	0.9512	0.6330	1.2700e-003		0.0407	0.0407		0.0374	0.0374	0.0000	111.7146	111.7146	0.0361	0.0000	112.6179
Total	**0.0859**	**0.9512**	**0.6330**	**1.2700e-003**	**0.1632**	**0.0407**	**0.2039**	**0.0722**	**0.0374**	**0.1096**	**0.0000**	**111.7146**	**111.7146**	**0.0361**	**0.0000**	**112.6179**

3.4 Foundation - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0183	0.6762	0.1546	1.9900e-003	0.0432	2.3200e-003	0.0455	0.0119	2.2200e-003	0.0141	0.0000	193.7852	193.7852	0.0112	0.0000	194.0647
Worker	5.3200e-003	3.4800e-003	0.0389	1.1000e-004	0.0113	8.0000e-005	0.0114	3.0000e-003	7.0000e-005	3.0800e-003	0.0000	9.6644	9.6644	2.5000e-004	0.0000	9.6707
Total	**0.0236**	**0.6797**	**0.1935**	**2.1000e-003**	**0.0545**	**2.4000e-003**	**0.0569**	**0.0149**	**2.2900e-003**	**0.0172**	**0.0000**	**203.4496**	**203.4496**	**0.0114**	**0.0000**	**203.7355**

3.5 Structural Framing - 2020

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	tons/yr										MT/yr					
Off-Road	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6352	26.6352	6.5000e-003	0.0000	26.7976
Total	**0.0244**	**0.2206**	**0.1938**	**3.1000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**26.6352**	**26.6352**	**6.5000e-003**	**0.0000**	**26.7976**

3.5 Structural Framing - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.6500e-003	0.0991	0.0224	2.7000e-004	5.8200e-003	3.5000e-004	6.1800e-003	1.6000e-003	3.4000e-004	1.9400e-003	0.0000	26.3968	26.3968	1.5300e-003	0.0000	26.4352
Worker	2.1400e-003	1.4500e-003	0.0159	4.0000e-005	4.2200e-003	3.0000e-005	4.2500e-003	1.1200e-003	3.0000e-005	1.1500e-003	0.0000	3.7417	3.7417	1.1000e-004	0.0000	3.7444
Total	**4.7900e-003**	**0.1006**	**0.0383**	**3.1000e-004**	**0.0100**	**3.8000e-004**	**0.0104**	**2.7200e-003**	**3.7000e-004**	**3.0900e-003**	**0.0000**	**30.1385**	**30.1385**	**1.6400e-003**	**0.0000**	**30.1796**

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	tons/yr										MT/yr					
Off-Road	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6351	26.6351	6.5000e-003	0.0000	26.7976
Total	**0.0244**	**0.2206**	**0.1938**	**3.1000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**26.6351**	**26.6351**	**6.5000e-003**	**0.0000**	**26.7976**

3.5 Structural Framing - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.6500e-003	0.0991	0.0224	2.7000e-004	5.8200e-003	3.5000e-004	6.1800e-003	1.6000e-003	3.4000e-004	1.9400e-003	0.0000	26.3968	26.3968	1.5300e-003	0.0000	26.4352
Worker	2.1400e-003	1.4500e-003	0.0159	4.0000e-005	4.2200e-003	3.0000e-005	4.2500e-003	1.1200e-003	3.0000e-005	1.1500e-003	0.0000	3.7417	3.7417	1.1000e-004	0.0000	3.7444
Total	**4.7900e-003**	**0.1006**	**0.0383**	**3.1000e-004**	**0.0100**	**3.8000e-004**	**0.0104**	**2.7200e-003**	**3.7000e-004**	**3.0900e-003**	**0.0000**	**30.1385**	**30.1385**	**1.6400e-003**	**0.0000**	**30.1796**

3.5 Structural Framing - 2021

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	tons/yr										MT/yr					
Off-Road	0.1226	1.1244	1.0691	1.7400e-003		0.0618	0.0618		0.0581	0.0581	0.0000	149.4060	149.4060	0.0361	0.0000	150.3072
Total	**0.1226**	**1.1244**	**1.0691**	**1.7400e-003**		**0.0618**	**0.0618**		**0.0581**	**0.0581**	**0.0000**	**149.4060**	**149.4060**	**0.0361**	**0.0000**	**150.3072**

3.5 Structural Framing - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0138	0.5106	0.1167	1.5000e-003	0.0326	1.7500e-003	0.0344	8.9600e-003	1.6700e-003	0.0106	0.0000	146.3315	146.3315	8.4400e-003	0.0000	146.5426
Worker	0.0112	7.3000e-003	0.0816	2.2000e-004	0.0237	1.7000e-004	0.0239	6.3000e-003	1.5000e-004	6.4500e-003	0.0000	20.2717	20.2717	5.3000e-004	0.0000	20.2850
Total	**0.0250**	**0.5179**	**0.1983**	**1.7200e-003**	**0.0563**	**1.9200e-003**	**0.0582**	**0.0153**	**1.8200e-003**	**0.0171**	**0.0000**	**166.6032**	**166.6032**	**8.9700e-003**	**0.0000**	**166.8275**

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	tons/yr										MT/yr					
Off-Road	0.1226	1.1244	1.0691	1.7400e-003		0.0618	0.0618		0.0581	0.0581	0.0000	149.4059	149.4059	0.0361	0.0000	150.3070
Total	**0.1226**	**1.1244**	**1.0691**	**1.7400e-003**		**0.0618**	**0.0618**		**0.0581**	**0.0581**	**0.0000**	**149.4059**	**149.4059**	**0.0361**	**0.0000**	**150.3070**

3.5 Structural Framing - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0138	0.5106	0.1167	1.5000e-003	0.0326	1.7500e-003	0.0344	8.9600e-003	1.6700e-003	0.0106	0.0000	146.3315	146.3315	8.4400e-003	0.0000	146.5426
Worker	0.0112	7.3000e-003	0.0816	2.2000e-004	0.0237	1.7000e-004	0.0239	6.3000e-003	1.5000e-004	6.4500e-003	0.0000	20.2717	20.2717	5.3000e-004	0.0000	20.2850
Total	**0.0250**	**0.5179**	**0.1983**	**1.7200e-003**	**0.0563**	**1.9200e-003**	**0.0582**	**0.0153**	**1.8200e-003**	**0.0171**	**0.0000**	**166.6032**	**166.6032**	**8.9700e-003**	**0.0000**	**166.8275**

3.6 Exterior Enclosure - 2021

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	tons/yr										MT/yr					
Off-Road	0.0816	0.8397	0.9525	1.4800e-003		0.0441	0.0441		0.0405	0.0405	0.0000	130.1526	130.1526	0.0421	0.0000	131.2050
Paving	4.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0821**	**0.8397**	**0.9525**	**1.4800e-003**		**0.0441**	**0.0441**		**0.0405**	**0.0405**	**0.0000**	**130.1526**	**130.1526**	**0.0421**	**0.0000**	**131.2050**

3.6 Exterior Enclosure - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.2600e-003	0.3430	0.0784	1.0100e-003	0.0219	1.1800e-003	0.0231	6.0200e-003	1.1200e-003	7.1400e-003	0.0000	98.3106	98.3106	5.6700e-003	0.0000	98.4524
Worker	7.8800e-003	5.1500e-003	0.0576	1.6000e-004	0.0167	1.2000e-004	0.0168	4.4400e-003	1.1000e-004	4.5500e-003	0.0000	14.3002	14.3002	3.8000e-004	0.0000	14.3096
Total	**0.0171**	**0.3482**	**0.1360**	**1.1700e-003**	**0.0386**	**1.3000e-003**	**0.0399**	**0.0105**	**1.2300e-003**	**0.0117**	**0.0000**	**112.6107**	**112.6107**	**6.0500e-003**	**0.0000**	**112.7619**

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	tons/yr										MT/yr					
Off-Road	0.0816	0.8397	0.9525	1.4800e-003		0.0441	0.0441		0.0405	0.0405	0.0000	130.1525	130.1525	0.0421	0.0000	131.2048
Paving	4.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0821**	**0.8397**	**0.9525**	**1.4800e-003**		**0.0441**	**0.0441**		**0.0405**	**0.0405**	**0.0000**	**130.1525**	**130.1525**	**0.0421**	**0.0000**	**131.2048**

3.6 Exterior Enclosure - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.2600e-003	0.3430	0.0784	1.0100e-003	0.0219	1.1800e-003	0.0231	6.0200e-003	1.1200e-003	7.1400e-003	0.0000	98.3106	98.3106	5.6700e-003	0.0000	98.4524
Worker	7.8800e-003	5.1500e-003	0.0576	1.6000e-004	0.0167	1.2000e-004	0.0168	4.4400e-003	1.1000e-004	4.5500e-003	0.0000	14.3002	14.3002	3.8000e-004	0.0000	14.3096
Total	**0.0171**	**0.3482**	**0.1360**	**1.1700e-003**	**0.0386**	**1.3000e-003**	**0.0399**	**0.0105**	**1.2300e-003**	**0.0117**	**0.0000**	**112.6107**	**112.6107**	**6.0500e-003**	**0.0000**	**112.7619**

3.7 Hospital Interior - 2021

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	tons/yr										MT/yr					
Archit. Coating	1.2207					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.1336	0.1590	2.6000e-004		8.2300e-003	8.2300e-003		8.2300e-003	8.2300e-003	0.0000	22.3410	22.3410	1.5300e-003	0.0000	22.3793
Total	**1.2399**	**0.1336**	**0.1590**	**2.6000e-004**		**8.2300e-003**	**8.2300e-003**		**8.2300e-003**	**8.2300e-003**	**0.0000**	**22.3410**	**22.3410**	**1.5300e-003**	**0.0000**	**22.3793**

3.7 Hospital Interior - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0623	2.3089	0.5277	6.8000e-003	0.1476	7.9100e-003	0.1555	0.0405	7.5700e-003	0.0481	0.0000	661.7057	661.7057	0.0382	0.0000	662.6601
Worker	0.1364	0.0891	0.9966	2.7400e-003	0.2892	2.0200e-003	0.2912	0.0769	1.8600e-003	0.0788	0.0000	247.5030	247.5030	6.5000e-003	0.0000	247.6654
Total	**0.1987**	**2.3980**	**1.5243**	**9.5400e-003**	**0.4368**	**9.9300e-003**	**0.4467**	**0.1174**	**9.4300e-003**	**0.1269**	**0.0000**	**909.2087**	**909.2087**	**0.0447**	**0.0000**	**910.3255**

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	tons/yr										MT/yr					
Archit. Coating	1.2207					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.1336	0.1590	2.6000e-004		8.2300e-003	8.2300e-003		8.2300e-003	8.2300e-003	0.0000	22.3409	22.3409	1.5300e-003	0.0000	22.3793
Total	**1.2399**	**0.1336**	**0.1590**	**2.6000e-004**		**8.2300e-003**	**8.2300e-003**		**8.2300e-003**	**8.2300e-003**	**0.0000**	**22.3409**	**22.3409**	**1.5300e-003**	**0.0000**	**22.3793**

3.7 Hospital Interior - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0623	2.3089	0.5277	6.8000e-003	0.1476	7.9100e-003	0.1555	0.0405	7.5700e-003	0.0481	0.0000	661.7057	661.7057	0.0382	0.0000	662.6601
Worker	0.1364	0.0891	0.9966	2.7400e-003	0.2892	2.0200e-003	0.2912	0.0769	1.8600e-003	0.0788	0.0000	247.5030	247.5030	6.5000e-003	0.0000	247.6654
Total	**0.1987**	**2.3980**	**1.5243**	**9.5400e-003**	**0.4368**	**9.9300e-003**	**0.4467**	**0.1174**	**9.4300e-003**	**0.1269**	**0.0000**	**909.2087**	**909.2087**	**0.0447**	**0.0000**	**910.3255**

3.7 Hospital Interior - 2022

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	tons/yr										MT/yr					
Archit. Coating	1.6602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.1676	0.2158	3.5000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003	0.0000	30.3837	30.3837	1.9800e-003	0.0000	30.4332
Total	**1.6845**	**0.1676**	**0.2158**	**3.5000e-004**		**9.7200e-003**	**9.7200e-003**		**9.7200e-003**	**9.7200e-003**	**0.0000**	**30.3837**	**30.3837**	**1.9800e-003**	**0.0000**	**30.4332**

3.7 Hospital Interior - 2022

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0795	2.8771	0.6874	9.1300e-003	0.2007	9.2500e-003	0.2099	0.0551	8.8500e-003	0.0639	0.0000	889.0418	889.0418	0.0510	0.0000	890.3169
Worker	0.1733	0.1090	1.2455	3.5900e-003	0.3933	2.6800e-003	0.3960	0.1046	2.4700e-003	0.1071	0.0000	324.5474	324.5474	7.9400e-003	0.0000	324.7459
Total	**0.2527**	**2.9860**	**1.9329**	**0.0127**	**0.5940**	**0.0119**	**0.6059**	**0.1597**	**0.0113**	**0.1710**	**0.0000**	**1,213.5892**	**1,213.5892**	**0.0589**	**0.0000**	**1,215.0628**

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	tons/yr										MT/yr					
Archit. Coating	1.6602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.1676	0.2158	3.5000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003	0.0000	30.3837	30.3837	1.9800e-003	0.0000	30.4331
Total	**1.6845**	**0.1676**	**0.2158**	**3.5000e-004**		**9.7200e-003**	**9.7200e-003**		**9.7200e-003**	**9.7200e-003**	**0.0000**	**30.3837**	**30.3837**	**1.9800e-003**	**0.0000**	**30.4331**

3.7 Hospital Interior - 2022

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0795	2.8771	0.6874	9.1300e-003	0.2007	9.2500e-003	0.2099	0.0551	8.8500e-003	0.0639	0.0000	889.0418	889.0418	0.0510	0.0000	890.3169
Worker	0.1733	0.1090	1.2455	3.5900e-003	0.3933	2.6800e-003	0.3960	0.1046	2.4700e-003	0.1071	0.0000	324.5474	324.5474	7.9400e-003	0.0000	324.7459
Total	**0.2527**	**2.9860**	**1.9329**	**0.0127**	**0.5940**	**0.0119**	**0.6059**	**0.1597**	**0.0113**	**0.1710**	**0.0000**	**1,213.5892**	**1,213.5892**	**0.0589**	**0.0000**	**1,215.0628**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
General Light Industry	10.00	5.00	6.50	59.00	28.00	13.00	92	5	3
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865
General Light Industry	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865
Hospital	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865
Parking Lot	0.559527	0.038733	0.206173	0.118029	0.019040	0.005245	0.018552	0.023249	0.002031	0.002054	0.005884	0.000619	0.000865

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
General Light Industry	0	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
Hospital	0	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
Parking Lot	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
General Light Industry	0	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
Hospital	0	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
Parking Lot	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	2.4252	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Unmitigated	2.4252	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Total	**2.4252**	**1.1000e-004**	**0.0121**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0235**	**0.0235**	**6.0000e-005**	**0.0000**	**0.0250**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0235	0.0235	6.0000e-005	0.0000	0.0250
Total	**2.4252**	**1.1000e-004**	**0.0121**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0235**	**0.0235**	**6.0000e-005**	**0.0000**	**0.0250**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2A Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	1,500.00	Space	13.50	205,600.00	0
Strip Mall	51.40	1000sqft	1.18	51,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2025
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Phase 2A Construction - Sacramento County, Annual

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading - 22,844 CY exported under excavation phase

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	25700	0
tblAreaCoating	Area_Nonresidential_Interior	77100	0
tblAreaCoating	Area_Parking	12336	0
tblConstructionPhase	NumDays	20.00	32.00
tblConstructionPhase	NumDays	10.00	33.00
tblConstructionPhase	NumDays	30.00	43.00
tblConstructionPhase	NumDays	300.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	77.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	5.33	0.00
tblEnergyUse	NT24E	0.19	0.00

Phase 2A Construction - Sacramento County, Annual

tblEnergyUse	NT24E	2.98	0.00
tblEnergyUse	NT24NG	0.93	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	3.26	0.00
tblEnergyUse	T24NG	4.49	0.00
tblGrading	AcresOfGrading	107.50	75.00
tblGrading	MaterialExported	0.00	22,844.00
tblLandUse	LandUseSquareFeet	600,000.00	205,600.00
tblSolidWaste	SolidWasteGenerationRate	53.97	0.00
tblTripsAndVMT	HaulingTripNumber	378.00	0.00
tblTripsAndVMT	HaulingTripNumber	2,856.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	15.00
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	42.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT

tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	50.00
tblTripsAndVMT	WorkerTripNumber	103.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	21.00	100.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	3,807,327.60	0.00
tblWater	OutdoorWaterUseRate	2,333,523.37	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2023	0.0249	0.2417	0.2151	4.8000e-004	0.0310	0.0105	0.0415	5.0400e-003	9.7900e-003	0.0148	0.0000	43.0397	43.0397	0.0104	0.0000	43.2987
2024	0.4838	2.2799	2.0054	5.6900e-003	0.5752	0.0815	0.6566	0.2664	0.0755	0.3419	0.0000	517.6400	517.6400	0.0986	0.0000	520.1058
Maximum	**0.4838**	**2.2799**	**2.0054**	**5.6900e-003**	**0.5752**	**0.0815**	**0.6566**	**0.2664**	**0.0755**	**0.3419**	**0.0000**	**517.6400**	**517.6400**	**0.0986**	**0.0000**	**520.1058**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2023	0.0249	0.2417	0.2151	4.8000e-004	0.0310	0.0105	0.0415	5.0400e-003	9.7900e-003	0.0148	0.0000	43.0397	43.0397	0.0104	0.0000	43.2987
2024	0.4838	2.2799	2.0054	5.6900e-003	0.5752	0.0815	0.6566	0.2664	0.0755	0.3419	0.0000	517.6396	517.6396	0.0986	0.0000	520.1054
Maximum	**0.4838**	**2.2799**	**2.0054**	**5.6900e-003**	**0.5752**	**0.0815**	**0.6566**	**0.2664**	**0.0755**	**0.3419**	**0.0000**	**517.6396**	**517.6396**	**0.0986**	**0.0000**	**520.1054**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2023	2-29-2024	0.7641	0.7641
2	3-1-2024	5-31-2024	1.1815	1.1815
3	6-1-2024	8-31-2024	0.5386	0.5386
4	9-1-2024	9-30-2024	0.1427	0.1427
		Highest	1.1815	1.1815

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.2159	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2159**	**1.8000e-004**	**0.0198**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0385**	**0.0385**	**1.0000e-004**	**0.0000**	**0.0410**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.2159	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2159**	**1.8000e-004**	**0.0198**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0385**	**0.0385**	**1.0000e-004**	**0.0000**	**0.0410**

	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	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 2A Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/1/2023	1/15/2024	5	32	
2	Excavation	Site Preparation	1/31/2024	3/15/2024	5	33	
3	Foundation	Grading	3/16/2024	5/15/2024	5	43	
4	Structural Framing	Building Construction	5/16/2024	7/15/2024	5	43	
5	Exterior Enclosure	Paving	7/16/2024	9/15/2024	5	44	
6	Interior	Architectural Coating	9/16/2024	12/31/2024	5	77	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 13.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 77,100; Non-Residential Outdoor: 25,700; Striped Parking Area: 12,336 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2A Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Excavation	Rubber Tired Dozers	3	8.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Foundation	Excavators	2	8.00	158	0.38
Foundation	Graders	1	8.00	187	0.41
Foundation	Rubber Tired Dozers	1	8.00	247	0.40
Foundation	Scrapers	2	8.00	367	0.48
Foundation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structural Framing	Welders	1	8.00	46	0.45
Exterior Enclosure	Pavers	2	8.00	130	0.42
Exterior Enclosure	Paving Equipment	2	8.00	132	0.36
Exterior Enclosure	Rollers	2	8.00	80	0.38
Interior	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase 2A Construction - Sacramento County, Annual

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
Demolition	6	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	7	20.00	15.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	8	50.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosure	6	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Interior	1	100.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 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	tons/yr										MT/yr					
Fugitive Dust					0.0280	0.0000	0.0280	4.2400e-003	0.0000	4.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0238	0.2256	0.2063	4.1000e-004		0.0105	0.0105		9.7400e-003	9.7400e-003	0.0000	35.6917	35.6917	0.0100	0.0000	35.9416
Total	**0.0238**	**0.2256**	**0.2063**	**4.1000e-004**	**0.0280**	**0.0105**	**0.0385**	**4.2400e-003**	**9.7400e-003**	**0.0140**	**0.0000**	**35.6917**	**35.6917**	**0.0100**	**0.0000**	**35.9416**

3.2 Demolition - 2023

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.3000e-004	0.0157	4.4000e-003	6.0000e-005	1.4200e-003	4.0000e-005	1.4500e-003	3.9000e-004	3.0000e-005	4.2000e-004	0.0000	6.1231	6.1231	3.4000e-004	0.0000	6.1315
Worker	6.4000e-004	3.8000e-004	4.4900e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2249	1.2249	3.0000e-005	0.0000	1.2256
Total	**1.0700e-003**	**0.0161**	**8.8900e-003**	**7.0000e-005**	**2.9600e-003**	**5.0000e-005**	**3.0000e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**7.3481**	**7.3481**	**3.7000e-004**	**0.0000**	**7.3572**

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	tons/yr										MT/yr					
Fugitive Dust					0.0280	0.0000	0.0280	4.2400e-003	0.0000	4.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0238	0.2256	0.2063	4.1000e-004		0.0105	0.0105		9.7400e-003	9.7400e-003	0.0000	35.6916	35.6916	0.0100	0.0000	35.9415
Total	**0.0238**	**0.2256**	**0.2063**	**4.1000e-004**	**0.0280**	**0.0105**	**0.0385**	**4.2400e-003**	**9.7400e-003**	**0.0140**	**0.0000**	**35.6916**	**35.6916**	**0.0100**	**0.0000**	**35.9415**

3.2 Demolition - 2023

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.3000e-004	0.0157	4.4000e-003	6.0000e-005	1.4200e-003	4.0000e-005	1.4500e-003	3.9000e-004	3.0000e-005	4.2000e-004	0.0000	6.1231	6.1231	3.4000e-004	0.0000	6.1315
Worker	6.4000e-004	3.8000e-004	4.4900e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2249	1.2249	3.0000e-005	0.0000	1.2256
Total	**1.0700e-003**	**0.0161**	**8.8900e-003**	**7.0000e-005**	**2.9600e-003**	**5.0000e-005**	**3.0000e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**7.3481**	**7.3481**	**3.7000e-004**	**0.0000**	**7.3572**

3.2 Demolition - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0147	0.0000	0.0147	2.2200e-003	0.0000	2.2200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1148	0.1084	2.1000e-004		5.2800e-003	5.2800e-003		4.9100e-003	4.9100e-003	0.0000	18.6978	18.6978	5.2300e-003	0.0000	18.8286
Total	**0.0123**	**0.1148**	**0.1084**	**2.1000e-004**	**0.0147**	**5.2800e-003**	**0.0200**	**2.2200e-003**	**4.9100e-003**	**7.1300e-003**	**0.0000**	**18.6978**	**18.6978**	**5.2300e-003**	**0.0000**	**18.8286**

3.2 Demolition - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.2000e-004	7.9300e-003	2.2500e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	3.1871	3.1871	1.8000e-004	0.0000	3.1915
Worker	3.1000e-004	1.8000e-004	2.1800e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6167	0.6167	1.0000e-005	0.0000	0.6170
Total	**5.3000e-004**	**8.1100e-003**	**4.4300e-003**	**4.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5700e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**3.8038**	**3.8038**	**1.9000e-004**	**0.0000**	**3.8085**

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	tons/yr										MT/yr					
Fugitive Dust					0.0147	0.0000	0.0147	2.2200e-003	0.0000	2.2200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1148	0.1084	2.1000e-004		5.2800e-003	5.2800e-003		4.9100e-003	4.9100e-003	0.0000	18.6978	18.6978	5.2300e-003	0.0000	18.8286
Total	**0.0123**	**0.1148**	**0.1084**	**2.1000e-004**	**0.0147**	**5.2800e-003**	**0.0200**	**2.2200e-003**	**4.9100e-003**	**7.1300e-003**	**0.0000**	**18.6978**	**18.6978**	**5.2300e-003**	**0.0000**	**18.8286**

3.2 Demolition - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.2000e-004	7.9300e-003	2.2500e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	3.1871	3.1871	1.8000e-004	0.0000	3.1915
Worker	3.1000e-004	1.8000e-004	2.1800e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6167	0.6167	1.0000e-005	0.0000	0.6170
Total	**5.3000e-004**	**8.1100e-003**	**4.4300e-003**	**4.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5700e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**3.8038**	**3.8038**	**1.9000e-004**	**0.0000**	**3.8085**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.3005	0.0000	0.3005	0.1642	0.0000	0.1642	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0439	0.4484	0.3025	6.3000e-004		0.0203	0.0203		0.0187	0.0187	0.0000	55.2042	55.2042	0.0179	0.0000	55.6505
Total	**0.0439**	**0.4484**	**0.3025**	**6.3000e-004**	**0.3005**	**0.0203**	**0.3207**	**0.1642**	**0.0187**	**0.1829**	**0.0000**	**55.2042**	**55.2042**	**0.0179**	**0.0000**	**55.6505**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.2300e-003	0.0446	0.0127	1.8000e-004	4.1700e-003	1.0000e-004	4.2700e-003	1.1400e-003	9.0000e-005	1.2400e-003	0.0000	17.9272	17.9272	9.9000e-004	0.0000	17.9519
Worker	9.4000e-004	5.5000e-004	6.5300e-003	2.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	1.8501	1.8501	4.0000e-005	0.0000	1.8511
Total	**2.1700e-003**	**0.0452**	**0.0192**	**2.0000e-004**	**6.5900e-003**	**1.2000e-004**	**6.7100e-003**	**1.7800e-003**	**1.0000e-004**	**1.9000e-003**	**0.0000**	**19.7773**	**19.7773**	**1.0300e-003**	**0.0000**	**19.8030**

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	tons/yr										MT/yr					
Fugitive Dust					0.3005	0.0000	0.3005	0.1642	0.0000	0.1642	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0439	0.4484	0.3025	6.3000e-004		0.0203	0.0203		0.0187	0.0187	0.0000	55.2041	55.2041	0.0179	0.0000	55.6504
Total	**0.0439**	**0.4484**	**0.3025**	**6.3000e-004**	**0.3005**	**0.0203**	**0.3207**	**0.1642**	**0.0187**	**0.1829**	**0.0000**	**55.2041**	**55.2041**	**0.0179**	**0.0000**	**55.6504**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.2300e-003	0.0446	0.0127	1.8000e-004	4.1700e-003	1.0000e-004	4.2700e-003	1.1400e-003	9.0000e-005	1.2400e-003	0.0000	17.9272	17.9272	9.9000e-004	0.0000	17.9519
Worker	9.4000e-004	5.5000e-004	6.5300e-003	2.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	1.8501	1.8501	4.0000e-005	0.0000	1.8511
Total	**2.1700e-003**	**0.0452**	**0.0192**	**2.0000e-004**	**6.5900e-003**	**1.2000e-004**	**6.7100e-003**	**1.7800e-003**	**1.0000e-004**	**1.9000e-003**	**0.0000**	**19.7773**	**19.7773**	**1.0300e-003**	**0.0000**	**19.8030**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.1692	0.0000	0.1692	0.0755	0.0000	0.0755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0692	0.6961	0.5960	1.3300e-003		0.0287	0.0287		0.0264	0.0264	0.0000	117.2170	117.2170	0.0379	0.0000	118.1647
Total	**0.0692**	**0.6961**	**0.5960**	**1.3300e-003**	**0.1692**	**0.0287**	**0.1980**	**0.0755**	**0.0264**	**0.1019**	**0.0000**	**117.2170**	**117.2170**	**0.0379**	**0.0000**	**118.1647**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.2200e-003	0.1163	0.0330	4.8000e-004	0.0109	2.6000e-004	0.0111	2.9800e-003	2.5000e-004	3.2300e-003	0.0000	46.7195	46.7195	2.5700e-003	0.0000	46.7838
Worker	3.0600e-003	1.7800e-003	0.0213	7.0000e-005	7.9000e-003	5.0000e-005	7.9500e-003	2.1000e-003	5.0000e-005	2.1500e-003	0.0000	6.0268	6.0268	1.3000e-004	0.0000	6.0300
Total	**6.2800e-003**	**0.1180**	**0.0543**	**5.5000e-004**	**0.0188**	**3.1000e-004**	**0.0191**	**5.0800e-003**	**3.0000e-004**	**5.3800e-003**	**0.0000**	**52.7463**	**52.7463**	**2.7000e-003**	**0.0000**	**52.8138**

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	tons/yr										MT/yr					
Fugitive Dust					0.1692	0.0000	0.1692	0.0755	0.0000	0.0755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0692	0.6961	0.5960	1.3300e-003		0.0287	0.0287		0.0264	0.0264	0.0000	117.2168	117.2168	0.0379	0.0000	118.1646
Total	**0.0692**	**0.6961**	**0.5960**	**1.3300e-003**	**0.1692**	**0.0287**	**0.1980**	**0.0755**	**0.0264**	**0.1019**	**0.0000**	**117.2168**	**117.2168**	**0.0379**	**0.0000**	**118.1646**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.2200e-003	0.1163	0.0330	4.8000e-004	0.0109	2.6000e-004	0.0111	2.9800e-003	2.5000e-004	3.2300e-003	0.0000	46.7195	46.7195	2.5700e-003	0.0000	46.7838
Worker	3.0600e-003	1.7800e-003	0.0213	7.0000e-005	7.9000e-003	5.0000e-005	7.9500e-003	2.1000e-003	5.0000e-005	2.1500e-003	0.0000	6.0268	6.0268	1.3000e-004	0.0000	6.0300
Total	**6.2800e-003**	**0.1180**	**0.0543**	**5.5000e-004**	**0.0188**	**3.1000e-004**	**0.0191**	**5.0800e-003**	**3.0000e-004**	**5.3800e-003**	**0.0000**	**52.7463**	**52.7463**	**2.7000e-003**	**0.0000**	**52.8138**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Off-Road	0.0316	0.2890	0.3476	5.8000e-004		0.0132	0.0132		0.0124	0.0124	0.0000	49.8476	49.8476	0.0118	0.0000	50.1423
Total	**0.0316**	**0.2890**	**0.3476**	**5.8000e-004**		**0.0132**	**0.0132**		**0.0124**	**0.0124**	**0.0000**	**49.8476**	**49.8476**	**0.0118**	**0.0000**	**50.1423**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1400e-003	0.0775	0.0220	3.2000e-004	7.2500e-003	1.7000e-004	7.4200e-003	1.9900e-003	1.6000e-004	2.1500e-003	0.0000	31.1463	31.1463	1.7100e-003	0.0000	31.1892
Worker	1.8400e-003	1.0700e-003	0.0128	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.6161	3.6161	8.0000e-005	0.0000	3.6180
Total	**3.9800e-003**	**0.0786**	**0.0348**	**3.6000e-004**	**0.0120**	**2.0000e-004**	**0.0122**	**3.2500e-003**	**1.9000e-004**	**3.4400e-003**	**0.0000**	**34.7624**	**34.7624**	**1.7900e-003**	**0.0000**	**34.8072**

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	tons/yr										MT/yr					
Off-Road	0.0316	0.2890	0.3476	5.8000e-004		0.0132	0.0132		0.0124	0.0124	0.0000	49.8475	49.8475	0.0118	0.0000	50.1422
Total	**0.0316**	**0.2890**	**0.3476**	**5.8000e-004**		**0.0132**	**0.0132**		**0.0124**	**0.0124**	**0.0000**	**49.8475**	**49.8475**	**0.0118**	**0.0000**	**50.1422**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1400e-003	0.0775	0.0220	3.2000e-004	7.2500e-003	1.7000e-004	7.4200e-003	1.9900e-003	1.6000e-004	2.1500e-003	0.0000	31.1463	31.1463	1.7100e-003	0.0000	31.1892
Worker	1.8400e-003	1.0700e-003	0.0128	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.6161	3.6161	8.0000e-005	0.0000	3.6180
Total	**3.9800e-003**	**0.0786**	**0.0348**	**3.6000e-004**	**0.0120**	**2.0000e-004**	**0.0122**	**3.2500e-003**	**1.9000e-004**	**3.4400e-003**	**0.0000**	**34.7624**	**34.7624**	**1.7900e-003**	**0.0000**	**34.8072**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Off-Road	0.0217	0.2095	0.3218	5.0000e-004		0.0103	0.0103		9.4800e-003	9.4800e-003	0.0000	44.0584	44.0584	0.0143	0.0000	44.4146
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0217**	**0.2095**	**0.3218**	**5.0000e-004**		**0.0103**	**0.0103**		**9.4800e-003**	**9.4800e-003**	**0.0000**	**44.0584**	**44.0584**	**0.0143**	**0.0000**	**44.4146**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1900e-003	0.0793	0.0225	3.3000e-004	7.4200e-003	1.8000e-004	7.5900e-003	2.0400e-003	1.7000e-004	2.2000e-003	0.0000	31.8707	31.8707	1.7500e-003	0.0000	31.9145
Worker	1.2500e-003	7.3000e-004	8.7000e-003	3.0000e-005	3.2300e-003	2.0000e-005	3.2500e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.4668	2.4668	5.0000e-005	0.0000	2.4681
Total	**3.4400e-003**	**0.0800**	**0.0312**	**3.6000e-004**	**0.0107**	**2.0000e-004**	**0.0108**	**2.9000e-003**	**1.9000e-004**	**3.0800e-003**	**0.0000**	**34.3374**	**34.3374**	**1.8000e-003**	**0.0000**	**34.3826**

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	tons/yr										MT/yr					
Off-Road	0.0217	0.2095	0.3218	5.0000e-004		0.0103	0.0103		9.4800e-003	9.4800e-003	0.0000	44.0583	44.0583	0.0143	0.0000	44.4146
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0217**	**0.2095**	**0.3218**	**5.0000e-004**		**0.0103**	**0.0103**		**9.4800e-003**	**9.4800e-003**	**0.0000**	**44.0583**	**44.0583**	**0.0143**	**0.0000**	**44.4146**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1900e-003	0.0793	0.0225	3.3000e-004	7.4200e-003	1.8000e-004	7.5900e-003	2.0400e-003	1.7000e-004	2.2000e-003	0.0000	31.8707	31.8707	1.7500e-003	0.0000	31.9145
Worker	1.2500e-003	7.3000e-004	8.7000e-003	3.0000e-005	3.2300e-003	2.0000e-005	3.2500e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.4668	2.4668	5.0000e-005	0.0000	2.4681
Total	**3.4400e-003**	**0.0800**	**0.0312**	**3.6000e-004**	**0.0107**	**2.0000e-004**	**0.0108**	**2.9000e-003**	**1.9000e-004**	**3.0800e-003**	**0.0000**	**34.3374**	**34.3374**	**1.8000e-003**	**0.0000**	**34.3826**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Archit. Coating	0.2668					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9600e-003	0.0469	0.0697	1.1000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	9.8300	9.8300	5.5000e-004	0.0000	9.8439
Total	**0.2738**	**0.0469**	**0.0697**	**1.1000e-004**		**2.3500e-003**	**2.3500e-003**		**2.3500e-003**	**2.3500e-003**	**0.0000**	**9.8300**	**9.8300**	**5.5000e-004**	**0.0000**	**9.8439**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.8400e-003	0.1388	0.0394	5.7000e-004	0.0130	3.1000e-004	0.0133	3.5600e-003	2.9000e-004	3.8600e-003	0.0000	55.7736	55.7736	3.0700e-003	0.0000	55.8504
Worker	0.0110	6.3700e-003	0.0762	2.4000e-004	0.0283	1.8000e-004	0.0285	7.5200e-003	1.7000e-004	7.6900e-003	0.0000	21.5843	21.5843	4.6000e-004	0.0000	21.5958
Total	**0.0148**	**0.1452**	**0.1156**	**8.1000e-004**	**0.0413**	**4.9000e-004**	**0.0418**	**0.0111**	**4.6000e-004**	**0.0116**	**0.0000**	**77.3579**	**77.3579**	**3.5300e-003**	**0.0000**	**77.4462**

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	tons/yr										MT/yr					
Archit. Coating	0.2668					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9600e-003	0.0469	0.0697	1.1000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	9.8300	9.8300	5.5000e-004	0.0000	9.8439
Total	**0.2738**	**0.0469**	**0.0697**	**1.1000e-004**		**2.3500e-003**	**2.3500e-003**		**2.3500e-003**	**2.3500e-003**	**0.0000**	**9.8300**	**9.8300**	**5.5000e-004**	**0.0000**	**9.8439**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.8400e-003	0.1388	0.0394	5.7000e-004	0.0130	3.1000e-004	0.0133	3.5600e-003	2.9000e-004	3.8600e-003	0.0000	55.7736	55.7736	3.0700e-003	0.0000	55.8504
Worker	0.0110	6.3700e-003	0.0762	2.4000e-004	0.0283	1.8000e-004	0.0285	7.5200e-003	1.7000e-004	7.6900e-003	0.0000	21.5843	21.5843	4.6000e-004	0.0000	21.5958
Total	**0.0148**	**0.1452**	**0.1156**	**8.1000e-004**	**0.0413**	**4.9000e-004**	**0.0418**	**0.0111**	**4.6000e-004**	**0.0116**	**0.0000**	**77.3579**	**77.3579**	**3.5300e-003**	**0.0000**	**77.4462**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.568817	0.036545	0.209097	0.111572	0.015710	0.004830	0.018344	0.024276	0.001951	0.001803	0.005698	0.000617	0.000741
Strip Mall	0.568817	0.036545	0.209097	0.111572	0.015710	0.004830	0.018344	0.024276	0.001951	0.001803	0.005698	0.000617	0.000741

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Strip Mall	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Strip Mall	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.2159	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Unmitigated	0.2159	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8200e-003	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Total	**0.2159**	**1.8000e-004**	**0.0198**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0385**	**0.0385**	**1.0000e-004**	**0.0000**	**0.0410**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8200e-003	1.8000e-004	0.0198	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0385	0.0385	1.0000e-004	0.0000	0.0410
Total	**0.2159**	**1.8000e-004**	**0.0198**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0385**	**0.0385**	**1.0000e-004**	**0.0000**	**0.0410**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2B Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	103.21	1000sqft	2.37	103,210.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Phase 2B Construction - Sacramento County, Annual

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading - No grading or excavating

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	51605	0
tblAreaCoating	Area_Nonresidential_Interior	154815	0
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	220.00	109.00
tblConstructionPhase	NumDays	10.00	53.00
tblConstructionPhase	NumDays	3.00	34.00
tblEnergyUse	LightingElect	4.98	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24NG	57.91	0.00
tblGrading	AcresOfGrading	51.00	0.00

tblSolidWaste	SolidWasteGenerationRate	1,114.67	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	60.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	17.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	7.00	100.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00
tblTripsAndVMT	WorkerTripNumber	33.00	45.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblWater	IndoorWaterUseRate	12,950,846.28	0.00
tblWater	OutdoorWaterUseRate	2,466,827.86	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2024	0.6183	2.3467	1.6617	8.2900e-003	0.2177	0.0444	0.2621	0.0590	0.0425	0.1014	0.0000	777.4350	777.4350	0.0637	0.0000	779.0266
2025	0.0936	0.5209	0.5169	1.8000e-003	0.0394	0.0131	0.0525	0.0107	0.0122	0.0229	0.0000	166.9998	166.9998	0.0210	0.0000	167.5254
Maximum	**0.6183**	**2.3467**	**1.6617**	**8.2900e-003**	**0.2177**	**0.0444**	**0.2621**	**0.0590**	**0.0425**	**0.1014**	**0.0000**	**777.4350**	**777.4350**	**0.0637**	**0.0000**	**779.0266**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2024	0.6183	2.3467	1.6617	8.2900e-003	0.2177	0.0444	0.2621	0.0590	0.0425	0.1014	0.0000	777.4348	777.4348	0.0637	0.0000	779.0264
2025	0.0936	0.5209	0.5169	1.8000e-003	0.0394	0.0131	0.0525	0.0107	0.0122	0.0229	0.0000	166.9997	166.9997	0.0210	0.0000	167.5253
Maximum	**0.6183**	**2.3467**	**1.6617**	**8.2900e-003**	**0.2177**	**0.0444**	**0.2621**	**0.0590**	**0.0425**	**0.1014**	**0.0000**	**777.4348**	**777.4348**	**0.0637**	**0.0000**	**779.0264**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2024	6-30-2024	0.5542	0.5542
2	7-1-2024	9-30-2024	1.1508	1.1508
3	10-1-2024	12-31-2024	1.2350	1.2350
4	1-1-2025	3-31-2025	0.6093	0.6093
		Highest	1.2350	1.2350

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.4032	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.4032**	**1.0000e-005**	**1.3100e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.5600e-003**	**2.5600e-003**	**1.0000e-005**	**0.0000**	**2.7300e-003**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.4032	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.4032**	**1.0000e-005**	**1.3100e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.5600e-003**	**2.5600e-003**	**1.0000e-005**	**0.0000**	**2.7300e-003**

	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	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 2B Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Interior	Architectural Coating	4/1/2024	1/31/2025	5	220	
2	Site Preparation	Site Preparation	7/1/2024	8/15/2024	5	34	
3	Structural Framing	Building Construction	8/16/2024	1/15/2025	5	109	
4	Exterior Enclosure	Paving	1/16/2025	3/31/2025	5	53	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 154,815; Non-Residential Outdoor: 51,605; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2B Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Structural Framing	Cranes	1	8.00	231	0.29
Structural Framing	Forklifts	2	7.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Structural Framing	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Structural Framing	Welders	3	8.00	46	0.45
Exterior Enclosure	Cement and Mortar Mixers	1	8.00	9	0.56
Exterior Enclosure	Pavers	1	8.00	130	0.42
Exterior Enclosure	Paving Equipment	1	8.00	132	0.36
Exterior Enclosure	Rollers	2	8.00	80	0.38
Exterior Enclosure	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Interior	Air Compressors	1	6.00	78	0.48

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
Site Preparation	3	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	8	45.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosure	6	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Interior	1	100.00	60.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Interior - 2024

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	tons/yr										MT/yr					
Archit. Coating	0.4284					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0178	0.1201	0.1783	2.9000e-004		6.0000e-003	6.0000e-003		6.0000e-003	6.0000e-003	0.0000	25.1496	25.1496	1.4200e-003	0.0000	25.1850
Total	**0.4462**	**0.1201**	**0.1783**	**2.9000e-004**		**6.0000e-003**	**6.0000e-003**		**6.0000e-003**	**6.0000e-003**	**0.0000**	**25.1496**	**25.1496**	**1.4200e-003**	**0.0000**	**25.1850**

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0295	1.0653	0.3023	4.3900e-003	0.0996	2.3700e-003	0.1020	0.0273	2.2600e-003	0.0296	0.0000	428.0808	428.0808	0.0236	0.0000	428.6698
Worker	0.0281	0.0163	0.1948	6.1000e-004	0.0723	4.7000e-004	0.0728	0.0192	4.3000e-004	0.0197	0.0000	55.2221	55.2221	1.1800e-003	0.0000	55.2517
Total	**0.0575**	**1.0816**	**0.4972**	**5.0000e-003**	**0.1720**	**2.8400e-003**	**0.1748**	**0.0466**	**2.6900e-003**	**0.0493**	**0.0000**	**483.3029**	**483.3029**	**0.0247**	**0.0000**	**483.9215**

3.2 Interior - 2024

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	tons/yr										MT/yr					
Archit. Coating	0.4284					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0178	0.1201	0.1783	2.9000e-004		6.0000e-003	6.0000e-003		6.0000e-003	6.0000e-003	0.0000	25.1495	25.1495	1.4200e-003	0.0000	25.1849
Total	**0.4462**	**0.1201**	**0.1783**	**2.9000e-004**		**6.0000e-003**	**6.0000e-003**		**6.0000e-003**	**6.0000e-003**	**0.0000**	**25.1495**	**25.1495**	**1.4200e-003**	**0.0000**	**25.1849**

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0295	1.0653	0.3023	4.3900e-003	0.0996	2.3700e-003	0.1020	0.0273	2.2600e-003	0.0296	0.0000	428.0808	428.0808	0.0236	0.0000	428.6698
Worker	0.0281	0.0163	0.1948	6.1000e-004	0.0723	4.7000e-004	0.0728	0.0192	4.3000e-004	0.0197	0.0000	55.2221	55.2221	1.1800e-003	0.0000	55.2517
Total	**0.0575**	**1.0816**	**0.4972**	**5.0000e-003**	**0.1720**	**2.8400e-003**	**0.1748**	**0.0466**	**2.6900e-003**	**0.0493**	**0.0000**	**483.3029**	**483.3029**	**0.0247**	**0.0000**	**483.9215**

3.2 Interior - 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	tons/yr										MT/yr					
Archit. Coating	0.0500					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9403
Total	**0.0520**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9403**

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.3700e-003	0.1202	0.0346	5.1000e-004	0.0116	2.6000e-004	0.0119	3.1900e-003	2.5000e-004	3.4400e-003	0.0000	49.6846	49.6846	2.7400e-003	0.0000	49.7531
Worker	3.0900e-003	1.7300e-003	0.0211	7.0000e-005	8.4500e-003	5.0000e-005	8.5000e-003	2.2500e-003	5.0000e-005	2.3000e-003	0.0000	6.1891	6.1891	1.2000e-004	0.0000	6.1923
Total	**6.4600e-003**	**0.1219**	**0.0557**	**5.8000e-004**	**0.0201**	**3.1000e-004**	**0.0204**	**5.4400e-003**	**3.0000e-004**	**5.7400e-003**	**0.0000**	**55.8737**	**55.8737**	**2.8600e-003**	**0.0000**	**55.9453**

3.2 Interior - 2025

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	tons/yr										MT/yr					
Archit. Coating	0.0500					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9402
Total	**0.0520**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9402**

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.3700e-003	0.1202	0.0346	5.1000e-004	0.0116	2.6000e-004	0.0119	3.1900e-003	2.5000e-004	3.4400e-003	0.0000	49.6846	49.6846	2.7400e-003	0.0000	49.7531
Worker	3.0900e-003	1.7300e-003	0.0211	7.0000e-005	8.4500e-003	5.0000e-005	8.5000e-003	2.2500e-003	5.0000e-005	2.3000e-003	0.0000	6.1891	6.1891	1.2000e-004	0.0000	6.1923
Total	**6.4600e-003**	**0.1219**	**0.0557**	**5.8000e-004**	**0.0201**	**3.1000e-004**	**0.0204**	**5.4400e-003**	**3.0000e-004**	**5.7400e-003**	**0.0000**	**55.8737**	**55.8737**	**2.8600e-003**	**0.0000**	**55.9453**

3.3 Site Preparation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0211	0.2230	0.1629	4.2000e-004		8.4500e-003	8.4500e-003		7.7700e-003	7.7700e-003	0.0000	36.6068	36.6068	0.0118	0.0000	36.9028
Total	**0.0211**	**0.2230**	**0.1629**	**4.2000e-004**	**0.0000**	**8.4500e-003**	**8.4500e-003**	**0.0000**	**7.7700e-003**	**7.7700e-003**	**0.0000**	**36.6068**	**36.6068**	**0.0118**	**0.0000**	**36.9028**

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	tons/yr										MT/yr					
Hauling	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
Vendor	6.8000e-004	0.0245	6.9600e-003	1.0000e-004	2.2900e-003	5.0000e-005	2.3500e-003	6.3000e-004	5.0000e-005	6.8000e-004	0.0000	9.8509	9.8509	5.4000e-004	0.0000	9.8645
Worker	9.7000e-004	5.6000e-004	6.7300e-003	2.0000e-005	2.5000e-003	2.0000e-005	2.5100e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	1.9061	1.9061	4.0000e-005	0.0000	1.9072
Total	**1.6500e-003**	**0.0251**	**0.0137**	**1.2000e-004**	**4.7900e-003**	**7.0000e-005**	**4.8600e-003**	**1.2900e-003**	**6.0000e-005**	**1.3600e-003**	**0.0000**	**11.7571**	**11.7571**	**5.8000e-004**	**0.0000**	**11.7716**

3.3 Site Preparation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0211	0.2230	0.1629	4.2000e-004		8.4500e-003	8.4500e-003		7.7700e-003	7.7700e-003	0.0000	36.6067	36.6067	0.0118	0.0000	36.9027
Total	**0.0211**	**0.2230**	**0.1629**	**4.2000e-004**	**0.0000**	**8.4500e-003**	**8.4500e-003**	**0.0000**	**7.7700e-003**	**7.7700e-003**	**0.0000**	**36.6067**	**36.6067**	**0.0118**	**0.0000**	**36.9027**

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	tons/yr										MT/yr					
Hauling	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
Vendor	6.8000e-004	0.0245	6.9600e-003	1.0000e-004	2.2900e-003	5.0000e-005	2.3500e-003	6.3000e-004	5.0000e-005	6.8000e-004	0.0000	9.8509	9.8509	5.4000e-004	0.0000	9.8645
Worker	9.7000e-004	5.6000e-004	6.7300e-003	2.0000e-005	2.5000e-003	2.0000e-005	2.5100e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	1.9061	1.9061	4.0000e-005	0.0000	1.9072
Total	**1.6500e-003**	**0.0251**	**0.0137**	**1.2000e-004**	**4.7900e-003**	**7.0000e-005**	**4.8600e-003**	**1.2900e-003**	**6.0000e-005**	**1.3600e-003**	**0.0000**	**11.7571**	**11.7571**	**5.8000e-004**	**0.0000**	**11.7716**

3.4 Structural Framing - 2024

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	tons/yr										MT/yr					
Off-Road	0.0783	0.6284	0.6909	1.2300e-003		0.0264	0.0264		0.0253	0.0253	0.0000	101.7798	101.7798	0.0190	0.0000	102.2537
Total	**0.0783**	**0.6284**	**0.6909**	**1.2300e-003**		**0.0264**	**0.0264**		**0.0253**	**0.0253**	**0.0000**	**101.7798**	**101.7798**	**0.0190**	**0.0000**	**102.2537**

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.3300e-003	0.2650	0.0752	1.0900e-003	0.0248	5.9000e-004	0.0254	6.8000e-003	5.6000e-004	7.3600e-003	0.0000	106.4770	106.4770	5.8600e-003	0.0000	106.6235
Worker	6.2800e-003	3.6500e-003	0.0436	1.4000e-004	0.0162	1.1000e-004	0.0163	4.3100e-003	1.0000e-004	4.4000e-003	0.0000	12.3619	12.3619	2.6000e-004	0.0000	12.3685
Total	**0.0136**	**0.2686**	**0.1188**	**1.2300e-003**	**0.0410**	**7.0000e-004**	**0.0417**	**0.0111**	**6.6000e-004**	**0.0118**	**0.0000**	**118.8389**	**118.8389**	**6.1200e-003**	**0.0000**	**118.9920**

3.4 Structural Framing - 2024

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	tons/yr										MT/yr					
Off-Road	0.0783	0.6284	0.6909	1.2300e-003		0.0264	0.0264		0.0253	0.0253	0.0000	101.7797	101.7797	0.0190	0.0000	102.2536
Total	**0.0783**	**0.6284**	**0.6909**	**1.2300e-003**		**0.0264**	**0.0264**		**0.0253**	**0.0253**	**0.0000**	**101.7797**	**101.7797**	**0.0190**	**0.0000**	**102.2536**

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.3300e-003	0.2650	0.0752	1.0900e-003	0.0248	5.9000e-004	0.0254	6.8000e-003	5.6000e-004	7.3600e-003	0.0000	106.4770	106.4770	5.8600e-003	0.0000	106.6235
Worker	6.2800e-003	3.6500e-003	0.0436	1.4000e-004	0.0162	1.1000e-004	0.0163	4.3100e-003	1.0000e-004	4.4000e-003	0.0000	12.3619	12.3619	2.6000e-004	0.0000	12.3685
Total	**0.0136**	**0.2686**	**0.1188**	**1.2300e-003**	**0.0410**	**7.0000e-004**	**0.0417**	**0.0111**	**6.6000e-004**	**0.0118**	**0.0000**	**118.8389**	**118.8389**	**6.1200e-003**	**0.0000**	**118.9920**

3.4 Structural Framing - 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	tons/yr										MT/yr					
Off-Road	8.1900e-003	0.0661	0.0770	1.4000e-004		2.5800e-003	2.5800e-003		2.4700e-003	2.4700e-003	0.0000	11.4254	11.4254	2.1000e-003	0.0000	11.4778
Total	**8.1900e-003**	**0.0661**	**0.0770**	**1.4000e-004**		**2.5800e-003**	**2.5800e-003**		**2.4700e-003**	**2.4700e-003**	**0.0000**	**11.4254**	**11.4254**	**2.1000e-003**	**0.0000**	**11.4778**

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	tons/yr										MT/yr					
Hauling	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
Vendor	8.1000e-004	0.0287	8.2800e-003	1.2000e-004	2.7800e-003	6.0000e-005	2.8400e-003	7.6000e-004	6.0000e-005	8.2000e-004	0.0000	11.8811	11.8811	6.6000e-004	0.0000	11.8975
Worker	6.7000e-004	3.7000e-004	4.5300e-003	1.0000e-005	1.8200e-003	1.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3327
Total	**1.4800e-003**	**0.0291**	**0.0128**	**1.3000e-004**	**4.6000e-003**	**7.0000e-005**	**4.6700e-003**	**1.2400e-003**	**7.0000e-005**	**1.3100e-003**	**0.0000**	**13.2131**	**13.2131**	**6.9000e-004**	**0.0000**	**13.2302**

3.4 Structural Framing - 2025

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	tons/yr										MT/yr					
Off-Road	8.1900e-003	0.0661	0.0770	1.4000e-004		2.5800e-003	2.5800e-003		2.4700e-003	2.4700e-003	0.0000	11.4254	11.4254	2.1000e-003	0.0000	11.4778
Total	**8.1900e-003**	**0.0661**	**0.0770**	**1.4000e-004**		**2.5800e-003**	**2.5800e-003**		**2.4700e-003**	**2.4700e-003**	**0.0000**	**11.4254**	**11.4254**	**2.1000e-003**	**0.0000**	**11.4778**

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	tons/yr										MT/yr					
Hauling	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
Vendor	8.1000e-004	0.0287	8.2800e-003	1.2000e-004	2.7800e-003	6.0000e-005	2.8400e-003	7.6000e-004	6.0000e-005	8.2000e-004	0.0000	11.8811	11.8811	6.6000e-004	0.0000	11.8975
Worker	6.7000e-004	3.7000e-004	4.5300e-003	1.0000e-005	1.8200e-003	1.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3327
Total	**1.4800e-003**	**0.0291**	**0.0128**	**1.3000e-004**	**4.6000e-003**	**7.0000e-005**	**4.6700e-003**	**1.2400e-003**	**7.0000e-005**	**1.3100e-003**	**0.0000**	**13.2131**	**13.2131**	**6.9000e-004**	**0.0000**	**13.2302**

3.5 Exterior Enclosure - 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	tons/yr										MT/yr					
Off-Road	0.0208	0.1971	0.3094	4.7000e-004		9.2800e-003	9.2800e-003		8.5700e-003	8.5700e-003	0.0000	41.1092	41.1092	0.0130	0.0000	41.4350
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0208**	**0.1971**	**0.3094**	**4.7000e-004**		**9.2800e-003**	**9.2800e-003**		**8.5700e-003**	**8.5700e-003**	**0.0000**	**41.1092**	**41.1092**	**0.0130**	**0.0000**	**41.4350**

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5900e-003	0.0923	0.0266	3.9000e-004	8.9300e-003	2.0000e-004	9.1300e-003	2.4500e-003	1.9000e-004	2.6400e-003	0.0000	38.1635	38.1635	2.1000e-003	0.0000	38.2161
Worker	2.1400e-003	1.1900e-003	0.0146	5.0000e-005	5.8400e-003	4.0000e-005	5.8800e-003	1.5500e-003	3.0000e-005	1.5900e-003	0.0000	4.2786	4.2786	9.0000e-005	0.0000	4.2807
Total	**4.7300e-003**	**0.0935**	**0.0412**	**4.4000e-004**	**0.0148**	**2.4000e-004**	**0.0150**	**4.0000e-003**	**2.2000e-004**	**4.2300e-003**	**0.0000**	**42.4421**	**42.4421**	**2.1900e-003**	**0.0000**	**42.4969**

3.5 Exterior Enclosure - 2025

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	tons/yr										MT/yr					
Off-Road	0.0208	0.1971	0.3094	4.7000e-004		9.2800e-003	9.2800e-003		8.5700e-003	8.5700e-003	0.0000	41.1092	41.1092	0.0130	0.0000	41.4349
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0208**	**0.1971**	**0.3094**	**4.7000e-004**		**9.2800e-003**	**9.2800e-003**		**8.5700e-003**	**8.5700e-003**	**0.0000**	**41.1092**	**41.1092**	**0.0130**	**0.0000**	**41.4349**

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5900e-003	0.0923	0.0266	3.9000e-004	8.9300e-003	2.0000e-004	9.1300e-003	2.4500e-003	1.9000e-004	2.6400e-003	0.0000	38.1635	38.1635	2.1000e-003	0.0000	38.2161
Worker	2.1400e-003	1.1900e-003	0.0146	5.0000e-005	5.8400e-003	4.0000e-005	5.8800e-003	1.5500e-003	3.0000e-005	1.5900e-003	0.0000	4.2786	4.2786	9.0000e-005	0.0000	4.2807
Total	**4.7300e-003**	**0.0935**	**0.0412**	**4.4000e-004**	**0.0148**	**2.4000e-004**	**0.0150**	**4.0000e-003**	**2.2000e-004**	**4.2300e-003**	**0.0000**	**42.4421**	**42.4421**	**2.1900e-003**	**0.0000**	**42.4969**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Hospital	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Hospital	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hospital	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hospital	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.4032	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Unmitigated	0.4032	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Total	**0.4032**	**1.0000e-005**	**1.3100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5600e-003**	**2.5600e-003**	**1.0000e-005**	**0.0000**	**2.7300e-003**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.7300e-003
Total	**0.4032**	**1.0000e-005**	**1.3100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5600e-003**	**2.5600e-003**	**1.0000e-005**	**0.0000**	**2.7300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hospital	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hospital	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2C Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	134.80	1000sqft	3.09	134,800.00	0
Medical Office Building	100.00	1000sqft	2.30	100,000.00	0
Enclosed Parking with Elevator	170.00	Space	1.53	33,700.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Phase 2C Construction - Sacramento County, Annual

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading - 21,219 CY exported under excavation phase

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	117400	0
tblAreaCoating	Area_Nonresidential_Interior	352200	0
tblAreaCoating	Area_Parking	2022	0
tblConstructionPhase	NumDays	10.00	32.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	230.00	42.00
tblConstructionPhase	NumDays	230.00	65.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	20.00	163.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	4.98	0.00
tblEnergyUse	LightingElect	3.71	0.00

tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	NT24NG	0.68	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24E	4.98	0.00
tblEnergyUse	T24NG	57.91	0.00
tblEnergyUse	T24NG	12.42	0.00
tblGrading	MaterialExported	0.00	21,219.00
tblLandUse	LandUseSquareFeet	68,000.00	33,700.00
tblSolidWaste	SolidWasteGenerationRate	1,455.84	0.00
tblSolidWaste	SolidWasteGenerationRate	1,080.00	0.00
tblTripsAndVMT	HaulingTripNumber	2,652.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	44.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	80.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	44.00	50.00

tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	89.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	18.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	89.00	50.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblWater	IndoorWaterUseRate	16,914,776.46	0.00
tblWater	IndoorWaterUseRate	12,548,053.76	0.00
tblWater	OutdoorWaterUseRate	3,221,862.18	0.00
tblWater	OutdoorWaterUseRate	2,390,105.48	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2023	0.0290	0.3051	0.2005	4.8000e-004	0.1927	0.0133	0.2060	0.1051	0.0123	0.1173	0.0000	42.4713	42.4713	0.0117	0.0000	42.7644
2024	0.5620	2.4110	2.0586	7.2500e-003	0.3102	0.0675	0.3777	0.1299	0.0630	0.1929	0.0000	674.2526	674.2526	0.0893	0.0000	676.4850
2025	0.7661	0.8207	0.3937	3.6100e-003	0.1045	4.6300e-003	0.1092	0.0284	4.5500e-003	0.0330	0.0000	348.1058	348.1058	0.0184	0.0000	348.5652
Maximum	**0.7661**	**2.4110**	**2.0586**	**7.2500e-003**	**0.3102**	**0.0675**	**0.3777**	**0.1299**	**0.0630**	**0.1929**	**0.0000**	**674.2526**	**674.2526**	**0.0893**	**0.0000**	**676.4850**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2023	0.0290	0.3051	0.2005	4.8000e-004	0.1927	0.0133	0.2060	0.1051	0.0123	0.1173	0.0000	42.4712	42.4712	0.0117	0.0000	42.7643
2024	0.5620	2.4110	2.0586	7.2500e-003	0.3102	0.0675	0.3777	0.1299	0.0630	0.1929	0.0000	674.2523	674.2523	0.0893	0.0000	676.4847
2025	0.7661	0.8207	0.3937	3.6100e-003	0.1045	4.6300e-003	0.1092	0.0284	4.5500e-003	0.0330	0.0000	348.1058	348.1058	0.0184	0.0000	348.5652
Maximum	**0.7661**	**2.4110**	**2.0586**	**7.2500e-003**	**0.3102**	**0.0675**	**0.3777**	**0.1299**	**0.0630**	**0.1929**	**0.0000**	**674.2523**	**674.2523**	**0.0893**	**0.0000**	**676.4847**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**12-1-2023**	**2-29-2024**	0.8921	0.8921
2	**3-1-2024**	**5-31-2024**	0.7364	0.7364
3	**6-1-2024**	**8-31-2024**	0.5987	0.5987
4	**9-1-2024**	**11-30-2024**	0.7528	0.7528
5	**12-1-2024**	**2-28-2025**	0.9532	0.9532
6	**3-1-2025**	**5-31-2025**	0.9483	0.9483
		Highest	0.9532	0.9532

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.9197	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.9197**	**5.0000e-005**	**5.1500e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0107**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.9197	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.9197**	**5.0000e-005**	**5.1500e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0107**

	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	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 2C Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2023	1/15/2024	5	32	
2	Excavation	Grading	1/16/2024	2/15/2024	5	23	
3	Foundation	Building Construction	2/16/2024	4/15/2024	5	42	
4	Structural Framing	Building Construction	4/16/2024	7/15/2024	5	65	
5	Exterior Enclosure	Paving	7/16/2024	10/15/2024	5	66	
6	Interior	Architectural Coating	10/16/2024	5/30/2025	5	163	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.53

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 352,200; Non-Residential Outdoor: 117,400; Striped Parking Area: 2,022 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2C Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Structural Framing	Welders	1	8.00	46	0.45
Exterior Enclosure	Pavers	2	8.00	130	0.42
Exterior Enclosure	Paving Equipment	2	8.00	132	0.36
Exterior Enclosure	Rollers	2	8.00	80	0.38
Interior	Air Compressors	1	6.00	78	0.48
Excavation	Excavators	1	8.00	158	0.38
Excavation	Graders	1	8.00	187	0.41
Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Foundation	Cranes	1	7.00	231	0.29
Foundation	Forklifts	3	8.00	89	0.20
Foundation	Generator Sets	1	8.00	84	0.74
Foundation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Foundation	Welders	1	8.00	46	0.45

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
Site Preparation	7	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	30.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosure	6	30.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Interior	1	80.00	80.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	6	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	9	50.00	50.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					0.1897	0.0000	0.1897	0.1043	0.0000	0.1043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.2890	0.1916	4.0000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	35.1232	35.1232	0.0114	0.0000	35.4072
Total	**0.0279**	**0.2890**	**0.1916**	**4.0000e-004**	**0.1897**	**0.0133**	**0.2030**	**0.1043**	**0.0122**	**0.1165**	**0.0000**	**35.1232**	**35.1232**	**0.0114**	**0.0000**	**35.4072**

3.2 Site Preparation - 2023

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.3000e-004	0.0157	4.4000e-003	6.0000e-005	1.4200e-003	4.0000e-005	1.4500e-003	3.9000e-004	3.0000e-005	4.2000e-004	0.0000	6.1231	6.1231	3.4000e-004	0.0000	6.1315
Worker	6.4000e-004	3.8000e-004	4.4900e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2249	1.2249	3.0000e-005	0.0000	1.2256
Total	**1.0700e-003**	**0.0161**	**8.8900e-003**	**7.0000e-005**	**2.9600e-003**	**5.0000e-005**	**3.0000e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**7.3481**	**7.3481**	**3.7000e-004**	**0.0000**	**7.3572**

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	tons/yr										MT/yr					
Fugitive Dust					0.1897	0.0000	0.1897	0.1043	0.0000	0.1043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.2890	0.1916	4.0000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	35.1232	35.1232	0.0114	0.0000	35.4072
Total	**0.0279**	**0.2890**	**0.1916**	**4.0000e-004**	**0.1897**	**0.0133**	**0.2030**	**0.1043**	**0.0122**	**0.1165**	**0.0000**	**35.1232**	**35.1232**	**0.0114**	**0.0000**	**35.4072**

3.2 Site Preparation - 2023

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.3000e-004	0.0157	4.4000e-003	6.0000e-005	1.4200e-003	4.0000e-005	1.4500e-003	3.9000e-004	3.0000e-005	4.2000e-004	0.0000	6.1231	6.1231	3.4000e-004	0.0000	6.1315
Worker	6.4000e-004	3.8000e-004	4.4900e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2249	1.2249	3.0000e-005	0.0000	1.2256
Total	**1.0700e-003**	**0.0161**	**8.8900e-003**	**7.0000e-005**	**2.9600e-003**	**5.0000e-005**	**3.0000e-003**	**8.0000e-004**	**4.0000e-005**	**8.4000e-004**	**0.0000**	**7.3481**	**7.3481**	**3.7000e-004**	**0.0000**	**7.3572**

3.2 Site Preparation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0546	0.0000	0.0546	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.1495	0.1009	2.1000e-004		6.7600e-003	6.7600e-003		6.2200e-003	6.2200e-003	0.0000	18.4014	18.4014	5.9500e-003	0.0000	18.5502
Total	**0.0146**	**0.1495**	**0.1009**	**2.1000e-004**	**0.0994**	**6.7600e-003**	**0.1061**	**0.0546**	**6.2200e-003**	**0.0608**	**0.0000**	**18.4014**	**18.4014**	**5.9500e-003**	**0.0000**	**18.5502**

3.2 Site Preparation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.2000e-004	7.9300e-003	2.2500e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	3.1871	3.1871	1.8000e-004	0.0000	3.1915
Worker	3.1000e-004	1.8000e-004	2.1800e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6167	0.6167	1.0000e-005	0.0000	0.6170
Total	**5.3000e-004**	**8.1100e-003**	**4.4300e-003**	**4.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5700e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**3.8038**	**3.8038**	**1.9000e-004**	**0.0000**	**3.8085**

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	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0546	0.0000	0.0546	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.1495	0.1009	2.1000e-004		6.7600e-003	6.7600e-003		6.2200e-003	6.2200e-003	0.0000	18.4014	18.4014	5.9500e-003	0.0000	18.5502
Total	**0.0146**	**0.1495**	**0.1009**	**2.1000e-004**	**0.0994**	**6.7600e-003**	**0.1061**	**0.0546**	**6.2200e-003**	**0.0608**	**0.0000**	**18.4014**	**18.4014**	**5.9500e-003**	**0.0000**	**18.5502**

3.2 Site Preparation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.2000e-004	7.9300e-003	2.2500e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	3.1871	3.1871	1.8000e-004	0.0000	3.1915
Worker	3.1000e-004	1.8000e-004	2.1800e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6167	0.6167	1.0000e-005	0.0000	0.6170
Total	**5.3000e-004**	**8.1100e-003**	**4.4300e-003**	**4.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5700e-003**	**4.1000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**3.8038**	**3.8038**	**1.9000e-004**	**0.0000**	**3.8085**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Fugitive Dust					0.0776	0.0000	0.0776	0.0391	0.0000	0.0391	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1959	0.1697	3.4000e-004		8.3300e-003	8.3300e-003		7.6600e-003	7.6600e-003	0.0000	29.9735	29.9735	9.6900e-003	0.0000	30.2159
Total	**0.0191**	**0.1959**	**0.1697**	**3.4000e-004**	**0.0776**	**8.3300e-003**	**0.0859**	**0.0391**	**7.6600e-003**	**0.0467**	**0.0000**	**29.9735**	**29.9735**	**9.6900e-003**	**0.0000**	**30.2159**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.1500e-003	0.0415	0.0118	1.7000e-004	3.8800e-003	9.0000e-005	3.9700e-003	1.0600e-003	9.0000e-005	1.1500e-003	0.0000	16.6597	16.6597	9.2000e-004	0.0000	16.6826
Worker	6.6000e-004	3.8000e-004	4.5500e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2895	1.2895	3.0000e-005	0.0000	1.2901
Total	**1.8100e-003**	**0.0418**	**0.0163**	**1.8000e-004**	**5.5700e-003**	**1.0000e-004**	**5.6700e-003**	**1.5100e-003**	**1.0000e-004**	**1.6100e-003**	**0.0000**	**17.9491**	**17.9491**	**9.5000e-004**	**0.0000**	**17.9727**

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	tons/yr										MT/yr					
Fugitive Dust					0.0776	0.0000	0.0776	0.0391	0.0000	0.0391	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1959	0.1697	3.4000e-004		8.3300e-003	8.3300e-003		7.6600e-003	7.6600e-003	0.0000	29.9735	29.9735	9.6900e-003	0.0000	30.2158
Total	**0.0191**	**0.1959**	**0.1697**	**3.4000e-004**	**0.0776**	**8.3300e-003**	**0.0859**	**0.0391**	**7.6600e-003**	**0.0467**	**0.0000**	**29.9735**	**29.9735**	**9.6900e-003**	**0.0000**	**30.2158**

3.3 Excavation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.1500e-003	0.0415	0.0118	1.7000e-004	3.8800e-003	9.0000e-005	3.9700e-003	1.0600e-003	9.0000e-005	1.1500e-003	0.0000	16.6597	16.6597	9.2000e-004	0.0000	16.6826
Worker	6.6000e-004	3.8000e-004	4.5500e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2895	1.2895	3.0000e-005	0.0000	1.2901
Total	**1.8100e-003**	**0.0418**	**0.0163**	**1.8000e-004**	**5.5700e-003**	**1.0000e-004**	**5.6700e-003**	**1.5100e-003**	**1.0000e-004**	**1.6100e-003**	**0.0000**	**17.9491**	**17.9491**	**9.5000e-004**	**0.0000**	**17.9727**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Off-Road	0.0309	0.2823	0.3395	5.7000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	48.6883	48.6883	0.0115	0.0000	48.9762
Total	**0.0309**	**0.2823**	**0.3395**	**5.7000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**48.6883**	**48.6883**	**0.0115**	**0.0000**	**48.9762**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.2300e-003	0.1893	0.0537	7.8000e-004	0.0177	4.2000e-004	0.0181	4.8600e-003	4.0000e-004	5.2600e-003	0.0000	76.0550	76.0550	4.1900e-003	0.0000	76.1596
Worker	2.9900e-003	1.7400e-003	0.0208	7.0000e-005	7.7100e-003	5.0000e-005	7.7600e-003	2.0500e-003	5.0000e-005	2.1000e-003	0.0000	5.8866	5.8866	1.3000e-004	0.0000	5.8898
Total	**8.2200e-003**	**0.1910**	**0.0745**	**8.5000e-004**	**0.0254**	**4.7000e-004**	**0.0259**	**6.9100e-003**	**4.5000e-004**	**7.3600e-003**	**0.0000**	**81.9416**	**81.9416**	**4.3200e-003**	**0.0000**	**82.0494**

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	tons/yr										MT/yr					
Off-Road	0.0309	0.2823	0.3395	5.7000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	48.6883	48.6883	0.0115	0.0000	48.9761
Total	**0.0309**	**0.2823**	**0.3395**	**5.7000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**48.6883**	**48.6883**	**0.0115**	**0.0000**	**48.9761**

3.4 Foundation - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.2300e-003	0.1893	0.0537	7.8000e-004	0.0177	4.2000e-004	0.0181	4.8600e-003	4.0000e-004	5.2600e-003	0.0000	76.0550	76.0550	4.1900e-003	0.0000	76.1596
Worker	2.9900e-003	1.7400e-003	0.0208	7.0000e-005	7.7100e-003	5.0000e-005	7.7600e-003	2.0500e-003	5.0000e-005	2.1000e-003	0.0000	5.8866	5.8866	1.3000e-004	0.0000	5.8898
Total	**8.2200e-003**	**0.1910**	**0.0745**	**8.5000e-004**	**0.0254**	**4.7000e-004**	**0.0259**	**6.9100e-003**	**4.5000e-004**	**7.3600e-003**	**0.0000**	**81.9416**	**81.9416**	**4.3200e-003**	**0.0000**	**82.0494**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Off-Road	0.0478	0.4369	0.5254	8.8000e-004		0.0199	0.0199		0.0188	0.0188	0.0000	75.3510	75.3510	0.0178	0.0000	75.7964
Total	**0.0478**	**0.4369**	**0.5254**	**8.8000e-004**		**0.0199**	**0.0199**		**0.0188**	**0.0188**	**0.0000**	**75.3510**	**75.3510**	**0.0178**	**0.0000**	**75.7964**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.8600e-003	0.1757	0.0499	7.2000e-004	0.0164	3.9000e-004	0.0168	4.5100e-003	3.7000e-004	4.8800e-003	0.0000	70.6225	70.6225	3.8900e-003	0.0000	70.7196
Worker	2.7800e-003	1.6100e-003	0.0193	6.0000e-005	7.1600e-003	5.0000e-005	7.2100e-003	1.9000e-003	4.0000e-005	1.9500e-003	0.0000	5.4662	5.4662	1.2000e-004	0.0000	5.4691
Total	**7.6400e-003**	**0.1774**	**0.0692**	**7.8000e-004**	**0.0236**	**4.4000e-004**	**0.0240**	**6.4100e-003**	**4.1000e-004**	**6.8300e-003**	**0.0000**	**76.0886**	**76.0886**	**4.0100e-003**	**0.0000**	**76.1887**

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	tons/yr										MT/yr					
Off-Road	0.0478	0.4369	0.5254	8.8000e-004		0.0199	0.0199		0.0188	0.0188	0.0000	75.3509	75.3509	0.0178	0.0000	75.7963
Total	**0.0478**	**0.4369**	**0.5254**	**8.8000e-004**		**0.0199**	**0.0199**		**0.0188**	**0.0188**	**0.0000**	**75.3509**	**75.3509**	**0.0178**	**0.0000**	**75.7963**

3.5 Structural Framing - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.8600e-003	0.1757	0.0499	7.2000e-004	0.0164	3.9000e-004	0.0168	4.5100e-003	3.7000e-004	4.8800e-003	0.0000	70.6225	70.6225	3.8900e-003	0.0000	70.7196
Worker	2.7800e-003	1.6100e-003	0.0193	6.0000e-005	7.1600e-003	5.0000e-005	7.2100e-003	1.9000e-003	4.0000e-005	1.9500e-003	0.0000	5.4662	5.4662	1.2000e-004	0.0000	5.4691
Total	**7.6400e-003**	**0.1774**	**0.0692**	**7.8000e-004**	**0.0236**	**4.4000e-004**	**0.0240**	**6.4100e-003**	**4.1000e-004**	**6.8300e-003**	**0.0000**	**76.0886**	**76.0886**	**4.0100e-003**	**0.0000**	**76.1887**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Off-Road	0.0326	0.3143	0.4827	7.5000e-004		0.0155	0.0155		0.0142	0.0142	0.0000	66.0876	66.0876	0.0214	0.0000	66.6219
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0326**	**0.3143**	**0.4827**	**7.5000e-004**		**0.0155**	**0.0155**		**0.0142**	**0.0142**	**0.0000**	**66.0876**	**66.0876**	**0.0214**	**0.0000**	**66.6219**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.9400e-003	0.1784	0.0506	7.4000e-004	0.0167	4.0000e-004	0.0171	4.5800e-003	3.8000e-004	4.9600e-003	0.0000	71.7090	71.7090	3.9500e-003	0.0000	71.8076
Worker	2.8200e-003	1.6400e-003	0.0196	6.0000e-005	7.2700e-003	5.0000e-005	7.3200e-003	1.9300e-003	4.0000e-005	1.9800e-003	0.0000	5.5502	5.5502	1.2000e-004	0.0000	5.5532
Total	**7.7600e-003**	**0.1801**	**0.0702**	**8.0000e-004**	**0.0240**	**4.5000e-004**	**0.0244**	**6.5100e-003**	**4.2000e-004**	**6.9400e-003**	**0.0000**	**77.2592**	**77.2592**	**4.0700e-003**	**0.0000**	**77.3609**

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	tons/yr										MT/yr					
Off-Road	0.0326	0.3143	0.4827	7.5000e-004		0.0155	0.0155		0.0142	0.0142	0.0000	66.0875	66.0875	0.0214	0.0000	66.6218
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0326**	**0.3143**	**0.4827**	**7.5000e-004**		**0.0155**	**0.0155**		**0.0142**	**0.0142**	**0.0000**	**66.0875**	**66.0875**	**0.0214**	**0.0000**	**66.6218**

3.6 Exterior Enclosure - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.9400e-003	0.1784	0.0506	7.4000e-004	0.0167	4.0000e-004	0.0171	4.5800e-003	3.8000e-004	4.9600e-003	0.0000	71.7090	71.7090	3.9500e-003	0.0000	71.8076
Worker	2.8200e-003	1.6400e-003	0.0196	6.0000e-005	7.2700e-003	5.0000e-005	7.3200e-003	1.9300e-003	4.0000e-005	1.9800e-003	0.0000	5.5502	5.5502	1.2000e-004	0.0000	5.5532
Total	**7.7600e-003**	**0.1801**	**0.0702**	**8.0000e-004**	**0.0240**	**4.5000e-004**	**0.0244**	**6.5100e-003**	**4.2000e-004**	**6.9400e-003**	**0.0000**	**77.2592**	**77.2592**	**4.0700e-003**	**0.0000**	**77.3609**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Archit. Coating	0.3688					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9700e-003	0.0335	0.0498	8.0000e-005		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	7.0215	7.0215	4.0000e-004	0.0000	7.0313
Total	**0.3738**	**0.0335**	**0.0498**	**8.0000e-005**		**1.6800e-003**	**1.6800e-003**		**1.6800e-003**	**1.6800e-003**	**0.0000**	**7.0215**	**7.0215**	**4.0000e-004**	**0.0000**	**7.0313**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0110	0.3965	0.1125	1.6300e-003	0.0371	8.8000e-004	0.0380	0.0102	8.4000e-004	0.0110	0.0000	159.3533	159.3533	8.7700e-003	0.0000	159.5725
Worker	6.2700e-003	3.6400e-003	0.0435	1.4000e-004	0.0162	1.0000e-004	0.0163	4.3000e-003	1.0000e-004	4.3900e-003	0.0000	12.3339	12.3339	2.6000e-004	0.0000	12.3405
Total	**0.0172**	**0.4002**	**0.1561**	**1.7700e-003**	**0.0532**	**9.8000e-004**	**0.0542**	**0.0145**	**9.4000e-004**	**0.0154**	**0.0000**	**171.6871**	**171.6871**	**9.0300e-003**	**0.0000**	**171.9130**

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	tons/yr										MT/yr					
Archit. Coating	0.3688					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9700e-003	0.0335	0.0498	8.0000e-005		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	7.0214	7.0214	4.0000e-004	0.0000	7.0313
Total	**0.3738**	**0.0335**	**0.0498**	**8.0000e-005**		**1.6800e-003**	**1.6800e-003**		**1.6800e-003**	**1.6800e-003**	**0.0000**	**7.0214**	**7.0214**	**4.0000e-004**	**0.0000**	**7.0313**

3.7 Interior - 2024

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0110	0.3965	0.1125	1.6300e-003	0.0371	8.8000e-004	0.0380	0.0102	8.4000e-004	0.0110	0.0000	159.3533	159.3533	8.7700e-003	0.0000	159.5725
Worker	6.2700e-003	3.6400e-003	0.0435	1.4000e-004	0.0162	1.0000e-004	0.0163	4.3000e-003	1.0000e-004	4.3900e-003	0.0000	12.3339	12.3339	2.6000e-004	0.0000	12.3405
Total	**0.0172**	**0.4002**	**0.1561**	**1.7700e-003**	**0.0532**	**9.8000e-004**	**0.0542**	**0.0145**	**9.4000e-004**	**0.0154**	**0.0000**	**171.6871**	**171.6871**	**9.0300e-003**	**0.0000**	**171.9130**

3.7 Interior - 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	tons/yr										MT/yr					
Archit. Coating	0.7242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2300e-003	0.0619	0.0977	1.6000e-004		2.7800e-003	2.7800e-003		2.7800e-003	2.7800e-003	0.0000	13.7876	13.7876	7.5000e-004	0.0000	13.8064
Total	**0.7334**	**0.0619**	**0.0977**	**1.6000e-004**		**2.7800e-003**	**2.7800e-003**		**2.7800e-003**	**2.7800e-003**	**0.0000**	**13.7876**	**13.7876**	**7.5000e-004**	**0.0000**	**13.8064**

3.7 Interior - 2025

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0211	0.7523	0.2169	3.1900e-003	0.0728	1.6500e-003	0.0745	0.0200	1.5800e-003	0.0216	0.0000	311.0686	311.0686	0.0172	0.0000	311.4975
Worker	0.0116	6.4900e-003	0.0792	2.6000e-004	0.0317	2.0000e-004	0.0319	8.4400e-003	1.9000e-004	8.6200e-003	0.0000	23.2496	23.2496	4.7000e-004	0.0000	23.2613
Total	**0.0327**	**0.7588**	**0.2960**	**3.4500e-003**	**0.1045**	**1.8500e-003**	**0.1064**	**0.0284**	**1.7700e-003**	**0.0302**	**0.0000**	**334.3182**	**334.3182**	**0.0176**	**0.0000**	**334.7588**

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	tons/yr										MT/yr					
Archit. Coating	0.7242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2300e-003	0.0619	0.0977	1.6000e-004		2.7800e-003	2.7800e-003		2.7800e-003	2.7800e-003	0.0000	13.7876	13.7876	7.5000e-004	0.0000	13.8064
Total	**0.7334**	**0.0619**	**0.0977**	**1.6000e-004**		**2.7800e-003**	**2.7800e-003**		**2.7800e-003**	**2.7800e-003**	**0.0000**	**13.7876**	**13.7876**	**7.5000e-004**	**0.0000**	**13.8064**

3.7 Interior - 2025

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	tons/yr										MT/yr					
Hauling	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
Vendor	0.0211	0.7523	0.2169	3.1900e-003	0.0728	1.6500e-003	0.0745	0.0200	1.5800e-003	0.0216	0.0000	311.0686	311.0686	0.0172	0.0000	311.4975
Worker	0.0116	6.4900e-003	0.0792	2.6000e-004	0.0317	2.0000e-004	0.0319	8.4400e-003	1.9000e-004	8.6200e-003	0.0000	23.2496	23.2496	4.7000e-004	0.0000	23.2613
Total	**0.0327**	**0.7588**	**0.2960**	**3.4500e-003**	**0.1045**	**1.8500e-003**	**0.1064**	**0.0284**	**1.7700e-003**	**0.0302**	**0.0000**	**334.3182**	**334.3182**	**0.0176**	**0.0000**	**334.7588**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Medical Office Building	10.00	5.00	6.50	29.60	51.40	19.00	60	30	10

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Hospital	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Medical Office Building	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Hospital	0	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
Medical Office Building	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Hospital	0	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
Medical Office Building	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.9197	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Unmitigated	0.9197	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9192					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.7000e-004	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Total	**0.9197**	**5.0000e-005**	**5.1500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0107**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9192					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.7000e-004	5.0000e-005	5.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0107
Total	**0.9197**	**5.0000e-005**	**5.1500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0107**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2D Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	3.21	Acre	3.21	139,997.48	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Demolition -

Grading -

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	132.00
tblLandUse	LandUseSquareFeet	139,827.60	139,997.48
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	OutdoorWaterUseRate	3,824,655.13	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2025	0.1711	1.7604	1.2450	3.0200e-003	1.2158	0.0720	1.2878	0.6617	0.0663	0.7280	0.0000	269.5577	269.5577	0.0738	0.0000	271.4014
Maximum	**0.1711**	**1.7604**	**1.2450**	**3.0200e-003**	**1.2158**	**0.0720**	**1.2878**	**0.6617**	**0.0663**	**0.7280**	**0.0000**	**269.5577**	**269.5577**	**0.0738**	**0.0000**	**271.4014**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2025	0.1711	1.7604	1.2450	3.0200e-003	1.2158	0.0720	1.2878	0.6617	0.0663	0.7280	0.0000	269.5574	269.5574	0.0738	0.0000	271.4011
Maximum	**0.1711**	**1.7604**	**1.2450**	**3.0200e-003**	**1.2158**	**0.0720**	**1.2878**	**0.6617**	**0.0663**	**0.7280**	**0.0000**	**269.5574**	**269.5574**	**0.0738**	**0.0000**	**271.4011**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2025**	**7-31-2025**	0.9606	0.9606
2	**8-1-2025**	**9-30-2025**	0.6369	0.6369
		Highest	0.9606	0.9606

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	1.3200e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3200e-003**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	1.3200e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3200e-003**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

	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	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	Site Preparation	Site Preparation	5/1/2025	10/31/2025	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

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
Site Preparation	7	30.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					1.1924	0.0000	1.1924	0.6554	0.0000	0.6554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1632	1.6654	1.1822	2.5100e-003		0.0717	0.0717		0.0660	0.0660	0.0000	220.8821	220.8821	0.0714	0.0000	222.6681
Total	**0.1632**	**1.6654**	**1.1822**	**2.5100e-003**	**1.1924**	**0.0717**	**1.2641**	**0.6554**	**0.0660**	**0.7214**	**0.0000**	**220.8821**	**220.8821**	**0.0714**	**0.0000**	**222.6681**

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5800e-003	0.0920	0.0265	3.9000e-004	8.9000e-003	2.0000e-004	9.1000e-003	2.4400e-003	1.9000e-004	2.6300e-003	0.0000	38.0195	38.0195	2.1000e-003	0.0000	38.0719
Worker	5.3300e-003	2.9700e-003	0.0363	1.2000e-004	0.0145	9.0000e-005	0.0146	3.8700e-003	9.0000e-005	3.9500e-003	0.0000	10.6561	10.6561	2.2000e-004	0.0000	10.6614
Total	**7.9100e-003**	**0.0949**	**0.0628**	**5.1000e-004**	**0.0234**	**2.9000e-004**	**0.0237**	**6.3100e-003**	**2.8000e-004**	**6.5800e-003**	**0.0000**	**48.6756**	**48.6756**	**2.3200e-003**	**0.0000**	**48.7334**

3.2 Site Preparation - 2025

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	tons/yr										MT/yr					
Fugitive Dust					1.1924	0.0000	1.1924	0.6554	0.0000	0.6554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1632	1.6654	1.1822	2.5100e-003		0.0717	0.0717		0.0660	0.0660	0.0000	220.8819	220.8819	0.0714	0.0000	222.6678
Total	**0.1632**	**1.6654**	**1.1822**	**2.5100e-003**	**1.1924**	**0.0717**	**1.2641**	**0.6554**	**0.0660**	**0.7214**	**0.0000**	**220.8819**	**220.8819**	**0.0714**	**0.0000**	**222.6678**

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5800e-003	0.0920	0.0265	3.9000e-004	8.9000e-003	2.0000e-004	9.1000e-003	2.4400e-003	1.9000e-004	2.6300e-003	0.0000	38.0195	38.0195	2.1000e-003	0.0000	38.0719
Worker	5.3300e-003	2.9700e-003	0.0363	1.2000e-004	0.0145	9.0000e-005	0.0146	3.8700e-003	9.0000e-005	3.9500e-003	0.0000	10.6561	10.6561	2.2000e-004	0.0000	10.6614
Total	**7.9100e-003**	**0.0949**	**0.0628**	**5.1000e-004**	**0.0234**	**2.9000e-004**	**0.0237**	**6.3100e-003**	**2.8000e-004**	**6.5800e-003**	**0.0000**	**48.6756**	**48.6756**	**2.3200e-003**	**0.0000**	**48.7334**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	10.00	5.00	6.50	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	1.3200e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Unmitigated	1.3200e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Total	**1.3200e-003**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Total	**1.3200e-003**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 3A Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	1,000.00	Space	9.00	165,600.00	0
Strip Mall	41.40	1000sqft	0.95	41,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2028
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Grading - 18,400 CY export under excavation phase

Demolition -

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	20700	0
tblAreaCoating	Area_Nonresidential_Interior	62100	0
tblAreaCoating	Area_Parking	9936	0
tblConstructionPhase	NumDays	20.00	77.00
tblConstructionPhase	NumDays	230.00	43.00
tblConstructionPhase	NumDays	20.00	34.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	PhaseEndDate	2/21/2028	11/30/2027
tblConstructionPhase	PhaseEndDate	12/27/2027	6/15/2027
tblConstructionPhase	PhaseEndDate	12/28/2026	1/15/2027

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tblConstructionPhase	PhaseEndDate	2/8/2027	4/15/2027
tblConstructionPhase	PhaseEndDate	1/24/2028	8/13/2027
tblConstructionPhase	PhaseEndDate	1/11/2027	2/15/2027
tblConstructionPhase	PhaseStartDate	1/25/2028	8/16/2027
tblConstructionPhase	PhaseStartDate	2/9/2027	4/16/2027
tblConstructionPhase	PhaseStartDate	1/12/2027	2/16/2027
tblConstructionPhase	PhaseStartDate	12/28/2027	6/16/2027
tblConstructionPhase	PhaseStartDate	12/29/2026	1/16/2027
tblEnergyUse	LightingElect	5.33	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	2.98	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	0.93	0.00
tblEnergyUse	T24E	3.26	0.00
tblEnergyUse	T24NG	4.49	0.00
tblGrading	AcresOfGrading	21.50	10.00
tblGrading	MaterialExported	0.00	18,400.00
tblLandUse	LandUseSquareFeet	400,000.00	165,600.00
tblSolidWaste	SolidWasteGenerationRate	43.47	0.00
tblTripsAndVMT	HaulingTripNumber	66.00	0.00
tblTripsAndVMT	HaulingTripNumber	2,300.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	34.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	15.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	17.00	30.00
tblTripsAndVMT	WorkerTripNumber	83.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	3,066,602.39	0.00
tblWater	OutdoorWaterUseRate	1,879,530.50	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2026	0.0251	0.2366	0.2318	5.3000e-004	8.2900e-003	9.8500e-003	0.0181	1.6400e-003	9.1500e-003	0.0108	0.0000	46.8775	46.8775	0.0113	0.0000	47.1600
2027	0.3612	1.6055	1.5147	4.4400e-003	0.3971	0.0529	0.4500	0.1952	0.0491	0.2443	0.0000	407.2055	407.2055	0.0709	0.0000	408.9791
Maximum	**0.3612**	**1.6055**	**1.5147**	**4.4400e-003**	**0.3971**	**0.0529**	**0.4500**	**0.1952**	**0.0491**	**0.2443**	**0.0000**	**407.2055**	**407.2055**	**0.0709**	**0.0000**	**408.9791**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2026	0.0251	0.2366	0.2318	5.3000e-004	8.2900e-003	9.8500e-003	0.0181	1.6400e-003	9.1500e-003	0.0108	0.0000	46.8774	46.8774	0.0113	0.0000	47.1600
2027	0.3612	1.6055	1.5147	4.4400e-003	0.3971	0.0529	0.4500	0.1952	0.0491	0.2443	0.0000	407.2052	407.2052	0.0709	0.0000	408.9788
Maximum	**0.3612**	**1.6055**	**1.5147**	**4.4400e-003**	**0.3971**	**0.0529**	**0.4500**	**0.1952**	**0.0491**	**0.2443**	**0.0000**	**407.2052**	**407.2052**	**0.0709**	**0.0000**	**408.9788**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2026	2-28-2027	0.8118	0.8118
2	3-1-2027	5-31-2027	0.6452	0.6452
3	6-1-2027	8-31-2027	0.4219	0.4219
4	9-1-2027	9-30-2027	0.1103	0.1103
		Highest	0.8118	0.8118

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.1736	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1736**	**1.2000e-004**	**0.0133**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0258**	**0.0258**	**7.0000e-005**	**0.0000**	**0.0275**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.1736	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1736**	**1.2000e-004**	**0.0133**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0258**	**0.0258**	**7.0000e-005**	**0.0000**	**0.0275**

	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	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 3A Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation/Demolition	Demolition	12/1/2026	1/15/2027	5	34	
2	Excavation	Site Preparation	1/16/2027	2/15/2027	5	21	
3	Foundation	Grading	2/16/2027	4/15/2027	5	43	
4	Structural Framing	Building Construction	4/16/2027	6/15/2027	5	43	
5	Exterior Enclosures/Arch Coating	Paving	6/16/2027	8/13/2027	5	43	
6	Interior	Architectural Coating	8/16/2027	11/30/2027	5	77	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 9

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 62,100; Non-Residential Outdoor: 20,700; Striped Parking Area: 9,936 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3A Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Interior	Air Compressors	1	6.00	78	0.48
Site Preparation/Demolition	Excavators	3	8.00	158	0.38
Site Preparation/Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Foundation	Excavators	1	8.00	158	0.38
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Exterior Enclosures/Arch Coating	Pavers	2	8.00	130	0.42
Exterior Enclosures/Arch Coating	Rollers	2	8.00	80	0.38
Site Preparation/Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Foundation	Rubber Tired Dozers	1	8.00	247	0.40
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Foundation	Graders	1	8.00	187	0.41
Foundation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Exterior Enclosures/Arch Coating	Paving Equipment	2	8.00	132	0.36
Excavation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Excavation	Rubber Tired Dozers	3	8.00	247	0.40
Structural Framing	Welders	1	8.00	46	0.45

Trips and VMT

Phase 3A Construction - Sacramento County, Annual

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
Interior	1	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Site Preparation/Demolitio	6	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	6	50.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosures/Arch Coati	6	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	7	20.00	15.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation/Demolition - 2026

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	tons/yr										MT/yr					
Fugitive Dust					5.0500e-003	0.0000	5.0500e-003	7.6000e-004	0.0000	7.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.2208	0.2233	4.5000e-004		9.8100e-003	9.8100e-003		9.1100e-003	9.1100e-003	0.0000	39.0973	39.0973	0.0109	0.0000	39.3702
Total	**0.0241**	**0.2208**	**0.2233**	**4.5000e-004**	**5.0500e-003**	**9.8100e-003**	**0.0149**	**7.6000e-004**	**9.1100e-003**	**9.8700e-003**	**0.0000**	**39.0973**	**39.0973**	**0.0109**	**0.0000**	**39.3702**

3.2 Site Preparation/Demolition - 2026

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.4000e-004	0.0155	4.5500e-003	7.0000e-005	1.5500e-003	3.0000e-005	1.5800e-003	4.3000e-004	3.0000e-005	4.6000e-004	0.0000	6.5883	6.5883	3.6000e-004	0.0000	6.5974
Worker	5.9000e-004	3.2000e-004	3.9200e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.1918	1.1918	2.0000e-005	0.0000	1.1924
Total	**1.0300e-003**	**0.0158**	**8.4700e-003**	**8.0000e-005**	**3.2400e-003**	**4.0000e-005**	**3.2800e-003**	**8.8000e-004**	**4.0000e-005**	**9.2000e-004**	**0.0000**	**7.7802**	**7.7802**	**3.8000e-004**	**0.0000**	**7.7898**

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	tons/yr										MT/yr					
Fugitive Dust					5.0500e-003	0.0000	5.0500e-003	7.6000e-004	0.0000	7.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.2208	0.2233	4.5000e-004		9.8100e-003	9.8100e-003		9.1100e-003	9.1100e-003	0.0000	39.0973	39.0973	0.0109	0.0000	39.3702
Total	**0.0241**	**0.2208**	**0.2233**	**4.5000e-004**	**5.0500e-003**	**9.8100e-003**	**0.0149**	**7.6000e-004**	**9.1100e-003**	**9.8700e-003**	**0.0000**	**39.0973**	**39.0973**	**0.0109**	**0.0000**	**39.3702**

3.2 Site Preparation/Demolition - 2026

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.4000e-004	0.0155	4.5500e-003	7.0000e-005	1.5500e-003	3.0000e-005	1.5800e-003	4.3000e-004	3.0000e-005	4.6000e-004	0.0000	6.5883	6.5883	3.6000e-004	0.0000	6.5974
Worker	5.9000e-004	3.2000e-004	3.9200e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.1918	1.1918	2.0000e-005	0.0000	1.1924
Total	**1.0300e-003**	**0.0158**	**8.4700e-003**	**8.0000e-005**	**3.2400e-003**	**4.0000e-005**	**3.2800e-003**	**8.8000e-004**	**4.0000e-005**	**9.2000e-004**	**0.0000**	**7.7802**	**7.7802**	**3.8000e-004**	**0.0000**	**7.7898**

3.2 Site Preparation/Demolition - 2027

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	tons/yr										MT/yr					
Fugitive Dust					2.4100e-003	0.0000	2.4100e-003	3.7000e-004	0.0000	3.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1056	0.1068	2.1000e-004		4.6900e-003	4.6900e-003		4.3600e-003	4.3600e-003	0.0000	18.6987	18.6987	5.2200e-003	0.0000	18.8292
Total	**0.0115**	**0.1056**	**0.1068**	**2.1000e-004**	**2.4100e-003**	**4.6900e-003**	**7.1000e-003**	**3.7000e-004**	**4.3600e-003**	**4.7300e-003**	**0.0000**	**18.6987**	**18.6987**	**5.2200e-003**	**0.0000**	**18.8292**

3.2 Site Preparation/Demolition - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1000e-004	7.1900e-003	2.1400e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	1.0000e-005	2.2000e-004	0.0000	3.1349	3.1349	1.7000e-004	0.0000	3.1393
Worker	2.7000e-004	1.4000e-004	1.7500e-003	1.0000e-005	8.1000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.5503	0.5503	1.0000e-005	0.0000	0.5506
Total	**4.8000e-004**	**7.3300e-003**	**3.8900e-003**	**4.0000e-005**	**1.5500e-003**	**2.0000e-005**	**1.5700e-003**	**4.1000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**3.6853**	**3.6853**	**1.8000e-004**	**0.0000**	**3.6898**

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	tons/yr										MT/yr					
Fugitive Dust					2.4100e-003	0.0000	2.4100e-003	3.7000e-004	0.0000	3.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1056	0.1068	2.1000e-004		4.6900e-003	4.6900e-003		4.3600e-003	4.3600e-003	0.0000	18.6987	18.6987	5.2200e-003	0.0000	18.8292
Total	**0.0115**	**0.1056**	**0.1068**	**2.1000e-004**	**2.4100e-003**	**4.6900e-003**	**7.1000e-003**	**3.7000e-004**	**4.3600e-003**	**4.7300e-003**	**0.0000**	**18.6987**	**18.6987**	**5.2200e-003**	**0.0000**	**18.8292**

3.2 Site Preparation/Demolition - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.1000e-004	7.1900e-003	2.1400e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	2.0000e-004	1.0000e-005	2.2000e-004	0.0000	3.1349	3.1349	1.7000e-004	0.0000	3.1393
Worker	2.7000e-004	1.4000e-004	1.7500e-003	1.0000e-005	8.1000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.5503	0.5503	1.0000e-005	0.0000	0.5506
Total	**4.8000e-004**	**7.3300e-003**	**3.8900e-003**	**4.0000e-005**	**1.5500e-003**	**2.0000e-005**	**1.5700e-003**	**4.1000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**3.6853**	**3.6853**	**1.8000e-004**	**0.0000**	**3.6898**

3.3 Excavation - 2027

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	tons/yr										MT/yr					
Fugitive Dust					0.1916	0.0000	0.1916	0.1046	0.0000	0.1046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0260	0.2650	0.1881	4.0000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	35.1403	35.1403	0.0114	0.0000	35.4245
Total	**0.0260**	**0.2650**	**0.1881**	**4.0000e-004**	**0.1916**	**0.0114**	**0.2030**	**0.1046**	**0.0105**	**0.1151**	**0.0000**	**35.1403**	**35.1403**	**0.0114**	**0.0000**	**35.4245**

3.3 Excavation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.4000e-004	0.0257	7.6700e-003	1.1000e-004	2.6500e-003	5.0000e-005	2.7100e-003	7.3000e-004	5.0000e-005	7.8000e-004	0.0000	11.2216	11.2216	6.2000e-004	0.0000	11.2371
Worker	5.1000e-004	2.6000e-004	3.3400e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.0506	1.0506	2.0000e-005	0.0000	1.0511
Total	**1.2500e-003**	**0.0260**	**0.0110**	**1.2000e-004**	**4.1900e-003**	**6.0000e-005**	**4.2600e-003**	**1.1400e-003**	**6.0000e-005**	**1.2000e-003**	**0.0000**	**12.2722**	**12.2722**	**6.4000e-004**	**0.0000**	**12.2882**

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	tons/yr										MT/yr					
Fugitive Dust					0.1916	0.0000	0.1916	0.1046	0.0000	0.1046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0260	0.2650	0.1881	4.0000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	35.1403	35.1403	0.0114	0.0000	35.4244
Total	**0.0260**	**0.2650**	**0.1881**	**4.0000e-004**	**0.1916**	**0.0114**	**0.2030**	**0.1046**	**0.0105**	**0.1151**	**0.0000**	**35.1403**	**35.1403**	**0.0114**	**0.0000**	**35.4244**

3.3 Excavation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.4000e-004	0.0257	7.6700e-003	1.1000e-004	2.6500e-003	5.0000e-005	2.7100e-003	7.3000e-004	5.0000e-005	7.8000e-004	0.0000	11.2216	11.2216	6.2000e-004	0.0000	11.2371
Worker	5.1000e-004	2.6000e-004	3.3400e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.0506	1.0506	2.0000e-005	0.0000	1.0511
Total	**1.2500e-003**	**0.0260**	**0.0110**	**1.2000e-004**	**4.1900e-003**	**6.0000e-005**	**4.2600e-003**	**1.1400e-003**	**6.0000e-005**	**1.2000e-003**	**0.0000**	**12.2722**	**12.2722**	**6.4000e-004**	**0.0000**	**12.2882**

3.4 Foundation - 2027

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	tons/yr										MT/yr					
Fugitive Dust					0.1348	0.0000	0.1348	0.0717	0.0000	0.0717	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0327	0.3293	0.3126	6.4000e-004		0.0134	0.0134		0.0123	0.0123	0.0000	56.0501	56.0501	0.0181	0.0000	56.5033
Total	**0.0327**	**0.3293**	**0.3126**	**6.4000e-004**	**0.1348**	**0.0134**	**0.1482**	**0.0717**	**0.0123**	**0.0841**	**0.0000**	**56.0501**	**56.0501**	**0.0181**	**0.0000**	**56.5033**

3.4 Foundation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.0300e-003	0.1053	0.0314	4.7000e-004	0.0109	2.2000e-004	0.0111	2.9800e-003	2.1000e-004	3.2000e-003	0.0000	45.9552	45.9552	2.5300e-003	0.0000	46.0186
Worker	2.5900e-003	1.3500e-003	0.0171	6.0000e-005	7.9000e-003	5.0000e-005	7.9400e-003	2.1000e-003	4.0000e-005	2.1400e-003	0.0000	5.3781	5.3781	1.0000e-004	0.0000	5.3805
Total	**5.6200e-003**	**0.1067**	**0.0485**	**5.3000e-004**	**0.0188**	**2.7000e-004**	**0.0190**	**5.0800e-003**	**2.5000e-004**	**5.3400e-003**	**0.0000**	**51.3334**	**51.3334**	**2.6300e-003**	**0.0000**	**51.3991**

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	tons/yr										MT/yr					
Fugitive Dust					0.1348	0.0000	0.1348	0.0717	0.0000	0.0717	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0327	0.3293	0.3126	6.4000e-004		0.0134	0.0134		0.0123	0.0123	0.0000	56.0500	56.0500	0.0181	0.0000	56.5032
Total	**0.0327**	**0.3293**	**0.3126**	**6.4000e-004**	**0.1348**	**0.0134**	**0.1482**	**0.0717**	**0.0123**	**0.0841**	**0.0000**	**56.0500**	**56.0500**	**0.0181**	**0.0000**	**56.5032**

3.4 Foundation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.0300e-003	0.1053	0.0314	4.7000e-004	0.0109	2.2000e-004	0.0111	2.9800e-003	2.1000e-004	3.2000e-003	0.0000	45.9552	45.9552	2.5300e-003	0.0000	46.0186
Worker	2.5900e-003	1.3500e-003	0.0171	6.0000e-005	7.9000e-003	5.0000e-005	7.9400e-003	2.1000e-003	4.0000e-005	2.1400e-003	0.0000	5.3781	5.3781	1.0000e-004	0.0000	5.3805
Total	**5.6200e-003**	**0.1067**	**0.0485**	**5.3000e-004**	**0.0188**	**2.7000e-004**	**0.0190**	**5.0800e-003**	**2.5000e-004**	**5.3400e-003**	**0.0000**	**51.3334**	**51.3334**	**2.6300e-003**	**0.0000**	**51.3991**

3.5 Structural Framing - 2027

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	tons/yr										MT/yr					
Off-Road	0.0294	0.2681	0.3458	5.8000e-004		0.0113	0.0113		0.0107	0.0107	0.0000	49.8627	49.8627	0.0117	0.0000	50.1557
Total	**0.0294**	**0.2681**	**0.3458**	**5.8000e-004**		**0.0113**	**0.0113**		**0.0107**	**0.0107**	**0.0000**	**49.8627**	**49.8627**	**0.0117**	**0.0000**	**50.1557**

3.5 Structural Framing - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0200e-003	0.0702	0.0209	3.1000e-004	7.2400e-003	1.5000e-004	7.3900e-003	1.9900e-003	1.4000e-004	2.1300e-003	0.0000	30.6368	30.6368	1.6900e-003	0.0000	30.6790
Worker	1.5600e-003	8.1000e-004	0.0103	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.2269	3.2269	6.0000e-005	0.0000	3.2283
Total	**3.5800e-003**	**0.0710**	**0.0312**	**3.5000e-004**	**0.0120**	**1.8000e-004**	**0.0122**	**3.2500e-003**	**1.7000e-004**	**3.4200e-003**	**0.0000**	**33.8637**	**33.8637**	**1.7500e-003**	**0.0000**	**33.9074**

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	tons/yr										MT/yr					
Off-Road	0.0294	0.2681	0.3458	5.8000e-004		0.0113	0.0113		0.0107	0.0107	0.0000	49.8626	49.8626	0.0117	0.0000	50.1557
Total	**0.0294**	**0.2681**	**0.3458**	**5.8000e-004**		**0.0113**	**0.0113**		**0.0107**	**0.0107**	**0.0000**	**49.8626**	**49.8626**	**0.0117**	**0.0000**	**50.1557**

3.5 Structural Framing - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0200e-003	0.0702	0.0209	3.1000e-004	7.2400e-003	1.5000e-004	7.3900e-003	1.9900e-003	1.4000e-004	2.1300e-003	0.0000	30.6368	30.6368	1.6900e-003	0.0000	30.6790
Worker	1.5600e-003	8.1000e-004	0.0103	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.2269	3.2269	6.0000e-005	0.0000	3.2283
Total	**3.5800e-003**	**0.0710**	**0.0312**	**3.5000e-004**	**0.0120**	**1.8000e-004**	**0.0122**	**3.2500e-003**	**1.7000e-004**	**3.4200e-003**	**0.0000**	**33.8637**	**33.8637**	**1.7500e-003**	**0.0000**	**33.9074**

3.6 Exterior Enclosures/Arch Coating - 2027

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	tons/yr										MT/yr					
Off-Road	0.0197	0.1845	0.3134	4.9000e-004		9.0000e-003	9.0000e-003		8.2800e-003	8.2800e-003	0.0000	43.0414	43.0414	0.0139	0.0000	43.3894
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0197**	**0.1845**	**0.3134**	**4.9000e-004**		**9.0000e-003**	**9.0000e-003**		**8.2800e-003**	**8.2800e-003**	**0.0000**	**43.0414**	**43.0414**	**0.0139**	**0.0000**	**43.3894**

3.6 Exterior Enclosures/Arch Coating - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0200e-003	0.0702	0.0209	3.1000e-004	7.2400e-003	1.5000e-004	7.3900e-003	1.9900e-003	1.4000e-004	2.1300e-003	0.0000	30.6368	30.6368	1.6900e-003	0.0000	30.6790
Worker	1.0400e-003	5.4000e-004	6.8400e-003	2.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.1512	2.1512	4.0000e-005	0.0000	2.1522
Total	**3.0600e-003**	**0.0708**	**0.0278**	**3.3000e-004**	**0.0104**	**1.7000e-004**	**0.0106**	**2.8300e-003**	**1.6000e-004**	**2.9900e-003**	**0.0000**	**32.7881**	**32.7881**	**1.7300e-003**	**0.0000**	**32.8313**

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	tons/yr										MT/yr					
Off-Road	0.0197	0.1845	0.3134	4.9000e-004		9.0000e-003	9.0000e-003		8.2800e-003	8.2800e-003	0.0000	43.0414	43.0414	0.0139	0.0000	43.3894
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0197**	**0.1845**	**0.3134**	**4.9000e-004**		**9.0000e-003**	**9.0000e-003**		**8.2800e-003**	**8.2800e-003**	**0.0000**	**43.0414**	**43.0414**	**0.0139**	**0.0000**	**43.3894**

3.6 Exterior Enclosures/Arch Coating - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0200e-003	0.0702	0.0209	3.1000e-004	7.2400e-003	1.5000e-004	7.3900e-003	1.9900e-003	1.4000e-004	2.1300e-003	0.0000	30.6368	30.6368	1.6900e-003	0.0000	30.6790
Worker	1.0400e-003	5.4000e-004	6.8400e-003	2.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.1512	2.1512	4.0000e-005	0.0000	2.1522
Total	**3.0600e-003**	**0.0708**	**0.0278**	**3.3000e-004**	**0.0104**	**1.7000e-004**	**0.0106**	**2.8300e-003**	**1.6000e-004**	**2.9900e-003**	**0.0000**	**32.7881**	**32.7881**	**1.7300e-003**	**0.0000**	**32.8313**

3.7 Interior - 2027

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	tons/yr										MT/yr					
Archit. Coating	0.2149					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5800e-003	0.0441	0.0697	1.1000e-004		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	9.8300	9.8300	5.4000e-004	0.0000	9.8434
Total	**0.2215**	**0.0441**	**0.0697**	**1.1000e-004**		**1.9800e-003**	**1.9800e-003**		**1.9800e-003**	**1.9800e-003**	**0.0000**	**9.8300**	**9.8300**	**5.4000e-004**	**0.0000**	**9.8434**

3.7 Interior - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.6200e-003	0.1257	0.0375	5.6000e-004	0.0130	2.7000e-004	0.0132	3.5600e-003	2.6000e-004	3.8200e-003	0.0000	54.8613	54.8613	3.0200e-003	0.0000	54.9369
Worker	2.7900e-003	1.4500e-003	0.0184	6.0000e-005	8.4800e-003	5.0000e-005	8.5300e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	5.7783	5.7783	1.0000e-004	0.0000	5.7809
Total	**6.4100e-003**	**0.1272**	**0.0559**	**6.2000e-004**	**0.0215**	**3.2000e-004**	**0.0218**	**5.8200e-003**	**3.1000e-004**	**6.1200e-003**	**0.0000**	**60.6396**	**60.6396**	**3.1200e-003**	**0.0000**	**60.7178**

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	tons/yr										MT/yr					
Archit. Coating	0.2149					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5800e-003	0.0441	0.0697	1.1000e-004		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	9.8300	9.8300	5.4000e-004	0.0000	9.8434
Total	**0.2215**	**0.0441**	**0.0697**	**1.1000e-004**		**1.9800e-003**	**1.9800e-003**		**1.9800e-003**	**1.9800e-003**	**0.0000**	**9.8300**	**9.8300**	**5.4000e-004**	**0.0000**	**9.8434**

3.7 Interior - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.6200e-003	0.1257	0.0375	5.6000e-004	0.0130	2.7000e-004	0.0132	3.5600e-003	2.6000e-004	3.8200e-003	0.0000	54.8613	54.8613	3.0200e-003	0.0000	54.9369
Worker	2.7900e-003	1.4500e-003	0.0184	6.0000e-005	8.4800e-003	5.0000e-005	8.5300e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	5.7783	5.7783	1.0000e-004	0.0000	5.7809
Total	**6.4100e-003**	**0.1272**	**0.0559**	**6.2000e-004**	**0.0215**	**3.2000e-004**	**0.0218**	**5.8200e-003**	**3.1000e-004**	**6.1200e-003**	**0.0000**	**60.6396**	**60.6396**	**3.1200e-003**	**0.0000**	**60.7178**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.574521	0.035271	0.210873	0.107638	0.013399	0.004562	0.018333	0.025065	0.001898	0.001611	0.005555	0.000614	0.000658
Unenclosed Parking with Elevator	0.574521	0.035271	0.210873	0.107638	0.013399	0.004562	0.018333	0.025065	0.001898	0.001611	0.005555	0.000614	0.000658

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.1736	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Unmitigated	0.1736	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1724					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2200e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Total	**0.1736**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0258**	**0.0258**	**7.0000e-005**	**0.0000**	**0.0275**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1724					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2200e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0258	0.0258	7.0000e-005	0.0000	0.0275
Total	**0.1736**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0258**	**0.0258**	**7.0000e-005**	**0.0000**	**0.0275**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 3B Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	150.00	Dwelling Unit	3.95	96,000.00	401
General Office Building	24.00	1000sqft	0.55	24,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2029
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Grading - No material exported

Demolition -

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	12000	0
tblAreaCoating	Area_Nonresidential_Interior	36000	0
tblAreaCoating	Area_Residential_Exterior	64800	0
tblAreaCoating	Area_Residential_Interior	194400	0
tblConstructionPhase	NumDays	18.00	98.00
tblConstructionPhase	NumDays	230.00	33.00
tblConstructionPhase	NumDays	8.00	22.00
tblConstructionPhase	NumDays	18.00	54.00
tblConstructionPhase	NumDays	5.00	55.00
tblConstructionPhase	PhaseEndDate	12/21/2028	12/29/2028
tblConstructionPhase	PhaseEndDate	11/1/2028	3/31/2028
tblConstructionPhase	PhaseEndDate	12/15/2027	2/15/2028

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tblConstructionPhase	PhaseEndDate	11/27/2028	8/15/2028
tblConstructionPhase	PhaseEndDate	12/3/2027	1/14/2028
tblConstructionPhase	PhaseStartDate	11/28/2028	8/16/2028
tblConstructionPhase	PhaseStartDate	12/16/2027	2/16/2028
tblConstructionPhase	PhaseStartDate	12/4/2027	1/16/2028
tblConstructionPhase	PhaseStartDate	11/2/2028	6/1/2028
tblConstructionPhase	PhaseStartDate	11/27/2027	11/1/2027
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.71	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	NT24NG	0.68	0.00
tblEnergyUse	T24E	460.92	0.00
tblEnergyUse	T24E	4.98	0.00
tblEnergyUse	T24NG	7,061.10	0.00
tblEnergyUse	T24NG	12.42	0.00
tblGrading	AcresOfGrading	11.00	4.00
tblLandUse	LandUseSquareFeet	150,000.00	96,000.00
tblSolidWaste	SolidWasteGenerationRate	69.00	0.00
tblSolidWaste	SolidWasteGenerationRate	22.32	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00

tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	23.00	60.00
tblTripsAndVMT	WorkerTripNumber	116.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	50.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblWater	IndoorWaterUseRate	9,773,103.84	0.00
tblWater	IndoorWaterUseRate	4,265,609.95	0.00
tblWater	OutdoorWaterUseRate	6,161,304.60	0.00
tblWater	OutdoorWaterUseRate	2,614,406.10	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2027	0.0576	0.5977	0.4189	1.0100e-003	0.4128	0.0245	0.4374	0.2252	0.0226	0.2477	0.0000	90.3767	90.3767	0.0251	0.0000	91.0043
2028	0.8149	1.1181	1.1081	3.4800e-003	0.2301	0.0340	0.2640	0.1056	0.0317	0.1373	0.0000	320.3084	320.3084	0.0473	0.0000	321.4910
Maximum	**0.8149**	**1.1181**	**1.1081**	**3.4800e-003**	**0.4128**	**0.0340**	**0.4374**	**0.2252**	**0.0317**	**0.2477**	**0.0000**	**320.3084**	**320.3084**	**0.0473**	**0.0000**	**321.4910**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2027	0.0576	0.5977	0.4189	1.0100e-003	0.4128	0.0245	0.4374	0.2252	0.0226	0.2477	0.0000	90.3767	90.3767	0.0251	0.0000	91.0042
2028	0.8149	1.1181	1.1081	3.4800e-003	0.2301	0.0340	0.2640	0.1056	0.0317	0.1373	0.0000	320.3082	320.3082	0.0473	0.0000	321.4909
Maximum	**0.8149**	**1.1181**	**1.1081**	**3.4800e-003**	**0.4128**	**0.0340**	**0.4374**	**0.2252**	**0.0317**	**0.2477**	**0.0000**	**320.3082**	**320.3082**	**0.0473**	**0.0000**	**321.4909**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2027	1-31-2028	0.9055	0.9055
2	2-1-2028	4-30-2028	0.3944	0.3944
3	5-1-2028	7-31-2028	0.2531	0.2531
4	8-1-2028	9-30-2028	0.3786	0.3786
		Highest	0.9055	0.9055

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.5151	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.5151**	**0.0178**	**1.5457**	**8.0000e-005**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**0.0000**	**2.5274**	**2.5274**	**2.4200e-003**	**0.0000**	**2.5880**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.5151	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.5151**	**0.0178**	**1.5457**	**8.0000e-005**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**0.0000**	**8.5800e-003**	**8.5800e-003**	**0.0000**	**2.5274**	**2.5274**	**2.4200e-003**	**0.0000**	**2.5880**

	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	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 3B Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2027	1/14/2028	5	55	
2	Foundation	Grading	1/16/2028	2/15/2028	5	22	
3	Structural Framing	Building Construction	2/16/2028	3/31/2028	5	33	
4	Exterior Enclosures/Arch Coating	Paving	6/1/2028	8/15/2028	5	54	
5	Interior	Architectural Coating	8/16/2028	12/29/2028	5	98	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 194,400; Residential Outdoor: 64,800; Non-Residential Indoor: 36,000; Non-Residential Outdoor: 12,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3B Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Interior	Air Compressors	1	6.00	78	0.48
Foundation	Excavators	1	8.00	158	0.38
Structural Framing	Cranes	1	7.00	231	0.29
Structural Framing	Forklifts	3	8.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Exterior Enclosures/Arch Coating	Pavers	1	8.00	130	0.42
Exterior Enclosures/Arch Coating	Rollers	2	6.00	80	0.38
Foundation	Rubber Tired Dozers	1	8.00	247	0.40
Structural Framing	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Foundation	Graders	1	8.00	187	0.41
Foundation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Exterior Enclosures/Arch Coating	Paving Equipment	2	6.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Structural Framing	Welders	1	8.00	46	0.45
Exterior Enclosures/Arch Coating	Cement and Mortar Mixers	2	6.00	9	0.56
Exterior Enclosures/Arch Coating	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Interior	1	60.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	9	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	6	50.00	30.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosures/Arch Coati	8	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Site Preparation	7	20.00	8.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2027

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	tons/yr										MT/yr					
Fugitive Dust					0.4065	0.0000	0.4065	0.2234	0.0000	0.2234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0556	0.5678	0.4030	8.6000e-004		0.0245	0.0245		0.0225	0.0225	0.0000	75.3007	75.3007	0.0244	0.0000	75.9096
Total	**0.0556**	**0.5678**	**0.4030**	**8.6000e-004**	**0.4065**	**0.0245**	**0.4309**	**0.2234**	**0.0225**	**0.2459**	**0.0000**	**75.3007**	**75.3007**	**0.0244**	**0.0000**	**75.9096**

3.2 Site Preparation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	8.5000e-004	0.0294	8.7700e-003	1.3000e-004	3.0300e-003	6.0000e-005	3.0900e-003	8.3000e-004	6.0000e-005	8.9000e-004	0.0000	12.8247	12.8247	7.1000e-004	0.0000	12.8424
Worker	1.0900e-003	5.7000e-004	7.1600e-003	2.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.2513	2.2513	4.0000e-005	0.0000	2.2523
Total	**1.9400e-003**	**0.0300**	**0.0159**	**1.5000e-004**	**6.3300e-003**	**8.0000e-005**	**6.4100e-003**	**1.7100e-003**	**8.0000e-005**	**1.7900e-003**	**0.0000**	**15.0760**	**15.0760**	**7.5000e-004**	**0.0000**	**15.0947**

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	tons/yr										MT/yr					
Fugitive Dust					0.4065	0.0000	0.4065	0.2234	0.0000	0.2234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0556	0.5678	0.4030	8.6000e-004		0.0245	0.0245		0.0225	0.0225	0.0000	75.3006	75.3006	0.0244	0.0000	75.9095
Total	**0.0556**	**0.5678**	**0.4030**	**8.6000e-004**	**0.4065**	**0.0245**	**0.4309**	**0.2234**	**0.0225**	**0.2459**	**0.0000**	**75.3006**	**75.3006**	**0.0244**	**0.0000**	**75.9095**

3.2 Site Preparation - 2027

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	tons/yr										MT/yr					
Hauling	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
Vendor	8.5000e-004	0.0294	8.7700e-003	1.3000e-004	3.0300e-003	6.0000e-005	3.0900e-003	8.3000e-004	6.0000e-005	8.9000e-004	0.0000	12.8247	12.8247	7.1000e-004	0.0000	12.8424
Worker	1.0900e-003	5.7000e-004	7.1600e-003	2.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.2513	2.2513	4.0000e-005	0.0000	2.2523
Total	**1.9400e-003**	**0.0300**	**0.0159**	**1.5000e-004**	**6.3300e-003**	**8.0000e-005**	**6.4100e-003**	**1.7100e-003**	**8.0000e-005**	**1.7900e-003**	**0.0000**	**15.0760**	**15.0760**	**7.5000e-004**	**0.0000**	**15.0947**

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	**0.0124**	**0.1262**	**0.0896**	**1.9000e-004**	**0.0903**	**5.4300e-003**	**0.0958**	**0.0497**	**5.0000e-003**	**0.0547**	**0.0000**	**16.7335**	**16.7335**	**5.4100e-003**	**0.0000**	**16.8688**

3.2 Site Preparation - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.9000e-004	6.3600e-003	1.9200e-003	3.0000e-005	6.7000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	2.0000e-004	0.0000	2.8378	2.8378	1.6000e-004	0.0000	2.8417
Worker	2.3000e-004	1.2000e-004	1.4900e-003	1.0000e-005	7.3000e-004	0.0000	7.4000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.4844	0.4844	1.0000e-005	0.0000	0.4846
Total	**4.2000e-004**	**6.4800e-003**	**3.4100e-003**	**4.0000e-005**	**1.4000e-003**	**1.0000e-005**	**1.4300e-003**	**3.8000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**3.3222**	**3.3222**	**1.7000e-004**	**0.0000**	**3.3263**

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	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	**0.0124**	**0.1262**	**0.0896**	**1.9000e-004**	**0.0903**	**5.4300e-003**	**0.0958**	**0.0497**	**5.0000e-003**	**0.0547**	**0.0000**	**16.7335**	**16.7335**	**5.4100e-003**	**0.0000**	**16.8688**

3.2 Site Preparation - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.9000e-004	6.3600e-003	1.9200e-003	3.0000e-005	6.7000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	2.0000e-004	0.0000	2.8378	2.8378	1.6000e-004	0.0000	2.8417
Worker	2.3000e-004	1.2000e-004	1.4900e-003	1.0000e-005	7.3000e-004	0.0000	7.4000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.4844	0.4844	1.0000e-005	0.0000	0.4846
Total	**4.2000e-004**	**6.4800e-003**	**3.4100e-003**	**4.0000e-005**	**1.4000e-003**	**1.0000e-005**	**1.4300e-003**	**3.8000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**3.3222**	**3.3222**	**1.7000e-004**	**0.0000**	**3.3263**

3.3 Foundation - 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	tons/yr										MT/yr					
Fugitive Dust					0.0684	0.0000	0.0684	0.0366	0.0000	0.0366	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.1685	0.1599	3.3000e-004		6.8600e-003	6.8600e-003		6.3100e-003	6.3100e-003	0.0000	28.6768	28.6768	9.2700e-003	0.0000	28.9087
Total	**0.0168**	**0.1685**	**0.1599**	**3.3000e-004**	**0.0684**	**6.8600e-003**	**0.0752**	**0.0366**	**6.3100e-003**	**0.0430**	**0.0000**	**28.6768**	**28.6768**	**9.2700e-003**	**0.0000**	**28.9087**

3.3 Foundation - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.5300e-003	0.0525	0.0159	2.4000e-004	5.5600e-003	1.1000e-004	5.6700e-003	1.5300e-003	1.1000e-004	1.6300e-003	0.0000	23.4115	23.4115	1.2900e-003	0.0000	23.4437
Worker	1.2500e-003	6.3000e-004	8.1900e-003	3.0000e-005	4.0400e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	2.6642	2.6642	5.0000e-005	0.0000	2.6653
Total	**2.7800e-003**	**0.0531**	**0.0241**	**2.7000e-004**	**9.6000e-003**	**1.3000e-004**	**9.7300e-003**	**2.6000e-003**	**1.3000e-004**	**2.7200e-003**	**0.0000**	**26.0757**	**26.0757**	**1.3400e-003**	**0.0000**	**26.1091**

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	tons/yr										MT/yr					
Fugitive Dust					0.0684	0.0000	0.0684	0.0366	0.0000	0.0366	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.1685	0.1599	3.3000e-004		6.8600e-003	6.8600e-003		6.3100e-003	6.3100e-003	0.0000	28.6768	28.6768	9.2700e-003	0.0000	28.9086
Total	**0.0168**	**0.1685**	**0.1599**	**3.3000e-004**	**0.0684**	**6.8600e-003**	**0.0752**	**0.0366**	**6.3100e-003**	**0.0430**	**0.0000**	**28.6768**	**28.6768**	**9.2700e-003**	**0.0000**	**28.9086**

3.3 Foundation - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.5300e-003	0.0525	0.0159	2.4000e-004	5.5600e-003	1.1000e-004	5.6700e-003	1.5300e-003	1.1000e-004	1.6300e-003	0.0000	23.4115	23.4115	1.2900e-003	0.0000	23.4437
Worker	1.2500e-003	6.3000e-004	8.1900e-003	3.0000e-005	4.0400e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	2.6642	2.6642	5.0000e-005	0.0000	2.6653
Total	**2.7800e-003**	**0.0531**	**0.0241**	**2.7000e-004**	**9.6000e-003**	**1.3000e-004**	**9.7300e-003**	**2.6000e-003**	**1.3000e-004**	**2.7200e-003**	**0.0000**	**26.0757**	**26.0757**	**1.3400e-003**	**0.0000**	**26.1091**

3.4 Structural Framing - 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	tons/yr										MT/yr					
Off-Road	0.0226	0.2058	0.2654	4.4000e-004		8.7000e-003	8.7000e-003		8.1900e-003	8.1900e-003	0.0000	38.2667	38.2667	9.0000e-003	0.0000	38.4916
Total	**0.0226**	**0.2058**	**0.2654**	**4.4000e-004**		**8.7000e-003**	**8.7000e-003**		**8.1900e-003**	**8.1900e-003**	**0.0000**	**38.2667**	**38.2667**	**9.0000e-003**	**0.0000**	**38.4916**

3.4 Structural Framing - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.5300e-003	0.0525	0.0159	2.4000e-004	5.5600e-003	1.1000e-004	5.6700e-003	1.5300e-003	1.1000e-004	1.6300e-003	0.0000	23.4115	23.4115	1.2900e-003	0.0000	23.4437
Worker	1.1200e-003	5.7000e-004	7.3700e-003	3.0000e-005	3.6400e-003	2.0000e-005	3.6600e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	2.3978	2.3978	4.0000e-005	0.0000	2.3988
Total	**2.6500e-003**	**0.0530**	**0.0233**	**2.7000e-004**	**9.2000e-003**	**1.3000e-004**	**9.3300e-003**	**2.5000e-003**	**1.3000e-004**	**2.6200e-003**	**0.0000**	**25.8093**	**25.8093**	**1.3300e-003**	**0.0000**	**25.8425**

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	tons/yr										MT/yr					
Off-Road	0.0226	0.2058	0.2654	4.4000e-004		8.7000e-003	8.7000e-003		8.1900e-003	8.1900e-003	0.0000	38.2667	38.2667	9.0000e-003	0.0000	38.4916
Total	**0.0226**	**0.2058**	**0.2654**	**4.4000e-004**		**8.7000e-003**	**8.7000e-003**		**8.1900e-003**	**8.1900e-003**	**0.0000**	**38.2667**	**38.2667**	**9.0000e-003**	**0.0000**	**38.4916**

3.4 Structural Framing - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	1.5300e-003	0.0525	0.0159	2.4000e-004	5.5600e-003	1.1000e-004	5.6700e-003	1.5300e-003	1.1000e-004	1.6300e-003	0.0000	23.4115	23.4115	1.2900e-003	0.0000	23.4437
Worker	1.1200e-003	5.7000e-004	7.3700e-003	3.0000e-005	3.6400e-003	2.0000e-005	3.6600e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	2.3978	2.3978	4.0000e-005	0.0000	2.3988
Total	**2.6500e-003**	**0.0530**	**0.0233**	**2.7000e-004**	**9.2000e-003**	**1.3000e-004**	**9.3300e-003**	**2.5000e-003**	**1.3000e-004**	**2.6200e-003**	**0.0000**	**25.8093**	**25.8093**	**1.3300e-003**	**0.0000**	**25.8425**

3.5 Exterior Enclosures/Arch Coating - 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	tons/yr										MT/yr					
Off-Road	0.0221	0.2034	0.3288	5.1000e-004		9.5100e-003	9.5100e-003		8.8000e-003	8.8000e-003	0.0000	44.2213	44.2213	0.0139	0.0000	44.5686
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0221**	**0.2034**	**0.3288**	**5.1000e-004**		**9.5100e-003**	**9.5100e-003**		**8.8000e-003**	**8.8000e-003**	**0.0000**	**44.2213**	**44.2213**	**0.0139**	**0.0000**	**44.5686**

3.5 Exterior Enclosures/Arch Coating - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5000e-003	0.0859	0.0260	3.9000e-004	9.1000e-003	1.8000e-004	9.2800e-003	2.5000e-003	1.7000e-004	2.6700e-003	0.0000	38.3098	38.3098	2.1100e-003	0.0000	38.3625
Worker	1.2300e-003	6.2000e-004	8.0500e-003	3.0000e-005	3.9700e-003	2.0000e-005	3.9900e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	2.6158	2.6158	4.0000e-005	0.0000	2.6169
Total	**3.7300e-003**	**0.0865**	**0.0340**	**4.2000e-004**	**0.0131**	**2.0000e-004**	**0.0133**	**3.5500e-003**	**1.9000e-004**	**3.7400e-003**	**0.0000**	**40.9255**	**40.9255**	**2.1500e-003**	**0.0000**	**40.9793**

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	tons/yr										MT/yr					
Off-Road	0.0221	0.2034	0.3288	5.1000e-004		9.5100e-003	9.5100e-003		8.8000e-003	8.8000e-003	0.0000	44.2212	44.2212	0.0139	0.0000	44.5686
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0221**	**0.2034**	**0.3288**	**5.1000e-004**		**9.5100e-003**	**9.5100e-003**		**8.8000e-003**	**8.8000e-003**	**0.0000**	**44.2212**	**44.2212**	**0.0139**	**0.0000**	**44.5686**

3.5 Exterior Enclosures/Arch Coating - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.5000e-003	0.0859	0.0260	3.9000e-004	9.1000e-003	1.8000e-004	9.2800e-003	2.5000e-003	1.7000e-004	2.6700e-003	0.0000	38.3098	38.3098	2.1100e-003	0.0000	38.3625
Worker	1.2300e-003	6.2000e-004	8.0500e-003	3.0000e-005	3.9700e-003	2.0000e-005	3.9900e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	2.6158	2.6158	4.0000e-005	0.0000	2.6169
Total	**3.7300e-003**	**0.0865**	**0.0340**	**4.2000e-004**	**0.0131**	**2.0000e-004**	**0.0133**	**3.5500e-003**	**1.9000e-004**	**3.7400e-003**	**0.0000**	**40.9255**	**40.9255**	**2.1500e-003**	**0.0000**	**40.9793**

3.6 Interior - 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	tons/yr										MT/yr					
Archit. Coating	0.7119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3700e-003	0.0561	0.0887	1.5000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	12.5109	12.5109	6.8000e-004	0.0000	12.5280
Total	**0.7203**	**0.0561**	**0.0887**	**1.5000e-004**		**2.5200e-003**	**2.5200e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**12.5109**	**12.5109**	**6.8000e-004**	**0.0000**	**12.5280**

3.6 Interior - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.5400e-003	0.1558	0.0472	7.1000e-004	0.0165	3.3000e-004	0.0168	4.5300e-003	3.1000e-004	4.8400e-003	0.0000	69.5251	69.5251	3.8300e-003	0.0000	69.6208
Worker	6.6800e-003	3.3900e-003	0.0438	1.6000e-004	0.0216	1.2000e-004	0.0217	5.7400e-003	1.1000e-004	5.8500e-003	0.0000	14.2413	14.2413	2.4000e-004	0.0000	14.2474
Total	**0.0112**	**0.1592**	**0.0910**	**8.7000e-004**	**0.0381**	**4.5000e-004**	**0.0385**	**0.0103**	**4.2000e-004**	**0.0107**	**0.0000**	**83.7665**	**83.7665**	**4.0700e-003**	**0.0000**	**83.8682**

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	tons/yr										MT/yr					
Archit. Coating	0.7119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3700e-003	0.0561	0.0887	1.5000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	12.5109	12.5109	6.8000e-004	0.0000	12.5280
Total	**0.7203**	**0.0561**	**0.0887**	**1.5000e-004**		**2.5200e-003**	**2.5200e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**12.5109**	**12.5109**	**6.8000e-004**	**0.0000**	**12.5280**

3.6 Interior - 2028

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	tons/yr										MT/yr					
Hauling	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
Vendor	4.5400e-003	0.1558	0.0472	7.1000e-004	0.0165	3.3000e-004	0.0168	4.5300e-003	3.1000e-004	4.8400e-003	0.0000	69.5251	69.5251	3.8300e-003	0.0000	69.6208
Worker	6.6800e-003	3.3900e-003	0.0438	1.6000e-004	0.0216	1.2000e-004	0.0217	5.7400e-003	1.1000e-004	5.8500e-003	0.0000	14.2413	14.2413	2.4000e-004	0.0000	14.2474
Total	**0.0112**	**0.1592**	**0.0910**	**8.7000e-004**	**0.0381**	**4.5000e-004**	**0.0385**	**0.0103**	**4.2000e-004**	**0.0107**	**0.0000**	**83.7665**	**83.7665**	**4.0700e-003**	**0.0000**	**83.8682**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.575787	0.034976	0.211293	0.106793	0.012806	0.004500	0.018351	0.025279	0.001887	0.001565	0.005515	0.000612	0.000636
General Office Building	0.575787	0.034976	0.211293	0.106793	0.012806	0.004500	0.018351	0.025279	0.001887	0.001565	0.005515	0.000612	0.000636

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	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
General Office Building	0	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
Total		**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**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	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
General Office Building	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.5151	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Unmitigated	0.5151	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4687					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0464	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Total	**0.5151**	**0.0178**	**1.5457**	**8.0000e-005**		**8.5800e-003**	**8.5800e-003**		**8.5800e-003**	**8.5800e-003**	**0.0000**	**2.5274**	**2.5274**	**2.4200e-003**	**0.0000**	**2.5880**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4687					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0464	0.0178	1.5457	8.0000e-005		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	2.5274	2.5274	2.4200e-003	0.0000	2.5880
Total	**0.5151**	**0.0178**	**1.5457**	**8.0000e-005**		**8.5800e-003**	**8.5800e-003**		**8.5800e-003**	**8.5800e-003**	**0.0000**	**2.5274**	**2.5274**	**2.4200e-003**	**0.0000**	**2.5880**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 3C Construction

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	200.00	Space	1.80	70,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2030
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Phase 3C Construction - Sacramento County, Annual

Project Characteristics -

Land Use - See appendix for modeling inputs

Construction Phase - See appendix for construction schedule by phase

Grading - 15,556 CY export under excavation phase

Demolition -

Trips and VMT - Maximum number of workers and daily haul trucks included in modeling input appendix.

Vehicle Trips - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	4200	0
tblConstructionPhase	NumDays	10.00	33.00
tblConstructionPhase	NumDays	200.00	20.00
tblConstructionPhase	NumDays	2.00	41.00
tblConstructionPhase	NumDays	4.00	45.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	2.00	34.00
tblConstructionPhase	PhaseEndDate	11/12/2029	10/31/2029
tblConstructionPhase	PhaseEndDate	10/15/2029	7/13/2029
tblConstructionPhase	PhaseEndDate	1/8/2029	6/15/2029
tblConstructionPhase	PhaseEndDate	10/29/2029	9/14/2029
tblConstructionPhase	PhaseEndDate	1/2/2029	2/15/2029

Phase 3C Construction - Sacramento County, Annual

tblConstructionPhase	PhaseStartDate	10/30/2029	9/16/2029
tblConstructionPhase	PhaseStartDate	1/9/2029	6/16/2029
tblConstructionPhase	PhaseStartDate	1/3/2029	4/16/2029
tblConstructionPhase	PhaseStartDate	10/16/2029	7/16/2029
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	T24E	3.92	0.00
tblGrading	AcresOfGrading	16.88	1.50
tblGrading	AcresOfGrading	17.00	1.00
tblGrading	MaterialExported	0.00	15,556.00
tblLandUse	LandUseSquareFeet	80,000.00	70,000.00
tblTripsAndVMT	HaulingTripNumber	1,945.00	0.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripLength	6.50	20.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	11.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT

tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	6.00	20.00
tblTripsAndVMT	WorkerTripNumber	29.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2029	0.1060	1.0281	0.8070	2.5400e-003	0.3512	0.0344	0.3856	0.1764	0.0319	0.2083	0.0000	230.9161	230.9161	0.0438	0.0000	232.0122
Maximum	**0.1060**	**1.0281**	**0.8070**	**2.5400e-003**	**0.3512**	**0.0344**	**0.3856**	**0.1764**	**0.0319**	**0.2083**	**0.0000**	**230.9161**	**230.9161**	**0.0438**	**0.0000**	**232.0122**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2029	0.1060	1.0281	0.8070	2.5400e-003	0.3512	0.0344	0.3856	0.1764	0.0319	0.2083	0.0000	230.9160	230.9160	0.0438	0.0000	232.0121
Maximum	**0.1060**	**1.0281**	**0.8070**	**2.5400e-003**	**0.3512**	**0.0344**	**0.3856**	**0.1764**	**0.0319**	**0.2083**	**0.0000**	**230.9160**	**230.9160**	**0.0438**	**0.0000**	**232.0121**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2029	3-31-2029	0.4266	0.4266
2	4-1-2029	6-30-2029	0.4198	0.4198
3	7-1-2029	9-30-2029	0.2309	0.2309
		Highest	0.4266	0.4266

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	4.7600e-003	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7600e-003**	**2.0000e-005**	**2.5400e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9600e-003**	**4.9600e-003**	**1.0000e-005**	**0.0000**	**5.2800e-003**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	4.7600e-003	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Energy	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
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7600e-003**	**2.0000e-005**	**2.5400e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9600e-003**	**4.9600e-003**	**1.0000e-005**	**0.0000**	**5.2800e-003**

	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	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 3C Construction - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2029	2/15/2029	5	34	
2	Excavation	Site Preparation	2/16/2029	4/13/2029	5	41	
3	Foundation	Grading	4/16/2029	6/15/2029	5	45	
4	Structural Framing	Building Construction	6/16/2029	7/13/2029	5	20	
5	Exterior Enclosures/Arch Coating	Paving	7/16/2029	9/14/2029	5	45	
6	Interior	Architectural Coating	9/16/2029	10/31/2029	5	33	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 4,200 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3C Construction - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Interior	Air Compressors	1	6.00	78	0.48
Site Preparation	Graders	1	8.00	187	0.41
Excavation	Graders	1	8.00	187	0.41
Excavation	Rubber Tired Dozers	1	7.00	247	0.40
Structural Framing	Cranes	1	6.00	231	0.29
Structural Framing	Forklifts	1	6.00	89	0.20
Structural Framing	Generator Sets	1	8.00	84	0.74
Exterior Enclosures/Arch Coating	Pavers	1	6.00	130	0.42
Exterior Enclosures/Arch Coating	Rollers	1	7.00	80	0.38
Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Foundation	Rubber Tired Dozers	1	6.00	247	0.40
Structural Framing	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Foundation	Graders	1	6.00	187	0.41
Foundation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Exterior Enclosures/Arch Coating	Paving Equipment	1	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Structural Framing	Welders	3	8.00	46	0.45
Exterior Enclosures/Arch Coating	Cement and Mortar Mixers	1	6.00	9	0.56
Exterior Enclosures/Arch Coating	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Interior	1	20.00	5.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Structural Framing	7	20.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Excavation	3	20.00	10.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Foundation	3	30.00	20.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Exterior Enclosures/Arch Coati	5	20.00	5.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT
Site Preparation	3	20.00	10.00	0.00	10.00	20.00	20.00	LD_Mix	HHDT	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2029

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	tons/yr										MT/yr					
Fugitive Dust					0.0901	0.0000	0.0901	0.0493	0.0000	0.0493	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0172	0.1801	0.1096	2.9000e-004		7.1300e-003	7.1300e-003		6.5600e-003	6.5600e-003	0.0000	25.6915	25.6915	8.3100e-003	0.0000	25.8993
Total	**0.0172**	**0.1801**	**0.1096**	**2.9000e-004**	**0.0901**	**7.1300e-003**	**0.0972**	**0.0493**	**6.5600e-003**	**0.0559**	**0.0000**	**25.6915**	**25.6915**	**8.3100e-003**	**0.0000**	**25.8993**

3.2 Site Preparation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.8000e-004	0.0263	8.1200e-003	1.2000e-004	2.8600e-003	5.0000e-005	2.9200e-003	7.9000e-004	5.0000e-005	8.4000e-004	0.0000	12.0129	12.0129	6.6000e-004	0.0000	12.0294
Worker	7.2000e-004	3.6000e-004	4.7400e-003	2.0000e-005	2.5000e-003	1.0000e-005	2.5100e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	1.5991	1.5991	3.0000e-005	0.0000	1.5997
Total	**1.5000e-003**	**0.0267**	**0.0129**	**1.4000e-004**	**5.3600e-003**	**6.0000e-005**	**5.4300e-003**	**1.4500e-003**	**6.0000e-005**	**1.5200e-003**	**0.0000**	**13.6120**	**13.6120**	**6.9000e-004**	**0.0000**	**13.6291**

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	tons/yr										MT/yr					
Fugitive Dust					0.0901	0.0000	0.0901	0.0493	0.0000	0.0493	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0172	0.1801	0.1096	2.9000e-004		7.1300e-003	7.1300e-003		6.5600e-003	6.5600e-003	0.0000	25.6915	25.6915	8.3100e-003	0.0000	25.8992
Total	**0.0172**	**0.1801**	**0.1096**	**2.9000e-004**	**0.0901**	**7.1300e-003**	**0.0972**	**0.0493**	**6.5600e-003**	**0.0559**	**0.0000**	**25.6915**	**25.6915**	**8.3100e-003**	**0.0000**	**25.8992**

3.2 Site Preparation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	7.8000e-004	0.0263	8.1200e-003	1.2000e-004	2.8600e-003	5.0000e-005	2.9200e-003	7.9000e-004	5.0000e-005	8.4000e-004	0.0000	12.0129	12.0129	6.6000e-004	0.0000	12.0294
Worker	7.2000e-004	3.6000e-004	4.7400e-003	2.0000e-005	2.5000e-003	1.0000e-005	2.5100e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	1.5991	1.5991	3.0000e-005	0.0000	1.5997
Total	**1.5000e-003**	**0.0267**	**0.0129**	**1.4000e-004**	**5.3600e-003**	**6.0000e-005**	**5.4300e-003**	**1.4500e-003**	**6.0000e-005**	**1.5200e-003**	**0.0000**	**13.6120**	**13.6120**	**6.9000e-004**	**0.0000**	**13.6291**

3.3 Excavation - 2029

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	tons/yr										MT/yr					
Fugitive Dust					0.1205	0.0000	0.1205	0.0608	0.0000	0.0608	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0207	0.2172	0.1322	3.5000e-004		8.5900e-003	8.5900e-003		7.9100e-003	7.9100e-003	0.0000	30.9810	30.9810	0.0100	0.0000	31.2315
Total	**0.0207**	**0.2172**	**0.1322**	**3.5000e-004**	**0.1205**	**8.5900e-003**	**0.1291**	**0.0608**	**7.9100e-003**	**0.0687**	**0.0000**	**30.9810**	**30.9810**	**0.0100**	**0.0000**	**31.2315**

3.3 Excavation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.4000e-004	0.0318	9.7900e-003	1.5000e-004	3.4500e-003	7.0000e-005	3.5200e-003	9.5000e-004	6.0000e-005	1.0100e-003	0.0000	14.4862	14.4862	8.0000e-004	0.0000	14.5060
Worker	8.7000e-004	4.3000e-004	5.7100e-003	2.0000e-005	3.0100e-003	2.0000e-005	3.0300e-003	8.0000e-004	1.0000e-005	8.2000e-004	0.0000	1.9283	1.9283	3.0000e-005	0.0000	1.9291
Total	**1.8100e-003**	**0.0322**	**0.0155**	**1.7000e-004**	**6.4600e-003**	**9.0000e-005**	**6.5500e-003**	**1.7500e-003**	**7.0000e-005**	**1.8300e-003**	**0.0000**	**16.4145**	**16.4145**	**8.3000e-004**	**0.0000**	**16.4351**

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	tons/yr										MT/yr					
Fugitive Dust					0.1205	0.0000	0.1205	0.0608	0.0000	0.0608	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0207	0.2172	0.1322	3.5000e-004		8.5900e-003	8.5900e-003		7.9100e-003	7.9100e-003	0.0000	30.9809	30.9809	0.0100	0.0000	31.2314
Total	**0.0207**	**0.2172**	**0.1322**	**3.5000e-004**	**0.1205**	**8.5900e-003**	**0.1291**	**0.0608**	**7.9100e-003**	**0.0687**	**0.0000**	**30.9809**	**30.9809**	**0.0100**	**0.0000**	**31.2314**

3.3 Excavation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.4000e-004	0.0318	9.7900e-003	1.5000e-004	3.4500e-003	7.0000e-005	3.5200e-003	9.5000e-004	6.0000e-005	1.0100e-003	0.0000	14.4862	14.4862	8.0000e-004	0.0000	14.5060
Worker	8.7000e-004	4.3000e-004	5.7100e-003	2.0000e-005	3.0100e-003	2.0000e-005	3.0300e-003	8.0000e-004	1.0000e-005	8.2000e-004	0.0000	1.9283	1.9283	3.0000e-005	0.0000	1.9291
Total	**1.8100e-003**	**0.0322**	**0.0155**	**1.7000e-004**	**6.4600e-003**	**9.0000e-005**	**6.5500e-003**	**1.7500e-003**	**7.0000e-005**	**1.8300e-003**	**0.0000**	**16.4145**	**16.4145**	**8.3000e-004**	**0.0000**	**16.4351**

3.4 Foundation - 2029

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	tons/yr										MT/yr					
Fugitive Dust					0.1024	0.0000	0.1024	0.0560	0.0000	0.0560	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0188	0.1965	0.1214	3.2000e-004		7.8400e-003	7.8400e-003		7.2100e-003	7.2100e-003	0.0000	27.8558	27.8558	9.0100e-003	0.0000	28.0810
Total	**0.0188**	**0.1965**	**0.1214**	**3.2000e-004**	**0.1024**	**7.8400e-003**	**0.1103**	**0.0560**	**7.2100e-003**	**0.0632**	**0.0000**	**27.8558**	**27.8558**	**9.0100e-003**	**0.0000**	**28.0810**

3.4 Foundation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0600e-003	0.0697	0.0215	3.3000e-004	7.5800e-003	1.4000e-004	7.7200e-003	2.0800e-003	1.4000e-004	2.2200e-003	0.0000	31.7989	31.7989	1.7500e-003	0.0000	31.8425
Worker	1.4300e-003	7.1000e-004	9.4000e-003	4.0000e-005	4.9600e-003	3.0000e-005	4.9800e-003	1.3200e-003	2.0000e-005	1.3400e-003	0.0000	3.1746	3.1746	5.0000e-005	0.0000	3.1759
Total	**3.4900e-003**	**0.0704**	**0.0309**	**3.7000e-004**	**0.0125**	**1.7000e-004**	**0.0127**	**3.4000e-003**	**1.6000e-004**	**3.5600e-003**	**0.0000**	**34.9735**	**34.9735**	**1.8000e-003**	**0.0000**	**35.0184**

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	tons/yr										MT/yr					
Fugitive Dust					0.1024	0.0000	0.1024	0.0560	0.0000	0.0560	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0188	0.1965	0.1214	3.2000e-004		7.8400e-003	7.8400e-003		7.2100e-003	7.2100e-003	0.0000	27.8557	27.8557	9.0100e-003	0.0000	28.0810
Total	**0.0188**	**0.1965**	**0.1214**	**3.2000e-004**	**0.1024**	**7.8400e-003**	**0.1103**	**0.0560**	**7.2100e-003**	**0.0632**	**0.0000**	**27.8557**	**27.8557**	**9.0100e-003**	**0.0000**	**28.0810**

3.4 Foundation - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	2.0600e-003	0.0697	0.0215	3.3000e-004	7.5800e-003	1.4000e-004	7.7200e-003	2.0800e-003	1.4000e-004	2.2200e-003	0.0000	31.7989	31.7989	1.7500e-003	0.0000	31.8425
Worker	1.4300e-003	7.1000e-004	9.4000e-003	4.0000e-005	4.9600e-003	3.0000e-005	4.9800e-003	1.3200e-003	2.0000e-005	1.3400e-003	0.0000	3.1746	3.1746	5.0000e-005	0.0000	3.1759
Total	**3.4900e-003**	**0.0704**	**0.0309**	**3.7000e-004**	**0.0125**	**1.7000e-004**	**0.0127**	**3.4000e-003**	**1.6000e-004**	**3.5600e-003**	**0.0000**	**34.9735**	**34.9735**	**1.8000e-003**	**0.0000**	**35.0184**

3.5 Structural Framing - 2029

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	tons/yr										MT/yr					
Off-Road	0.0133	0.1041	0.1244	2.2000e-004		3.9200e-003	3.9200e-003		3.7900e-003	3.7900e-003	0.0000	18.1632	18.1632	2.9700e-003	0.0000	18.2374
Total	**0.0133**	**0.1041**	**0.1244**	**2.2000e-004**		**3.9200e-003**	**3.9200e-003**		**3.7900e-003**	**3.7900e-003**	**0.0000**	**18.1632**	**18.1632**	**2.9700e-003**	**0.0000**	**18.2374**

3.5 Structural Framing - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.1000e-004	0.0310	9.5500e-003	1.4000e-004	3.3700e-003	6.0000e-005	3.4300e-003	9.2000e-004	6.0000e-005	9.9000e-004	0.0000	14.1328	14.1328	7.8000e-004	0.0000	14.1522
Worker	4.2000e-004	2.1000e-004	2.7900e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	0.9406	0.9406	2.0000e-005	0.0000	0.9410
Total	**1.3300e-003**	**0.0312**	**0.0123**	**1.5000e-004**	**4.8400e-003**	**7.0000e-005**	**4.9100e-003**	**1.3100e-003**	**7.0000e-005**	**1.3900e-003**	**0.0000**	**15.0735**	**15.0735**	**8.0000e-004**	**0.0000**	**15.0932**

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	tons/yr										MT/yr					
Off-Road	0.0133	0.1041	0.1244	2.2000e-004		3.9200e-003	3.9200e-003		3.7900e-003	3.7900e-003	0.0000	18.1632	18.1632	2.9700e-003	0.0000	18.2373
Total	**0.0133**	**0.1041**	**0.1244**	**2.2000e-004**		**3.9200e-003**	**3.9200e-003**		**3.7900e-003**	**3.7900e-003**	**0.0000**	**18.1632**	**18.1632**	**2.9700e-003**	**0.0000**	**18.2373**

3.5 Structural Framing - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	9.1000e-004	0.0310	9.5500e-003	1.4000e-004	3.3700e-003	6.0000e-005	3.4300e-003	9.2000e-004	6.0000e-005	9.9000e-004	0.0000	14.1328	14.1328	7.8000e-004	0.0000	14.1522
Worker	4.2000e-004	2.1000e-004	2.7900e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	0.9406	0.9406	2.0000e-005	0.0000	0.9410
Total	**1.3300e-003**	**0.0312**	**0.0123**	**1.5000e-004**	**4.8400e-003**	**7.0000e-005**	**4.9100e-003**	**1.3100e-003**	**7.0000e-005**	**1.3900e-003**	**0.0000**	**15.0735**	**15.0735**	**8.0000e-004**	**0.0000**	**15.0932**

3.6 Exterior Enclosures/Arch Coating - 2029

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	tons/yr										MT/yr					
Off-Road	0.0129	0.1198	0.1979	3.0000e-004		5.5500e-003	5.5500e-003		5.1200e-003	5.1200e-003	0.0000	26.4904	26.4904	8.4000e-003	0.0000	26.7004
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0129**	**0.1198**	**0.1979**	**3.0000e-004**		**5.5500e-003**	**5.5500e-003**		**5.1200e-003**	**5.1200e-003**	**0.0000**	**26.4904**	**26.4904**	**8.4000e-003**	**0.0000**	**26.7004**

3.6 Exterior Enclosures/Arch Coating - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.1000e-004	0.0174	5.3700e-003	8.0000e-005	1.8900e-003	4.0000e-005	1.9300e-003	5.2000e-004	3.0000e-005	5.5000e-004	0.0000	7.9497	7.9497	4.4000e-004	0.0000	7.9606
Worker	9.5000e-004	4.8000e-004	6.2700e-003	2.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.1164	2.1164	3.0000e-005	0.0000	2.1173
Total	**1.4600e-003**	**0.0179**	**0.0116**	**1.0000e-004**	**5.1900e-003**	**6.0000e-005**	**5.2500e-003**	**1.4000e-003**	**5.0000e-005**	**1.4400e-003**	**0.0000**	**10.0661**	**10.0661**	**4.7000e-004**	**0.0000**	**10.0779**

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	tons/yr										MT/yr					
Off-Road	0.0129	0.1198	0.1979	3.0000e-004		5.5500e-003	5.5500e-003		5.1200e-003	5.1200e-003	0.0000	26.4904	26.4904	8.4000e-003	0.0000	26.7004
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0129**	**0.1198**	**0.1979**	**3.0000e-004**		**5.5500e-003**	**5.5500e-003**		**5.1200e-003**	**5.1200e-003**	**0.0000**	**26.4904**	**26.4904**	**8.4000e-003**	**0.0000**	**26.7004**

3.6 Exterior Enclosures/Arch Coating - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	5.1000e-004	0.0174	5.3700e-003	8.0000e-005	1.8900e-003	4.0000e-005	1.9300e-003	5.2000e-004	3.0000e-005	5.5000e-004	0.0000	7.9497	7.9497	4.4000e-004	0.0000	7.9606
Worker	9.5000e-004	4.8000e-004	6.2700e-003	2.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.1164	2.1164	3.0000e-005	0.0000	2.1173
Total	**1.4600e-003**	**0.0179**	**0.0116**	**1.0000e-004**	**5.1900e-003**	**6.0000e-005**	**5.2500e-003**	**1.4000e-003**	**5.0000e-005**	**1.4400e-003**	**0.0000**	**10.0661**	**10.0661**	**4.7000e-004**	**0.0000**	**10.0779**

3.7 Interior - 2029

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	tons/yr										MT/yr					
Archit. Coating	9.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8200e-003	0.0189	0.0299	5.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	4.2129	4.2129	2.3000e-004	0.0000	4.2186
Total	**0.0126**	**0.0189**	**0.0299**	**5.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**4.2129**	**4.2129**	**2.3000e-004**	**0.0000**	**4.2186**

3.7 Interior - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.8000e-004	0.0128	3.9400e-003	6.0000e-005	1.3900e-003	3.0000e-005	1.4200e-003	3.8000e-004	3.0000e-005	4.1000e-004	0.0000	5.8298	5.8298	3.2000e-004	0.0000	5.8378
Worker	7.0000e-004	3.5000e-004	4.6000e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	1.5520	1.5520	2.0000e-005	0.0000	1.5527
Total	**1.0800e-003**	**0.0131**	**8.5400e-003**	**8.0000e-005**	**3.8100e-003**	**4.0000e-005**	**3.8600e-003**	**1.0200e-003**	**4.0000e-005**	**1.0700e-003**	**0.0000**	**7.3818**	**7.3818**	**3.4000e-004**	**0.0000**	**7.3905**

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	tons/yr										MT/yr					
Archit. Coating	9.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8200e-003	0.0189	0.0299	5.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	4.2129	4.2129	2.3000e-004	0.0000	4.2186
Total	**0.0126**	**0.0189**	**0.0299**	**5.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**4.2129**	**4.2129**	**2.3000e-004**	**0.0000**	**4.2186**

3.7 Interior - 2029

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	tons/yr										MT/yr					
Hauling	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
Vendor	3.8000e-004	0.0128	3.9400e-003	6.0000e-005	1.3900e-003	3.0000e-005	1.4200e-003	3.8000e-004	3.0000e-005	4.1000e-004	0.0000	5.8298	5.8298	3.2000e-004	0.0000	5.8378
Worker	7.0000e-004	3.5000e-004	4.6000e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	1.5520	1.5520	2.0000e-005	0.0000	1.5527
Total	**1.0800e-003**	**0.0131**	**8.5400e-003**	**8.0000e-005**	**3.8100e-003**	**4.0000e-005**	**3.8600e-003**	**1.0200e-003**	**4.0000e-005**	**1.0700e-003**	**0.0000**	**7.3818**	**7.3818**	**3.4000e-004**	**0.0000**	**7.3905**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	4.7600e-003	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Unmitigated	4.7600e-003	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3000e-004	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Total	**4.7500e-003**	**2.0000e-005**	**2.5400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9600e-003**	**4.9600e-003**	**1.0000e-005**	**0.0000**	**5.2800e-003**

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3000e-004	2.0000e-005	2.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2800e-003
Total	**4.7500e-003**	**2.0000e-005**	**2.5400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.9600e-003**	**4.9600e-003**	**1.0000e-005**	**0.0000**	**5.2800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C

Operational Emissions Modeling

Existing Building Energy, Water, Solid Waste Operation

	Land Use in CalEEMod				
Project Building	**Type**	**Amount**	**Unit**	**Indoor Water Demand**	**Outdoor Water Demand (gal/year)**
All Data Building	General Office Building	76,000	sq ft	6,000,000	3,756,603
2501, 2505, 2509,2521, 2525, 2619 West Taron Court	Strip Mall	58,946	sq ft	CalEEMod Default	Included above

Existing Site Mobile Source GHG Emissions - 2020

Project VMT (mi)	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	**CO2e (MT)**
21,247,504	8,478,515,142.73	8,478.52	515,673.50	0.52	490,439.02	0.49	**8,638**

EMFAC2017 Output				
	VMT (mi)	CO2 (ton/day)	CH4 (ton/day)	N2O (ton/day)
All Vehicles	38,312,798	16,852.33	1.02	0.97

	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
All Vehicles	399.04	0.02	0.02

1	Ton
907185	Grams
1000000	g/MT

Emission Factors

Electricity Emission Factors

2014 SMUD ELECTRICITY EF	Amount	Units	Source
CO2	561.08	lb/MWh	Martha Helek, SMUD, email communication to Dimitri Antoniou of Ascent Environmental on June 28, 2016
CH4	0.014116	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
N20	0.002572	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
2020 SMUD ELECTRICITY EF			
CO2	529.4699	lb/MWh	33% RPS
CH4	0.013321	lb/MWh	
N20	0.002427	lb/MWh	
Conversion Factors			
lb/MT	2204.623		

Phase 1 Existing Buildings

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	37.20	1000sqft	0.85	37,199.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2020
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	529.47	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Phase 1 Existing Buildings - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2020 RPS compliance (33%)

Land Use - 2501, 2505, 2509/2513, 2525 West Taron Court buildings to be demoed under Phase 1

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Grading -

Trips and VMT - Operation only

Architectural Coating - Operation only

Vehicle Trips - Existing mobile sources modeled separately

Energy Use - Building constructed to 2008 Title 24 standards. Historical data used.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	18,600.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	55,799.00	0.00
tblEnergyUse	LightingElect	6.45	5.33
tblEnergyUse	T24E	4.20	3.26
tblEnergyUse	T24NG	5.52	4.49
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	590.31	529.47
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblTripsAndVMT	VendorTripNumber	6.00	0.00
tblTripsAndVMT	WorkerTripNumber	12.00	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	44.32	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.1626	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Energy	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	114.0939	114.0939	2.7400e-003	5.9000e-004	114.3375
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	7.9288	0.0000	7.9288	0.4686	0.0000	19.6433
Water						0.0000	0.0000		0.0000	0.0000	0.9749	4.7169	5.6918	3.4700e-003	2.1400e-003	6.4157
Total	**0.1637**	**9.8700e-003**	**8.7700e-003**	**6.0000e-005**	**0.0000**	**7.5000e-004**	**7.5000e-004**	**0.0000**	**7.5000e-004**	**7.5000e-004**	**8.9037**	**118.8117**	**127.7155**	**0.4748**	**2.7300e-003**	**140.3976**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.1626	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Energy	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	114.0939	114.0939	2.7400e-003	5.9000e-004	114.3375
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	7.9288	0.0000	7.9288	0.4686	0.0000	19.6433
Water						0.0000	0.0000		0.0000	0.0000	0.9749	4.7169	5.6918	3.4700e-003	2.1400e-003	6.4157
Total	**0.1637**	**9.8700e-003**	**8.7700e-003**	**6.0000e-005**	**0.0000**	**7.5000e-004**	**7.5000e-004**	**0.0000**	**7.5000e-004**	**7.5000e-004**	**8.9037**	**118.8117**	**127.7155**	**0.4748**	**2.7300e-003**	**140.3976**

	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	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 1 Existing Buildings - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/14/2019	10/25/2019	5	10	
2	Site Preparation	Site Preparation	10/26/2019	10/28/2019	5	1	
3	Grading	Grading	10/29/2019	10/30/2019	5	2	
4	Building Construction	Building Construction	10/31/2019	3/18/2020	5	100	
5	Paving	Paving	3/19/2020	3/25/2020	5	5	
6	Architectural Coating	Architectural Coating	3/26/2020	4/1/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 1 Existing Buildings - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Site Preparation	Graders	0	8.00	187	0.41
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Off-Road	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
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.551662	0.040953	0.203778	0.123762	0.021802	0.005583	0.018466	0.022043	0.002076	0.002280	0.006004	0.000618	0.000971

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	103.3445	103.3445	2.5400e-003	3.9000e-004	103.5243
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	103.3445	103.3445	2.5400e-003	3.9000e-004	103.5243
NaturalGas Mitigated	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7493	10.7493	2.1000e-004	2.0000e-004	10.8132
NaturalGas Unmitigated	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7493	10.7493	2.1000e-004	2.0000e-004	10.8132

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	201435	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7493	10.7493	2.1000e-004	2.0000e-004	10.8132
Total		**1.0900e-003**	**9.8700e-003**	**8.2900e-003**	**6.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**10.7493**	**10.7493**	**2.1000e-004**	**2.0000e-004**	**10.8132**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	201435	1.0900e-003	9.8700e-003	8.2900e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7493	10.7493	2.1000e-004	2.0000e-004	10.8132
Total		**1.0900e-003**	**9.8700e-003**	**8.2900e-003**	**6.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**10.7493**	**10.7493**	**2.1000e-004**	**2.0000e-004**	**10.8132**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	430309	103.3445	2.5400e-003	3.9000e-004	103.5243
Total		**103.3445**	**2.5400e-003**	**3.9000e-004**	**103.5243**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	430309	103.3445	2.5400e-003	3.9000e-004	103.5243
Total		**103.3445**	**2.5400e-003**	**3.9000e-004**	**103.5243**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.1626	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Unmitigated	0.1626	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1453					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Total	**0.1626**	**0.0000**	**4.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.2000e-004**	**9.2000e-004**	**0.0000**	**0.0000**	**9.9000e-004**

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1453					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Total	**0.1626**	**0.0000**	**4.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.2000e-004**	**9.2000e-004**	**0.0000**	**0.0000**	**9.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.6918	3.4700e-003	2.1400e-003	6.4157
Unmitigated	5.6918	3.4700e-003	2.1400e-003	6.4157

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	2.7555 / 1.68885	5.6918	3.4700e-003	2.1400e-003	6.4157
Total		**5.6918**	**3.4700e-003**	**2.1400e-003**	**6.4157**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	2.7555 / 1.68885	5.6918	3.4700e-003	2.1400e-003	6.4157
Total		**5.6918**	**3.4700e-003**	**2.1400e-003**	**6.4157**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.9288	0.4686	0.0000	19.6433
Unmitigated	7.9288	0.4686	0.0000	19.6433

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	39.06	7.9288	0.4686	0.0000	19.6433
Total		**7.9288**	**0.4686**	**0.0000**	**19.6433**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	39.06	7.9288	0.4686	0.0000	19.6433
Total		**7.9288**	**0.4686**	**0.0000**	**19.6433**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Phase 2 Existing Buildings

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	76.00	1000sqft	1.74	76,000.00	0
Strip Mall	7.20	1000sqft	0.17	7,201.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	529.47	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Phase 2 Existing Buildings - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2020 RPS compliance (33%).

Land Use - 9650 and 2521 West Taron Court demoed under Phase 2

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Grading -

Trips and VMT - Operation only

Architectural Coating - Operation only

Vehicle Trips - Existing mobile sources modeled separately

Energy Use - Building constructed to 2008 Title 24 standards. Historical data used.

Water And Wastewater - Landscaping and building water provided in water demand table by applicant for existing building

Stationary Sources - Emergency Generators and Fire Pumps - Cat C15 Diesel generator 400 ekW

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	41,601.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	124,802.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	200.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	4.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	2.00	0.00
tblConstructionPhase	PhaseEndDate	9/21/2020	9/7/2020

Phase 2 Existing Buildings - Sacramento County, Annual

tblConstructionPhase	PhaseEndDate	8/24/2020	11/18/2019
tblConstructionPhase	PhaseEndDate	11/8/2019	10/13/2019
tblConstructionPhase	PhaseEndDate	11/18/2019	11/12/2019
tblConstructionPhase	PhaseEndDate	9/7/2020	8/24/2020
tblConstructionPhase	PhaseEndDate	11/12/2019	11/8/2019
tblEnergyUse	LightingElect	4.50	3.71
tblEnergyUse	LightingElect	6.45	5.33
tblEnergyUse	T24E	6.76	4.98
tblEnergyUse	T24E	4.20	3.26
tblEnergyUse	T24NG	15.15	12.42
tblEnergyUse	T24NG	5.52	4.49
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	590.31	529.47
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	536.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	96.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	14.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	27.00	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	13,507,764.85	2,711,181.00
tblWater	OutdoorWaterUseRate	8,278,952.65	1,740,903.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.3636	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Energy	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	338.7175	338.7175	8.0200e-003	2.0800e-003	339.5387
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
Stationary	0.0422	0.1180	0.1077	2.0000e-004		6.2100e-003	6.2100e-003		6.2100e-003	6.2100e-003	0.0000	19.5943	19.5943	2.7500e-003	0.0000	19.6630
Waste						0.0000	0.0000		0.0000	0.0000	15.8820	0.0000	15.8820	0.9386	0.0000	39.3470
Water						0.0000	0.0000		0.0000	0.0000	1.1479	5.6206	6.7685	4.0900e-003	2.5200e-003	7.6210
Total	**0.4114**	**0.1687**	**0.1513**	**5.0000e-004**	**0.0000**	**0.0101**	**0.0101**	**0.0000**	**0.0101**	**0.0101**	**17.0299**	**363.9345**	**380.9644**	**0.9535**	**4.6000e-003**	**406.1719**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.3636	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Energy	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	338.7175	338.7175	8.0200e-003	2.0800e-003	339.5387
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
Stationary	0.0422	0.1180	0.1077	2.0000e-004		6.2100e-003	6.2100e-003		6.2100e-003	6.2100e-003	0.0000	19.5943	19.5943	2.7500e-003	0.0000	19.6630
Waste						0.0000	0.0000		0.0000	0.0000	15.8820	0.0000	15.8820	0.9386	0.0000	39.3470
Water						0.0000	0.0000		0.0000	0.0000	1.1479	5.6206	6.7685	4.0900e-003	2.5200e-003	7.6210
Total	**0.4114**	**0.1687**	**0.1513**	**5.0000e-004**	**0.0000**	**0.0101**	**0.0101**	**0.0000**	**0.0101**	**0.0101**	**17.0299**	**363.9345**	**380.9644**	**0.9535**	**4.6000e-003**	**406.1719**

	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	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 2 Existing Buildings - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/14/2019	10/13/2019	5	0	
2	Site Preparation	Site Preparation	11/9/2019	11/8/2019	5	0	
3	Grading	Grading	11/13/2019	11/12/2019	5	0	
4	Building Construction	Building Construction	11/19/2019	11/18/2019	5	0	
5	Paving	Paving	8/25/2020	8/24/2020	5	0	
6	Architectural Coating	Architectural Coating	9/8/2020	9/7/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2 Existing Buildings - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Site Preparation	Graders	0	8.00	187	0.41
Paving	Pavers	0	6.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Dozers	0	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Graders	0	6.00	187	0.41
Paving	Paving Equipment	0	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40
Building Construction	Welders	0	8.00	46	0.45

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
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Strip Mall	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	283.5099	283.5099	6.9600e-003	1.0700e-003	284.0030
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	283.5099	283.5099	6.9600e-003	1.0700e-003	284.0030
NaturalGas Mitigated	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	55.2076	55.2076	1.0600e-003	1.0100e-003	55.5357
NaturalGas Unmitigated	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	55.2076	55.2076	1.0600e-003	1.0100e-003	55.5357

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	995557	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	53.1267	53.1267	1.0200e-003	9.7000e-004	53.4425
Strip Mall	38993.9	2.1000e-004	1.9100e-003	1.6100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.0809	2.0809	4.0000e-005	4.0000e-005	2.0932
Total		**5.5800e-003**	**0.0507**	**0.0426**	**3.0000e-004**		**3.8600e-003**	**3.8600e-003**		**3.8600e-003**	**3.8600e-003**	**0.0000**	**55.2076**	**55.2076**	**1.0600e-003**	**1.0100e-003**	**55.5357**

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	995557	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	53.1267	53.1267	1.0200e-003	9.7000e-004	53.4425
Strip Mall	38993.9	2.1000e-004	1.9100e-003	1.6100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.0809	2.0809	4.0000e-005	4.0000e-005	2.0932
Total		**5.5800e-003**	**0.0507**	**0.0426**	**3.0000e-004**		**3.8600e-003**	**3.8600e-003**		**3.8600e-003**	**3.8600e-003**	**0.0000**	**55.2076**	**55.2076**	**1.0600e-003**	**1.0100e-003**	**55.5357**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.09719e+006	263.5044	6.4700e-003	1.0000e-003	263.9628
Strip Mall	83299.4	20.0055	4.9000e-004	8.0000e-005	20.0403
Total		**283.5099**	**6.9600e-003**	**1.0800e-003**	**284.0030**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.09719e+006	263.5044	6.4700e-003	1.0000e-003	263.9628
Strip Mall	83299.4	20.0055	4.9000e-004	8.0000e-005	20.0403
Total		**283.5099**	**6.9600e-003**	**1.0800e-003**	**284.0030**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.3636	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Unmitigated	0.3636	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3249					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Total	**0.3636**	**1.0000e-005**	**1.0600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0600e-003**	**2.0600e-003**	**1.0000e-005**	**0.0000**	**2.2000e-003**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3249					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0600e-003	2.0600e-003	1.0000e-005	0.0000	2.2000e-003
Total	**0.3636**	**1.0000e-005**	**1.0600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0600e-003**	**2.0600e-003**	**1.0000e-005**	**0.0000**	**2.2000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.7685	4.0900e-003	2.5200e-003	7.6210
Unmitigated	6.7685	4.0900e-003	2.5200e-003	7.6210

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.71118 / 1.7409	5.6669	3.4200e-003	2.1000e-003	6.3792
Strip Mall	0.533322 / 0.326875	1.1017	6.7000e-004	4.1000e-004	1.2418
Total		**6.7685**	**4.0900e-003**	**2.5100e-003**	**7.6210**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.71118 / 1.7409	5.6669	3.4200e-003	2.1000e-003	6.3792
Strip Mall	0.533322 / 0.326875	1.1017	6.7000e-004	4.1000e-004	1.2418
Total		**6.7685**	**4.0900e-003**	**2.5100e-003**	**7.6210**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.8820	0.9386	0.0000	39.3470
Unmitigated	15.8820	0.9386	0.0000	39.3470

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	70.68	14.3474	0.8479	0.0000	35.5451
Strip Mall	7.56	1.5346	0.0907	0.0000	3.8019
Total		**15.8820**	**0.9386**	**0.0000**	**39.3470**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	70.68	14.3474	0.8479	0.0000	35.5451
Strip Mall	7.56	1.5346	0.0907	0.0000	3.8019
Total		**15.8820**	**0.9386**	**0.0000**	**39.3470**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	96	536	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)	0.0422	0.1180	0.1077	2.0000e-004		6.2100e-003	6.2100e-003		6.2100e-003	6.2100e-003	0.0000	19.5943	19.5943	2.7500e-003	0.0000	19.6630
Total	**0.0422**	**0.1180**	**0.1077**	**2.0000e-004**		**6.2100e-003**	**6.2100e-003**		**6.2100e-003**	**6.2100e-003**	**0.0000**	**19.5943**	**19.5943**	**2.7500e-003**	**0.0000**	**19.6630**

11.0 Vegetation

Phase 3 Existing Buildings

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	14.55	1000sqft	0.33	14,546.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	395.13	**CH4 Intensity (lb/MWhr)**	0.01	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Phase 3 Existing Buildings - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2026 RPS compliance (50%).

Land Use - 2615 and 2619 West Taron Court to be demoed under Phase 3

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Grading -

Trips and VMT - Operation only

Architectural Coating - Operation only

Vehicle Trips - Existing mobile sources modeled separately

Energy Use - Building constructed to 2008 Title 24 standards. Historical data used.

Water And Wastewater - Water demand provided as total for all existing buildings. Allocated to buildings in Phase 1 and 2

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	7,273.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	21,819.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	2.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblConstructionPhase	NumDays	1.00	0.00
tblConstructionPhase	PhaseEndDate	4/1/2020	3/25/2020

Phase 3 Existing Buildings - Sacramento County, Annual

tblConstructionPhase	PhaseEndDate	3/18/2020	10/30/2019
tblConstructionPhase	PhaseEndDate	10/25/2019	10/13/2019
tblConstructionPhase	PhaseEndDate	10/30/2019	10/28/2019
tblConstructionPhase	PhaseEndDate	3/25/2020	3/18/2020
tblConstructionPhase	PhaseEndDate	10/28/2019	10/25/2019
tblEnergyUse	LightingElect	6.45	5.33
tblEnergyUse	T24E	4.20	3.26
tblEnergyUse	T24NG	5.52	4.49
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.01
tblProjectCharacteristics	CO2IntensityFactor	590.31	395.13
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002

tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	1,077,755.19	0.00
tblWater	OutdoorWaterUseRate	660,559.63	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2019	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
2020	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
Maximum	**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**

	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	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.0636	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Energy	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	34.3611	34.3611	8.4000e-004	2.3000e-004	34.4506
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	3.1017	0.0000	3.1017	0.1833	0.0000	7.6843
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0640**	**3.8600e-003**	**3.4300e-003**	**2.0000e-005**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**3.1017**	**34.3614**	**37.4631**	**0.1842**	**2.3000e-004**	**42.1353**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.0636	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Energy	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	34.3611	34.3611	8.4000e-004	2.3000e-004	34.4506
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	3.1017	0.0000	3.1017	0.1833	0.0000	7.6843
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0640**	**3.8600e-003**	**3.4300e-003**	**2.0000e-005**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**3.1017**	**34.3614**	**37.4631**	**0.1842**	**2.3000e-004**	**42.1353**

	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	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 3 Existing Buildings - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/14/2019	10/13/2019	5	0	
2	Site Preparation	Site Preparation	10/26/2019	10/25/2019	5	0	
3	Grading	Grading	10/29/2019	10/28/2019	5	0	
4	Building Construction	Building Construction	10/31/2019	10/30/2019	5	0	
5	Paving	Paving	3/19/2020	3/18/2020	5	0	
6	Architectural Coating	Architectural Coating	3/26/2020	3/25/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3 Existing Buildings - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Site Preparation	Graders	0	8.00	187	0.41
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.2 Demolition - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2019

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1577	30.1577	7.6000e-004	1.5000e-004	30.2223
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1577	30.1577	7.6000e-004	1.5000e-004	30.2223
NaturalGas Mitigated	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2033	4.2033	8.0000e-005	8.0000e-005	4.2283
NaturalGas Unmitigated	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2033	4.2033	8.0000e-005	8.0000e-005	4.2283

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	78767.5	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2033	4.2033	8.0000e-005	8.0000e-005	4.2283
Total		**4.2000e-004**	**3.8600e-003**	**3.2400e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.2033**	**4.2033**	**8.0000e-005**	**8.0000e-005**	**4.2283**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	78767.5	4.2000e-004	3.8600e-003	3.2400e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2033	4.2033	8.0000e-005	8.0000e-005	4.2283
Total		**4.2000e-004**	**3.8600e-003**	**3.2400e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.2033**	**4.2033**	**8.0000e-005**	**8.0000e-005**	**4.2283**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	168265	30.1577	7.6000e-004	1.5000e-004	30.2223
Total		**30.1577**	**7.6000e-004**	**1.5000e-004**	**30.2223**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	168265	30.1577	7.6000e-004	1.5000e-004	30.2223
Total		**30.1577**	**7.6000e-004**	**1.5000e-004**	**30.2223**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.0636	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Unmitigated	0.0636	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.7400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Total	**0.0636**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.6000e-004**	**3.6000e-004**	**0.0000**	**0.0000**	**3.8000e-004**

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.7400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.8000e-004
Total	**0.0636**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.6000e-004**	**3.6000e-004**	**0.0000**	**0.0000**	**3.8000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.1017	0.1833	0.0000	7.6843
Unmitigated	3.1017	0.1833	0.0000	7.6843

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	15.28	3.1017	0.1833	0.0000	7.6843
Total		**3.1017**	**0.1833**	**0.0000**	**7.6843**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	15.28	3.1017	0.1833	0.0000	7.6843
Total		**3.1017**	**0.1833**	**0.0000**	**7.6843**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE
SACRAMEN	2020	All Other B	Aggregatec	Aggregatec	DSL	470.8857	24342.87	3955.44	32.32923	0.00054	0.005082
SACRAMEN	2020	LDA	Aggregatec	Aggregatec	GAS	562308.4	20379238	2622438	6488.63	0.273786	0.212098
SACRAMEN	2020	LDA	Aggregatec	Aggregatec	DSL	4715.654	173323.5	21897.36	40.34655	0.000184	0.006342
SACRAMEN	2020	LDA	Aggregatec	Aggregatec	ELEC	6575.116	256516.7	32944.15	0	0	0
SACRAMEN	2020	LDT1	Aggregatec	Aggregatec	GAS	62565.85	2093110	283205.1	775.1561	0.047266	0.032756
SACRAMEN	2020	LDT1	Aggregatec	Aggregatec	DSL	230.9232	4421.791	869.7209	2.290688	2.96E-05	0.00036
SACRAMEN	2020	LDT1	Aggregatec	Aggregatec	ELEC	215.1146	7559.58	1037.313	0	0	0
SACRAMEN	2020	LDT2	Aggregatec	Aggregatec	GAS	200449	7002680	925793.4	2859.47	0.127851	0.104089
SACRAMEN	2020	LDT2	Aggregatec	Aggregatec	DSL	874.3506	37105.38	4307.459	11.77238	3.11E-05	0.00185
SACRAMEN	2020	LDT2	Aggregatec	Aggregatec	ELEC	805.6064	27180.57	4087.465	0	0	0
SACRAMEN	2020	LHD1	Aggregatec	Aggregatec	GAS	17931.14	606571.9	267147.3	699.4422	0.021797	0.025952
SACRAMEN	2020	LHD1	Aggregatec	Aggregatec	DSL	14531.28	510511.1	182785.2	325.6884	0.005229	0.051194
SACRAMEN	2020	LHD2	Aggregatec	Aggregatec	GAS	2350.507	80286.25	35019.06	105.9136	0.002595	0.003357
SACRAMEN	2020	LHD2	Aggregatec	Aggregatec	DSL	4640.209	168397.1	58367.99	120.2747	0.001564	0.018906
SACRAMEN	2020	MCY	Aggregatec	Aggregatec	GAS	28915.15	205683.9	57830.3	51.91141	0.095621	0.016097
SACRAMEN	2020	MDV	Aggregatec	Aggregatec	GAS	150962.3	4932504	685998	2460.633	0.121709	0.089853
SACRAMEN	2020	MDV	Aggregatec	Aggregatec	DSL	2487.754	100644.5	12084.33	42.46094	7.53E-05	0.006674
SACRAMEN	2020	MDV	Aggregatec	Aggregatec	ELEC	265.7412	8954.915	1344.151	0	0	0
SACRAMEN	2020	MH	Aggregatec	Aggregatec	GAS	3364.607	28658.06	336.5952	58.21128	0.000664	0.00102
SACRAMEN	2020	MH	Aggregatec	Aggregatec	DSL	1047.878	9419.136	104.7878	11.01393	6.75E-05	0.001731
SACRAMEN	2020	Motor Coa	Aggregatec	Aggregatec	DSL	104.4371	13334.62	1524.781	24.32598	0.000198	0.003824
SACRAMEN	2020	OBUS	Aggregatec	Aggregatec	GAS	618.1662	28972.49	12368.27	59.74574	0.001321	0.001483
SACRAMEN	2020	PTO	Aggregatec	Aggregatec	DSL	0	18015.43	0	41.07113	0.000358	0.006456
SACRAMEN	2020	SBUS	Aggregatec	Aggregatec	GAS	101.2371	5046.944	404.9482	5.138097	0.000394	0.000195
SACRAMEN	2020	SBUS	Aggregatec	Aggregatec	DSL	1066.604	33499.71	12308.46	47.76384	0.000223	0.007508
SACRAMEN	2020	T6 Ag	Aggregatec	Aggregatec	DSL	17.38314	274.3826	76.48584	0.340181	7.59E-06	5.35E-05

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE
SACRAMEN	2020	T6 CAIRP h	Aggregatec	Aggregatec	DSL	104.3856	20726.79	1524.03	21.55275	4.37E-05	0.003388
SACRAMEN	2020	T6 CAIRP sı	Aggregatec	Aggregatec	DSL	56.02069	2968.495	817.9021	3.266816	1.09E-05	0.000513
SACRAMEN	2020	T6 instate (	Aggregatec	Aggregatec	DSL	172.8604	11752.46	781.4952	16.6446	0.000294	0.002616
SACRAMEN	2020	T6 instate (	Aggregatec	Aggregatec	DSL	1688.937	86219.97	7635.62	121.4636	0.002081	0.019092
SACRAMEN	2020	T6 instate l	Aggregatec	Aggregatec	DSL	1343.385	178022.2	15502.48	208.7037	0.001903	0.032805
SACRAMEN	2020	T6 instate s	Aggregatec	Aggregatec	DSL	5293.837	256170.5	61090.14	315.0532	0.00373	0.049522
SACRAMEN	2020	T6 OOS hea	Aggregatec	Aggregatec	DSL	58.91439	11708.35	860.1501	12.17929	2.36E-05	0.001914
SACRAMEN	2020	T6 OOS sm	Aggregatec	Aggregatec	DSL	31.33666	1637.559	457.5152	1.808294	6.49E-06	0.000284
SACRAMEN	2020	T6 Public	Aggregatec	Aggregatec	DSL	4496.374	69021.1	13639	109.1237	0.000418	0.017153
SACRAMEN	2020	T6 utility	Aggregatec	Aggregatec	DSL	171.6652	2865.339	1974.149	3.718785	5.05E-06	0.000585
SACRAMEN	2020	T6TS	Aggregatec	Aggregatec	GAS	2250.191	108653.8	45021.82	223.1953	0.005803	0.005452
SACRAMEN	2020	T7 Ag	Aggregatec	Aggregatec	DSL	10.55333	197.5579	46.43464	0.385965	1.1E-05	6.07E-05
SACRAMEN	2020	T7 CAIRP	Aggregatec	Aggregatec	DSL	807.845	146246.3	11794.54	249.6123	0.000981	0.039236
SACRAMEN	2020	T7 CAIRP c	Aggregatec	Aggregatec	DSL	45.89798	8441.895	207.503	16.74976	7.43E-05	0.002633
SACRAMEN	2020	T7 NNOOS	Aggregatec	Aggregatec	DSL	883.3627	178299.2	12897.09	295.6075	0.001297	0.046465
SACRAMEN	2020	T7 NOOS	Aggregatec	Aggregatec	DSL	317.5425	57459.39	4636.12	100.3453	0.000415	0.015773
SACRAMEN	2020	T7 other p	Aggregatec	Aggregatec	DSL	10.00402	1604.083	76.03052	3.346185	2.14E-05	0.000526
SACRAMEN	2020	T7 POAK	Aggregatec	Aggregatec	DSL	41.85246	4679.204	318.0787	10.17386	7.74E-05	0.001599
SACRAMEN	2020	T7 Public	Aggregatec	Aggregatec	DSL	4391.136	88892.13	13319.78	193.5638	0.000861	0.030426
SACRAMEN	2020	T7 Single	Aggregatec	Aggregatec	DSL	1220.09	90729.3	14079.67	164.4255	0.00134	0.025845
SACRAMEN	2020	T7 single c	Aggregatec	Aggregatec	DSL	296.9415	20942.79	1342.461	44.94422	0.000589	0.007065
SACRAMEN	2020	T7 SWCV	Aggregatec	Aggregatec	DSL	568.3002	23183.53	2216.371	108.1785	7.3E-05	0.017004
SACRAMEN	2020	T7 SWCV	Aggregatec	Aggregatec	NG	259.8475	10586.88	1013.405	39.76441	0.053067	0.008106
SACRAMEN	2020	T7 tractor	Aggregatec	Aggregatec	DSL	794.1183	109688.9	10085.3	174.7178	0.000991	0.027463
SACRAMEN	2020	T7 tractor (	Aggregatec	Aggregatec	DSL	245.8322	17275.96	1111.398	37.24275	0.000507	0.005854
SACRAMEN	2020	T7 utility	Aggregatec	Aggregatec	DSL	24.14959	490.115	277.7203	0.980467	2.7E-06	0.000154

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE
SACRAMEN	2020	T7IS	Aggregatec	Aggregatec	GAS	9.793828	362.9092	195.9549	0.922662	0.000165	9.56E-05
SACRAMEN	2020	UBUS	Aggregatec	Aggregatec	GAS	170.4936	12872.13	681.9743	32.71646	0.000191	0.000425
SACRAMEN	2020	UBUS	Aggregatec	Aggregatec	DSL	4.334945	242.4383	17.33978	0.327372	1.52E-05	5.15E-05
SACRAMEN	2020	UBUS	Aggregatec	Aggregatec	ELEC	0.002191	0.046908	0.008765	0	0	0
SACRAMEN	2020	UBUS	Aggregatec	Aggregatec	NG	360.4708	34604.16	1441.883	77.68276	0.248468	0.015836
						1093746	38312798	5453300	16852.33	1.024979	0.974822

Summary of GHG Emissions

Existing Site

	MTCO2e/year		
Source	Phase 1	Phase 2	Phase 3
Area	0	0	0
Energy	114	340	34
Mobile	2,381	4,843	771
Waste	20	39	8
Water	6	8	-
Stationary	-	20	-
Total	**2,521**	**5,249**	**813**
Operational Total	**93,292**	**178,479**	**24,380**

Construction

Phase	Year	Off-Road Equipment	On-Road Travel	MTCO2e
1	2020	607	453	1,267
1	2021	417	1,394	1,810
1	2022	30	1,215	1,245
2A	2023	36	7	43
2A	2024	297	223	520
2B	2024	164	615	779
2B	2025	56	112	168
2C	2023	35	7	43
2C	2024	247	429	676
2C	2025	14	335	349
2D	2025	223	49	271
3A	2026	39	8	47
3A	2027	214	195	409
3B	2027	76	15	91
3B	2028	141	180	321
3C	2029	134	98	232
Total		**2,732**	**5,334**	**8,273**

Total by Year				
	Year	Off-Road Equipment	On-Road Travel	MTCO2e
	2020	607	453	1,267
	2021	417	1,394	1,810
	2022	30	1,215	1,245
	2023	71	15	86
	2024	709	1,267	1,976
	2025	292	495	787
	2026	39	8	47
	2027	290	210	500
	2028	141	180	321
	2029	134	98	232
Total				**8,273**

Operational Emissions - Unmitigated

First Year of Operation	MTCO2e/year		
Phase	Phase 1	Phase 2	Phase 3
Year	2023	2026	2030

Area	0	0	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Stationary	925	-	-
Waste	3,256	2,046	68
Water	82	45	12
Total	**26,553**	**14,061**	**5,071**

Operational Emissions - Mitigated

First Year of Operation	MTCO2e/year		
Phase	Phase 1	Phase 2	Phase 3
Year	2023	2026	2030
Area	0	0	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Stationary	925	-	-
Waste	1,628	1,023	34
Water	82	45	12
Solar Reduction	(319)	(456)	(227)
EV Charging Reduction	(335)	(353)	(113)
SMUD Greenergy	(4,950)	(2,076)	(338)
TDM Plan	(1,974)	(1,050)	(613)
Carbon Sequestration Gain	-	-	(11)
Total	**17,347**	**9,103**	**3,736**

Total Lifetime Operation Unmitigated	1,370,530	1,074,378
Total Lifetime Operation Mitigated	1,063,501	
Net Increase in Operation	767,349	
Project Total w/ Construction	775,622	

Area	0	0	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Stationary	925	-	-
Waste	3,256	2,046	68
Water	82	45	12
Total	**26,553**	**14,061**	**5,071**

Operational Emissions - Mitigated

First Year of Operation	MTCO2e/year		
Phase	Phase 1	Phase 2	Phase 3
Year	2023	2026	2030
Area	0	0	3
Energy	8,914	4,863	904
Mobile	13,376	7,107	4,084
Stationary	925	-	-
Waste	1,628	1,023	34
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Solar Reduction	(319)	(456)	(227)
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SMUD Greenergy	(4,950)	(2,076)	(338)
TDM Plan	(1,974)	(1,050)	(613)
Carbon Sequestration Gain	-	-	(11)
Total	**17,347**	**9,103**	**3,736**

Total Lifetime Operation Unmitigated	1,370,530	1,113,025
Total Lifetime Operation Mitigated	1,063,501	
Net Increase in Operation	805,997	
Project Total w/ Construction	814,269	

Proposed Project Building Energy, Water, Solid Waste Operation

		Land Use in CalEEMod						
Phase	**Project Building**	**Type**	**Amount**	**Unit**	**Water Demand (gal/year)**	**Electricity Demand (kWh/year)**	**Natural Gas Demand (cubic feet/year)**	**Notes**
1	CNU Medical Center (Hospital Podium/West Tower w/Helistop)	Hospital	596,790	sq ft	42,871,510	20,887,700	68,630,900	Accounts for reduced water demand from xeriscaping
			250	beds				
		Enclosed Parking with Elevator	230	spaces				
			33,290	sq ft				
	Central Plant	General Light Industry	22,850	sq ft	2,190,000	1,008,000	-	
	Central Plant Parking	Enclosed Parking with Elevator	14,650	sq ft	-	-	-	
			80	spaces				
	Mechanical Yard	Surface Parking Lot	15,500	sq ft	-	-	-	
2	CNU Med Center (Hospital Podium/West Tower w/Helistop/East Tower)	Hospital	103,210	sq ft	7,101,510	3,612,400	11,869,200	Accounts for reduced water demand from xeriscaping
			150	beds				
	Out-Patient Clinic	Hospital	168,500	sq ft	12,410,000	5,897,500	19,377,500	
	Out-Patient Clinic Parking	Enclosed Parking with Elevator	170	spaces				
			33,700	sq ft				
	Parking Garage 1	Unenclosed Parking with Elevator	205,600	sq ft	-	-	-	
			1,500	spaces				
	Retail South	Strip Mall	51,400	sq ft	2,920,000	1,088,000	1,142,400	
	Medical Office Building	Medical Office Building	100,000	sq ft	7,300,000	3,500,000	11,500,000	
	Central Quad Landscape Area	City Park	3.2139449	acres	-	-	-	
			140,000	sq ft				
3	Parking Garage 2	Unenclosed Parking with Elevator	165,600	sq ft	-	-	-	
			1,000	spaces				
	Retail North	Strip Mall	41,400	sq ft	2,190,000	828,000	869,400	
	Dormitory	Apartments Mid-Rise	96,000	sq ft	5,837,735	2,400,000	4,800,000	Accounts for reduced water demand from xeriscaping
			150	dwelling units				
	Admin Support	General Office Building	24,000	sq ft				
	Student Parking	Enclosed Parking with Elevator	70,000	sq ft	1,825,000	700,000	735,000	
			200	spaces				
		Sport Floor	35,000	sq ft				

Phase 1 Project Mobile Source GHG Emissions - 2023

	Project VMT (mi)	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	**CO2e (MT)**
Without TDMs	35,604,629	12,930,679,218	12,931	754,451	0.75	716,858	0.72	**13,163**
With TDMs	30,263,952	10,991,083,636	10,991.08	641,283	0.64	609,329	0.61	**11,189**

EMFAC2017 Output				
	VMT (mi)	CO2 (ton/day)	CH4 (ton/day)	N2O (ton/day)
All Vehicles	39,750,906	15,913.51	0.93	0.88

	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
All Vehicles	363.17	0.02	0.02

1	Ton
907185	Grams
1000000	g/MT

Phase 2 Project Mobile Source GHG Emissions - 2026

	Project VMT (mi)	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	**CO2e (MT)**
Without TDMs	20,807,508	6,877,241,877	6,877	404,688	0.40	379,163	0.38	**7,000**
With TDMs	17,686,243	5,845,609,719	5,845.61	343,982	0.34	322,286	0.32	**5,950**

EMFAC2017 Output				
	VMT (mi)	CO2 (ton/day)	CH4 (ton/day)	N2O (ton/day)
All Vehicles	41,135,078	14,986.86	0.88	0.83

	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
All Vehicles	330.52	0.02	0.02

1	Ton
907185	Grams
1000000	g/MT

Phase 3 Project Mobile Source GHG Emissions - 2030

	Project VMT (mi)	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	**CO2e (MT)**
Without TDMs	13,469,499	4,011,526,443	4,012	245,548	0.25	223,362	0.22	**4,084**
With TDMs	11,449,265	3,409,854,316	3,409.85	208,720	0.21	189,860	0.19	**3,472**

EMFAC2017 Output				
	VMT (mi)	CO2 (ton/day)	CH4 (ton/day)	N2O (ton/day)
All Vehicles	43,068,139	14,138.99	0.87	0.79

	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
All Vehicles	297.82	0.02	0.02

1	Ton
907185	Grams
1000000	g/MT

Helicopter Emissions

Phase 1 GHG Emissions

Helicopter operation	**Value**	Source
Gallons of jet fuel used per hour	100	FOCA 2009 - used AS 365 N3 Dauphin as proxy
Gallons of fuel used per LTO	15	FOCA 2009 - used AS 365 N3 Dauphin as proxy
Average hours/use (assumes 2 LTO)	4	assumption
Total Days Helicopter Used per Year	52	Applicant data - 1 trip per week
Total Hours Helicopter Used per Year	208	calculated
Gallons used for LTO	805	calculated
Gallons used for cruising	20,868	calculated
Total gallons used per year	21,674	calculated
Jet A Emissions Factor (kg CO2/gal)	9.7497	Climate Registry 2017 Emission Factors
Jet A Emissions Factor (kg N2O/gal)	0.000308	Climate Registry 2017 Emission Factors
GWP N2O	298	
LTO MTCO2E	7.93	
Cruising MTCO2E	205.37	
Total MTCO2E	213.30	
Note: No emission factor available for CH4 helicopter emissions.		

Phase 2 GHG Emissions

Helicopter operation	**Value**	Source
Gallons of jet fuel used per hour	100	FOCA 2009 - used AS 365 N3 Dauphin as proxy
Gallons of fuel used per LTO	15	FOCA 2009 - used AS 365 N3 Dauphin as proxy
Average hours/use (assumes 2 LTO)	4	assumption
Total Days Helicopter Used per Year	26	Applicant data - 0.5 trip per week
Total Hours Helicopter Used per Year	104	calculated
Gallons used for LTO	403	calculated
Gallons used for cruising	10,434	calculated
Total gallons used per year	10,837	calculated
Jet A Emissions Factor (kg CO2/gal)	9.7497	Climate Registry 2017 Emission Factors
Jet A Emissions Factor (kg N2O/gal)	0.000308	Climate Registry 2017 Emission Factors
GWP N2O	298	
LTO MTCO2E	3.96	
Cruising MTCO2E	102.69	
Total MTCO2E	106.65	
Note: No emission factor available for CH4 helicopter emissions.		

FOCA 2009 - Guidance on the Determination of Helicopter Emissions

Green Project Features

On-Site Solar

	kWh/year	MTCO2e	sq ft	m^2	kW system
Phase 1	1,327,446	319.44	46,665	4,335	824
Phase 2	2,537,432	455.68	89,335	8,299	1,577
Phase 3	1,578,453	226.77	55,590	5,164	981

EV Charging Stations

Phase 1			
Number of Chargers		37	
Number of Connections per Charge		2	<-- assumption
Average Charging hours per Connection per day		3	<-- assumption
Number of hours of charge per year for all chargers (h/year)		70,034	
Average Efficiency of EV LDV (kWh/100-mi) (1)		34	<-for MY2015-2018
Average Efficiency of Gasoline LDV in 2023 (mpg)		32	<- EMFAC2017 for Sacramento
GHG Emissions per kWh in 2023 (MTCO2e/kWh)		0.0002406	
GHG Emissions per mi for average gasoline LDV (gCO2/mi)		325	
Emissions reductions per EV mi (kg CO2/mi)		0.24	

Type of EV Charger	Charger Power (kW or kWh/h) (2)	Charged amount (kWh)	Equivalent VMT (mi)	EV emissions (MT CO2e)	Equivalent Gasoline emissions (MT CO2e)	Emissions reductions (MT CO2e)	Emissions reductions per hour of charge (kg CO2e/h)
Level 2 (high)	6.6	462,221.76	1,374,514	111	446	335	5
		Total VMT	1,374,514		Total Reductions	335	

Phase 2			
Number of Chargers		36	
Number of Connections per Charge		2	<-- assumption
Average Charging hours per Connection per day		3	<-- assumption
Number of hours of charge per year for all chargers (h/year)		68,141	
Average Efficiency of EV LDV (kWh/100-mi) (1)		34	<-for MY2015-2018
Average Efficiency of Gasoline LDV in 2026 (mpg)		35	<- EMFAC2017 for Sacramento
GHG Emissions per kWh in 2026 (MTCO2e/kWh)		0.0001796	
GHG Emissions per mi for average gasoline LDV (gCO2/mi)		325	
Emissions reductions per EV mi (kg CO2/mi)		0.26	

Type of EV Charger	Charger Power (kW or kWh/h) (2)	Charged amount (kWh)	Equivalent VMT (mi)	EV emissions (MT CO2e)	Equivalent Gasoline emissions (MT CO2e)	Emissions reductions (MT CO2e)	Emissions reductions per hour of charge (kg CO2e/h)
Level 2 (high)	6.6	449,729.28	1,337,365	81	434	353	5
		Total VMT	1,337,365		Total Reductions	353	

Phase 3			
Number of Chargers		11	
Number of Connections per Charge		2	<-- assumption
Average Charging hours per Connection per day		3	<-- assumption
Number of hours of charge per year for all chargers (h/year)		20,821	
Average Efficiency of EV LDV (kWh/100-mi) (1)		34	<-for MY2015-2018
Average Efficiency of Gasoline LDV in 2030 (mpg)		38	<- EMFAC2017 for Sacramento
GHG Emissions per kWh in 2030 (MTCO2e/kWh)		0.0001437	
GHG Emissions per mi for average gasoline LDV (gCO2/mi)		325	
Emissions reductions per EV mi (kg CO2/mi)		0.28	

Type of EV Charger	Charger Power (kW or kWh/h) (2)	Charged amount (kWh)	Equivalent VMT (mi)	EV emissions (MT CO2e)	Equivalent Gasoline emissions (MT CO2e)	Emissions reductions (MT CO2e)	Emissions reductions per hour of charge (kg CO2e/h)
Level 2 (high)	6.6	137,417.28	408,639	20	133	113	5
		Total VMT	408,639		Total Reductions	113	

Vegetation Change

	Number of trees	MTCO2e
New Trees Gained after Construction	313	222

Notes

Assumed all trees removed are fully mature

Assumed new planted trees are miscellaneous mix of species

Source: CalEEMod 2016.3.2

Emission Factors

Electricity Emission Factors

2014 SMUD ELECTRICITY EF	Amount	Units	Source
CO2	561.08	lb/MWh	Martha Helek, SMUD, email communication to Dimitri Antoniou of Ascent Environmental on June 28, 2016
CH4	0.014116	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
N20	0.002572	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
2020 SMUD ELECTRICITY EF			
CO2	529.4699	lb/MWh	33% RPS
CH4	0.013321	lb/MWh	
N20	0.002427	lb/MWh	
2026 SMUD ELECTRICITY EF			50% RPS
CO2	395.1268	lb/MWh	
CH4	0.009941	lb/MWh	
N20	0.001811	lb/MWh	
2030 SMUD ELECTRICITY EF			60% RPS
CO2	316.1014	lb/MWh	
CH4	0.007953	lb/MWh	
N20	0.001449	lb/MWh	
Natural Gas Emission Factors			
	53.06	kg CO2/MMBtu	2017 Default Emission Factors Table 12.1
	0.001	kg CH4/MMBtu	2017 Default Emission Factors Table 12.9
	0.0001	kg N2O/MMBtu	2017 Default Emission Factors Table 12.9
Diesel Emission Factors			
	10.21	kg CO2/gal	2017 Default Emission Facotrs Table 13.1
	0.00006	kg CH4/gal	2017 Default Emission Factors Table 13.7
	0.00045	kg N2O/gal	2017 Default Emission Factors Table 13.7
Conversion Factors			
lb/MT	2204.623		
BTU/ft^3	1000		
BTU/MMBTU	1000000		
MT/kg	0.001		
g/lb	453.592		
lb jet fuel/gallon	6.79		

Phase 1 Operation

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	596.79	1000sqft	13.70	596,790.00	0
General Light Industry	22.85	1000sqft	0.52	22,850.00	0
Enclosed Parking with Elevator	80.00	Space	0.72	14,650.00	0
Parking Lot	15.50	1000sqft	0.36	15,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	529.47	**CH4 Intensity (lb/MWhr)**	0.012	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - SMUD intensity factor adjusted for 2020 RPS compliance (33% renewable)

Land Use - See appendix for modeling inputs

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Trips and VMT - Operation only

Grading - Operation only

Architectural Coating - Operation only

Vehicle Trips - Mobile sources modeled separately

Energy Use - Energy modeled separately

Water And Wastewater - Water demand accounts for landscaping demand from data provided by applicant

Land Use Change -

Waste Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	309,820.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	929,460.00	0.00
tblArchitecturalCoating	ConstArea_Parking	1,809.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	300.00	0.00
tblConstructionPhase	NumDays	20.00	0.00

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tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	4.57	0.00
tblEnergyUse	LightingElect	4.98	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	7.20	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24NG	12.42	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	3.41	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24NG	23.39	0.00
tblEnergyUse	T24NG	57.91	0.00
tblLandUse	LandUseSquareFeet	32,000.00	14,650.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.012
tblProjectCharacteristics	CO2IntensityFactor	590.31	529.47
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblTripsAndVMT	VendorTripNumber	107.00	0.00
tblTripsAndVMT	WorkerTripNumber	213.00	0.00
tblTripsAndVMT	WorkerTripNumber	43.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblWater	IndoorWaterUseRate	5,284,062.50	2,190,000.00
tblWater	IndoorWaterUseRate	74,885,530.01	42,871,510.00
tblWater	OutdoorWaterUseRate	14,263,910.48	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

	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	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**

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	2.7104	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Energy	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
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	1,314.0945	0.0000	1,314.0945	77.6608	0.0000	3,255.6134
Water						0.0000	0.0000		0.0000	0.0000	15.9428	53.9224	69.8652	0.0561	0.0349	81.6601
Total	**2.7104**	**8.0000e-005**	**9.1300e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**1,330.0373**	**53.9401**	**1,383.9774**	**77.7169**	**0.0349**	**3,337.2924**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	2.7104	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Energy	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
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	657.0472	0.0000	657.0472	38.8304	0.0000	1,627.8067
Water						0.0000	0.0000		0.0000	0.0000	15.9428	53.9224	69.8652	0.0561	0.0349	81.6601
Total	**2.7104**	**8.0000e-005**	**9.1300e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**672.9901**	**53.9401**	**726.9302**	**38.8865**	**0.0349**	**1,709.4857**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**49.40**	**0.00**	**47.48**	**49.96**	**0.00**	**48.78**

3.0 Construction Detail

Construction Phase

Phase 1 Operation - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	12/31/2019	5	0	
2	Site Preparation	Site Preparation	1/29/2020	1/28/2020	5	0	
3	Grading	Grading	2/12/2020	2/11/2020	5	0	
4	Building Construction	Building Construction	3/25/2020	3/24/2020	5	0	
5	Paving	Paving	5/19/2021	5/18/2021	5	0	
6	Architectural Coating	Architectural Coating	6/16/2021	6/15/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 1 Operation - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase 1 Operation - Sacramento County, Annual

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
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
General Light Industry	10.00	5.00	6.50	59.00	28.00	13.00	92	5	3
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
General Light Industry	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Hospital	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
General Light Industry	0	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
Hospital	0	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
Parking Lot	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
General Light Industry	0	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
Hospital	0	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
Parking Lot	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	2.7104	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Unmitigated	2.7104	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.5000e-004	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Total	**2.7104**	**8.0000e-005**	**9.1300e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0178**	**0.0178**	**5.0000e-005**	**0.0000**	**0.0189**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.5000e-004	8.0000e-005	9.1300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0189
Total	**2.7104**	**8.0000e-005**	**9.1300e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0178**	**0.0178**	**5.0000e-005**	**0.0000**	**0.0189**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	69.8652	0.0561	0.0349	81.6601
Unmitigated	69.8652	0.0561	0.0349	81.6601

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	2.19 / 0	3.3955	2.7300e-003	1.6900e-003	3.9687
Hospital	42.8715 / 0	66.4697	0.0534	0.0332	77.6914
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**69.8652**	**0.0561**	**0.0349**	**81.6601**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	2.19 / 0	3.3955	2.7300e-003	1.6900e-003	3.9687
Hospital	42.8715 / 0	66.4697	0.0534	0.0332	77.6914
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**69.8652**	**0.0561**	**0.0349**	**81.6601**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	657.0472	38.8304	0.0000	1,627.8067
Unmitigated	1,314.0945	77.6608	0.0000	3,255.6134

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	28.33	5.7507	0.3399	0.0000	14.2472
Hospital	6445.33	1,308.3437	77.3209	0.0000	3,241.3662
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1,314.0945**	**77.6608**	**0.0000**	**3,255.6134**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	14.165	2.8754	0.1699	0.0000	7.1236
Hospital	3222.67	654.1719	38.6605	0.0000	1,620.6831
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**657.0472**	**38.8304**	**0.0000**	**1,627.8067**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2023	All Other B	Aggregatec	Aggregatec	DSL	432.3096	23331	3631.4	28.3112	1.39E-05	0.00445	2.52318
SACRAMEN	2023	LDA	Aggregatec	Aggregatec	GAS	606308.3	21470908	2835871	6304.102	0.21921	0.183874	665.4181
SACRAMEN	2023	LDA	Aggregatec	Aggregatec	DSL	5931.129	213255.2	27679.17	45.87348	0.00015	0.007211	4.088384
SACRAMEN	2023	LDA	Aggregatec	Aggregatec	ELEC	11992.87	495863.5	59658.62	0	0	0	0
SACRAMEN	2023	LDT1	Aggregatec	Aggregatec	GAS	65368.82	2148248	297348.1	738.5381	0.035426	0.02596	77.95506
SACRAMEN	2023	LDT1	Aggregatec	Aggregatec	DSL	171.8028	2906.858	624.5734	1.488277	1.82E-05	0.000234	0.13264
SACRAMEN	2023	LDT1	Aggregatec	Aggregatec	ELEC	520.3597	21554.14	2582.693	0	0	0	0
SACRAMEN	2023	LDT2	Aggregatec	Aggregatec	GAS	210187	7110546	970164.9	2632.827	0.103966	0.083689	277.9034
SACRAMEN	2023	LDT2	Aggregatec	Aggregatec	DSL	1241.048	49360.09	6058.387	14.42235	3.83E-05	0.002267	1.285364
SACRAMEN	2023	LDT2	Aggregatec	Aggregatec	ELEC	2017.989	64372.67	10165.34	0	0	0	0
SACRAMEN	2023	LHD1	Aggregatec	Aggregatec	GAS	16570.85	539163.4	246880.9	607.1481	0.0168	0.020783	64.08642
SACRAMEN	2023	LHD1	Aggregatec	Aggregatec	DSL	14242.94	481068	179158.3	296.8832	0.004531	0.046666	26.45913
SACRAMEN	2023	LHD2	Aggregatec	Aggregatec	GAS	2262.202	74699.66	33703.44	96.02306	0.001981	0.002773	10.13554
SACRAMEN	2023	LHD2	Aggregatec	Aggregatec	DSL	4802.26	166508.8	60406.39	114.8289	0.001436	0.01805	10.2339
SACRAMEN	2023	MCY	Aggregatec	Aggregatec	GAS	30303.88	203769.7	60607.75	51.53285	0.093701	0.015898	5.439458
SACRAMEN	2023	MDV	Aggregatec	Aggregatec	GAS	150190.5	4749354	681491.9	2164.009	0.090399	0.067064	228.4181
SACRAMEN	2023	MDV	Aggregatec	Aggregatec	DSL	3183.546	120771.4	15325.09	46.92857	7.22E-05	0.007377	4.182417
SACRAMEN	2023	MDV	Aggregatec	Aggregatec	ELEC	1127.726	36901.46	5725.011	0	0	0	0
SACRAMEN	2023	MH	Aggregatec	Aggregatec	GAS	2990.831	25478.21	299.2028	50.04589	0.000411	0.000733	5.282504
SACRAMEN	2023	MH	Aggregatec	Aggregatec	DSL	1076.009	9299.846	107.6009	10.57767	6.2E-05	0.001663	0.942714
SACRAMEN	2023	Motor Coa	Aggregatec	Aggregatec	DSL	99.86095	14071.11	1457.97	24.14589	3.39E-05	0.003795	2.151955
SACRAMEN	2023	OBUS	Aggregatec	Aggregatec	GAS	560.205	24124.38	11208.58	48.29858	0.00097	0.001077	5.09807
SACRAMEN	2023	PTO	Aggregatec	Aggregatec	DSL	0	22179.21	0	46.08897	2.67E-05	0.007245	4.107589
SACRAMEN	2023	SBUS	Aggregatec	Aggregatec	GAS	126.4847	6096.482	505.9387	6.016118	0.000442	0.000186	0.63502
SACRAMEN	2023	SBUS	Aggregatec	Aggregatec	DSL	1040.459	32508.3	12006.75	45.58128	0.000205	0.007165	4.062342
SACRAMEN	2023	T6 Ag	Aggregatec	Aggregatec	DSL	16.07611	207.8509	70.7349	0.254846	1.45E-07	4.01E-05	0.022713

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2023	T6 CAIRP h	Aggregatec	Aggregatec	DSL	112.1188	21881.03	1636.934	21.08746	8.99E-06	0.003315	1.879378
SACRAMEN	2023	T6 CAIRP sı	Aggregatec	Aggregatec	DSL	60.92955	3190.303	889.5714	3.281647	1.43E-06	0.000516	0.29247
SACRAMEN	2023	T6 instate (	Aggregatec	Aggregatec	DSL	200.3538	13192.91	905.792	17.36633	1.9E-05	0.00273	1.54774
SACRAMEN	2023	T6 instate (	Aggregatec	Aggregatec	DSL	1725.535	96787.54	7801.076	126.5513	7.92E-05	0.019892	11.27863
SACRAMEN	2023	T6 instate l	Aggregatec	Aggregatec	DSL	1384.478	187980.5	15976.68	199.0075	8.91E-05	0.031281	17.73615
SACRAMEN	2023	T6 instate s	Aggregatec	Aggregatec	DSL	5035.97	260027.7	58114.39	290.817	0.000132	0.045712	25.9185
SACRAMEN	2023	T6 OOS hea	Aggregatec	Aggregatec	DSL	62.98831	12260.01	919.6294	11.82427	5.04E-06	0.001859	1.053815
SACRAMEN	2023	T6 OOS sm	Aggregatec	Aggregatec	DSL	33.22714	1720.234	485.1162	1.774206	7.74E-07	0.000279	0.158123
SACRAMEN	2023	T6 Public	Aggregatec	Aggregatec	DSL	4468.183	69648.01	13553.49	104.4354	0.00033	0.016416	9.307596
SACRAMEN	2023	T6 utility	Aggregatec	Aggregatec	DSL	175.4286	2940.509	2017.429	3.548332	2.33E-06	0.000558	0.316238
SACRAMEN	2023	T6TS	Aggregatec	Aggregatec	GAS	2071.193	97303.04	41440.42	193.3592	0.00408	0.003857	20.40968
SACRAMEN	2023	T7 Ag	Aggregatec	Aggregatec	DSL	11.9101	151.0314	52.40443	0.297981	6.03E-07	4.68E-05	0.026557
SACRAMEN	2023	T7 CAIRP	Aggregatec	Aggregatec	DSL	848.0909	154330.8	12382.13	247.4425	0.00062	0.038895	22.05282
SACRAMEN	2023	T7 CAIRP c	Aggregatec	Aggregatec	DSL	51.96953	9476.578	234.9522	17.6385	2.2E-05	0.002773	1.571997
SACRAMEN	2023	T7 NNOOS	Aggregatec	Aggregatec	DSL	952.1692	188153.9	13901.67	287.3122	0.000814	0.045161	25.60613
SACRAMEN	2023	T7 NOOS	Aggregatec	Aggregatec	DSL	336.1067	60637.58	4907.157	99.62819	0.000289	0.01566	8.879167
SACRAMEN	2023	T7 other p	Aggregatec	Aggregatec	DSL	10.34874	1777.384	78.65044	3.192215	3.47E-06	0.000502	0.2845
SACRAMEN	2023	T7 POAK	Aggregatec	Aggregatec	DSL	45.75421	5550.891	347.732	10.36048	1.45E-05	0.001629	0.923358
SACRAMEN	2023	T7 Public	Aggregatec	Aggregatec	DSL	4682.134	94808.83	14202.47	196.7875	0.000834	0.030932	17.5383
SACRAMEN	2023	T7 Single	Aggregatec	Aggregatec	DSL	1507.418	111698.9	17395.39	181.1458	0.000264	0.028474	16.14426
SACRAMEN	2023	T7 single c	Aggregatec	Aggregatec	DSL	338.7823	23509.65	1531.622	46.23886	8.05E-05	0.007268	4.120947
SACRAMEN	2023	T7 SWCV	Aggregatec	Aggregatec	DSL	549.8797	22429.39	2144.531	99.9639	7.38E-05	0.015713	8.909086
SACRAMEN	2023	T7 SWCV	Aggregatec	Aggregatec	NG	298.5023	12165.01	1164.159	44.0066	0.054978	0.008971	5.086492
SACRAMEN	2023	T7 tractor	Aggregatec	Aggregatec	DSL	843.5276	115843.1	10712.8	166.1206	0.000191	0.026112	14.80517
SACRAMEN	2023	T7 tractor (	Aggregatec	Aggregatec	DSL	284.6932	19393.39	1287.087	38.3361	6.65E-05	0.006026	3.416629
SACRAMEN	2023	T7 utility	Aggregatec	Aggregatec	DSL	24.7459	502.0886	284.5779	0.946626	1.2E-06	0.000149	0.084366

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2023	T7IS	Aggregatec	Aggregatec	GAS	4.126049	370.9549	82.554	0.784019	4.91E-05	6.9E-05	0.082756
SACRAMEN	2023	UBUS	Aggregatec	Aggregatec	GAS	202.327	15275.52	809.308	33.7431	0.000201	0.000364	3.561692
SACRAMEN	2023	UBUS	Aggregatec	Aggregatec	DSL	2.109857	135.6226	8.439428	0.1748	6.36E-06	2.75E-05	0.015579
SACRAMEN	2023	UBUS	Aggregatec	Aggregatec	ELEC	0.002191	0.046908	0.008765	0	0	0	0
SACRAMEN	2023	UBUS	Aggregatec	Aggregatec	NG	430.8104	41217.31	1723.241	92.41423	0.295338	0.018839	10.68168
						1159521	39750906	5749731	15913.51	0.928486	0.882222	1634.254

Phase 2 Operation

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	103.21	1000sqft	2.37	103,210.00	0
Hospital	168.50	1000sqft	3.87	168,500.00	0
Medical Office Building	100.00	1000sqft	2.30	100,000.00	0
Enclosed Parking with Elevator	170.00	Space	1.53	33,700.00	0
Unenclosed Parking with Elevator	1,500.00	Space	13.50	205,600.00	0
Strip Mall	51.40	1000sqft	1.18	51,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2026
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	395.13	**CH4 Intensity (lb/MWhr)**	0.01	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Phase 2 Operation - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2026 RPS compliance (50% renewable)

Land Use - See appendix for modeling inputs

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Trips and VMT - Operation only

Grading - Operation only

Architectural Coating - Operation only

Vehicle Trips - Mobile sources modeled separately

Energy Use - Energy modeled separately

Water And Wastewater - Water demand accounts for landscaping demand from data provided by applicant

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	211,555.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	634,665.00	0.00
tblArchitecturalCoating	ConstArea_Parking	14,358.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	35.00	0.00
tblConstructionPhase	NumDays	370.00	0.00

Phase 2 Operation - Sacramento County, Annual

tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	4.98	0.00
tblEnergyUse	LightingElect	3.71	0.00
tblEnergyUse	LightingElect	5.33	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	6.17	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	2.98	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	9.61	0.00
tblEnergyUse	NT24NG	0.68	0.00
tblEnergyUse	NT24NG	0.93	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	9.18	0.00
tblEnergyUse	T24E	4.98	0.00
tblEnergyUse	T24E	3.26	0.00
tblEnergyUse	T24NG	57.91	0.00
tblEnergyUse	T24NG	12.42	0.00
tblEnergyUse	T24NG	4.49	0.00
tblLandUse	LandUseSquareFeet	68,000.00	33,700.00
tblLandUse	LandUseSquareFeet	600,000.00	205,600.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.01
tblProjectCharacteristics	CO2IntensityFactor	590.31	395.13
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblTripsAndVMT	VendorTripNumber	109.00	0.00
tblTripsAndVMT	WorkerTripNumber	236.00	0.00
tblTripsAndVMT	WorkerTripNumber	47.00	0.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	SU_TR	1.55	0.00

tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	34,094,316.86	19,511,510.00
tblWater	IndoorWaterUseRate	12,548,053.76	7,300,000.00
tblWater	IndoorWaterUseRate	3,807,327.60	2,920,000.00
tblWater	OutdoorWaterUseRate	6,494,155.59	0.00
tblWater	OutdoorWaterUseRate	2,390,105.48	0.00
tblWater	OutdoorWaterUseRate	2,333,523.37	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

	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	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**

Phase 2 Operation - Sacramento County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	1.8698	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Energy	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
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	825.8566	0.0000	825.8566	48.8067	0.0000	2,046.0247
Water						0.0000	0.0000		0.0000	0.0000	10.5191	26.5509	37.0699	0.0369	0.0230	44.8488
Total	**1.8698**	**2.4000e-004**	**0.0266**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**836.3756**	**26.6028**	**862.9784**	**48.8437**	**0.0230**	**2,090.9288**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	1.8698	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Energy	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
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	412.9283	0.0000	412.9283	24.4034	0.0000	1,023.0123
Water						0.0000	0.0000		0.0000	0.0000	10.5191	26.5509	37.0699	0.0369	0.0230	44.8488
Total	**1.8698**	**2.4000e-004**	**0.0266**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**423.4473**	**26.6028**	**450.0502**	**24.4404**	**0.0230**	**1,067.9165**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**49.37**	**0.00**	**47.85**	**49.96**	**0.00**	**48.93**

3.0 Construction Detail

Construction Phase

Phase 2 Operation - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	12/31/2019	5	0	
2	Site Preparation	Site Preparation	1/29/2020	1/28/2020	5	0	
3	Grading	Grading	2/12/2020	2/11/2020	5	0	
4	Building Construction	Building Construction	4/1/2020	3/31/2020	5	0	
5	Paving	Paving	9/1/2021	8/31/2021	5	0	
6	Architectural Coating	Architectural Coating	9/29/2021	9/28/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 15.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2 Operation - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase 2 Operation - Sacramento County, Annual

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
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Hospital	10.00	5.00	6.50	64.90	16.10	19.00	73	25	2
Medical Office Building	10.00	5.00	6.50	29.60	51.40	19.00	60	30	10
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Hospital	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Medical Office Building	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Strip Mall	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710
Unenclosed Parking with Elevator	0.570990	0.036039	0.209774	0.110012	0.014862	0.004732	0.018347	0.024592	0.001934	0.001739	0.005654	0.000617	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Phase 2 Operation - Sacramento County, Annual

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Hospital	0	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
Medical Office Building	0	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
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	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
Hospital	0	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
Medical Office Building	0	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
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	1.8698	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Unmitigated	1.8698	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1994					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4500e-003	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Total	**1.8698**	**2.4000e-004**	**0.0266**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0520**	**0.0520**	**1.4000e-004**	**0.0000**	**0.0553**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1994					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4500e-003	2.4000e-004	0.0266	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0553
Total	**1.8698**	**2.4000e-004**	**0.0266**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0520**	**0.0520**	**1.4000e-004**	**0.0000**	**0.0553**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	37.0699	0.0369	0.0230	44.8488
Unmitigated	37.0699	0.0369	0.0230	44.8488

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	19.5115 / 0	24.3274	0.0242	0.0151	29.4323
Medical Office Building	7.3 / 0	9.1018	9.0500e-003	5.6500e-003	11.0118
Strip Mall	2.92 / 0	3.6407	3.6200e-003	2.2600e-003	4.4047
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**37.0699**	**0.0369**	**0.0230**	**44.8488**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hospital	19.5115 / 0	24.3274	0.0242	0.0151	29.4323
Medical Office Building	7.3 / 0	9.1018	9.0500e-003	5.6500e-003	11.0118
Strip Mall	2.92 / 0	3.6407	3.6200e-003	2.2600e-003	4.4047
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**37.0699**	**0.0369**	**0.0230**	**44.8488**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	412.9283	24.4034	0.0000	1,023.0123
Unmitigated	825.8566	48.8067	0.0000	2,046.0247

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	2934.47	595.6709	35.2031	0.0000	1,475.7494
Medical Office Building	1080	219.2302	12.9561	0.0000	543.1336
Strip Mall	53.97	10.9554	0.6475	0.0000	27.1416
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**825.8566**	**48.8067**	**0.0000**	**2,046.0247**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hospital	1467.23	297.8355	17.6016	0.0000	737.8747
Medical Office Building	540	109.6151	6.4781	0.0000	271.5668
Strip Mall	26.985	5.4777	0.3237	0.0000	13.5708
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**412.9283**	**24.4034**	**0.0000**	**1,023.0123**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2026	All Other B	Aggregatec	Aggregatec	DSL	450.3192	22870.04	3782.681	26.89342	1.4E-05	0.004227	2.396823
SACRAMEN	2026	LDA	Aggregatec	Aggregatec	GAS	650890.6	22324683	3044173	6022.409	0.18193	0.167028	635.6846
SACRAMEN	2026	LDA	Aggregatec	Aggregatec	DSL	6973.938	243777.2	32661.99	48.43658	0.000121	0.007614	4.316815
SACRAMEN	2026	LDA	Aggregatec	Aggregatec	ELEC	19872.84	835373.8	98202.35	0	0	0	0
SACRAMEN	2026	LDT1	Aggregatec	Aggregatec	GAS	68561.71	2198585	312732	697.8684	0.026982	0.021551	73.66224
SACRAMEN	2026	LDT1	Aggregatec	Aggregatec	DSL	125.8905	1914.326	443.0684	0.959033	1.1E-05	0.000151	0.085472
SACRAMEN	2026	LDT1	Aggregatec	Aggregatec	ELEC	973.1006	41688.24	4831.856	0	0	0	0
SACRAMEN	2026	LDT2	Aggregatec	Aggregatec	GAS	220207	7209554	1015428	2410.04	0.085035	0.069703	254.3874
SACRAMEN	2026	LDT2	Aggregatec	Aggregatec	DSL	1581.089	58923.56	7641.529	15.86343	4.41E-05	0.002494	1.413797
SACRAMEN	2026	LDT2	Aggregatec	Aggregatec	ELEC	3777.031	113158.2	18833.68	0	0	0	0
SACRAMEN	2026	LHD1	Aggregatec	Aggregatec	GAS	15400.25	490024.7	229440.8	531.8281	0.012749	0.016709	56.13615
SACRAMEN	2026	LHD1	Aggregatec	Aggregatec	DSL	13917.02	457409	175058.6	269.9721	0.00394	0.042436	24.06073
SACRAMEN	2026	LHD2	Aggregatec	Aggregatec	GAS	2184.141	70428.39	32540.45	87.13537	0.001534	0.002299	9.197417
SACRAMEN	2026	LHD2	Aggregatec	Aggregatec	DSL	4933.9	164690.6	62062.26	108.6092	0.001325	0.017072	9.679579
SACRAMEN	2026	MCY	Aggregatec	Aggregatec	GAS	31485.42	202349	62970.85	51.25422	0.092308	0.015751	5.410047
SACRAMEN	2026	MDV	Aggregatec	Aggregatec	GAS	150154.4	4622823	681448.1	1902.936	0.068607	0.051867	200.861
SACRAMEN	2026	MDV	Aggregatec	Aggregatec	DSL	3823.35	135927	18216.44	48.53524	6.79E-05	0.007629	4.325608
SACRAMEN	2026	MDV	Aggregatec	Aggregatec	ELEC	2396.39	73387.81	12033.98	0	0	0	0
SACRAMEN	2026	MH	Aggregatec	Aggregatec	GAS	2688.662	23216.9	268.9737	43.50883	0.000273	0.000551	4.592497
SACRAMEN	2026	MH	Aggregatec	Aggregatec	DSL	1095.317	9216.081	109.5317	10.09942	5.7E-05	0.001587	0.900091
SACRAMEN	2026	Motor Coa	Aggregatec	Aggregatec	DSL	115.2673	14778.67	1682.902	24.20467	3.78E-05	0.003805	2.157194
SACRAMEN	2026	OBUS	Aggregatec	Aggregatec	GAS	516.1638	20818.14	10327.41	39.81125	0.000754	0.00082	4.202205
SACRAMEN	2026	PTO	Aggregatec	Aggregatec	DSL	0	26359.89	0	52.43349	3.25E-05	0.008242	4.673032
SACRAMEN	2026	SBUS	Aggregatec	Aggregatec	GAS	150.1397	7012.582	600.5589	6.662718	0.000465	0.000148	0.703271
SACRAMEN	2026	SBUS	Aggregatec	Aggregatec	DSL	1004.433	31308.84	11591.02	42.92107	0.000185	0.006747	3.825256
SACRAMEN	2026	T6 Ag	Aggregatec	Aggregatec	DSL	15.54002	118.3009	68.37608	0.149654	1.02E-07	2.35E-05	0.013338

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2026	T6 CAIRP h	Aggregatec	Aggregatec	DSL	124.5716	22987	1818.745	20.42336	9.47E-06	0.00321	1.820192
SACRAMEN	2026	T6 CAIRP sı	Aggregatec	Aggregatec	DSL	69.47397	3382.608	1014.32	3.278197	1.54E-06	0.000515	0.292163
SACRAMEN	2026	T6 instate (	Aggregatec	Aggregatec	DSL	233.3297	14575.67	1054.874	18.58305	1.81E-05	0.002921	1.656178
SACRAMEN	2026	T6 instate (	Aggregatec	Aggregatec	DSL	2039.02	106931.9	9218.33	133.7136	8.84E-05	0.021018	11.91696
SACRAMEN	2026	T6 instate l	Aggregatec	Aggregatec	DSL	1614.513	197775.5	18631.25	199.3382	9.68E-05	0.031333	17.76563
SACRAMEN	2026	T6 instate s	Aggregatec	Aggregatec	DSL	5572.478	264563.9	64305.62	283.7704	0.000138	0.044605	25.29047
SACRAMEN	2026	T6 OOS hea	Aggregatec	Aggregatec	DSL	69.70386	12820.27	1017.676	11.40056	5.29E-06	0.001792	1.016052
SACRAMEN	2026	T6 OOS sm	Aggregatec	Aggregatec	DSL	37.45976	1802.459	546.9126	1.752301	8.24E-07	0.000275	0.15617
SACRAMEN	2026	T6 Public	Aggregatec	Aggregatec	DSL	4505.945	70724.25	13668.03	100.2028	0.00026	0.01575	8.930373
SACRAMEN	2026	T6 utility	Aggregatec	Aggregatec	DSL	181.5101	3015.92	2087.366	3.404524	2.39E-06	0.000535	0.303422
SACRAMEN	2026	T6TS	Aggregatec	Aggregatec	GAS	1941.162	89281.22	38838.76	169.2147	0.003079	0.002922	17.86115
SACRAMEN	2026	T7 Ag	Aggregatec	Aggregatec	DSL	14.9824	102.8716	65.92255	0.218562	6.75E-07	3.44E-05	0.019479
SACRAMEN	2026	T7 CAIRP	Aggregatec	Aggregatec	DSL	869.7737	162094.7	12698.7	242.1868	0.000637	0.038068	21.58442
SACRAMEN	2026	T7 CAIRP c	Aggregatec	Aggregatec	DSL	57.20829	10469.83	258.6365	18.2593	2.4E-05	0.00287	1.627324
SACRAMEN	2026	T7 NNOOS	Aggregatec	Aggregatec	DSL	1054.215	197617.2	15391.54	278.2001	0.000889	0.043729	24.79403
SACRAMEN	2026	T7 NOOS	Aggregatec	Aggregatec	DSL	346.9851	63690.29	5065.983	97.74035	0.000298	0.015363	8.710917
SACRAMEN	2026	T7 other p	Aggregatec	Aggregatec	DSL	10.33293	1925.303	78.53025	3.342298	3.78E-06	0.000525	0.297876
SACRAMEN	2026	T7 POAK	Aggregatec	Aggregatec	DSL	44.30628	6467.404	336.7277	11.69123	1.61E-05	0.001838	1.041958
SACRAMEN	2026	T7 Public	Aggregatec	Aggregatec	DSL	4969.677	100624.2	15074.69	197.6137	0.000791	0.031062	17.61194
SACRAMEN	2026	T7 Single	Aggregatec	Aggregatec	DSL	1748.843	132753.7	20181.41	205.8589	0.000311	0.032358	18.34677
SACRAMEN	2026	T7 single c	Aggregatec	Aggregatec	DSL	370.6435	25973.72	1675.665	49.13019	8.2E-05	0.007723	4.378631
SACRAMEN	2026	T7 SWCV	Aggregatec	Aggregatec	DSL	541.046	22064.21	2110.079	93.20286	7.35E-05	0.01465	8.306521
SACRAMEN	2026	T7 SWCV	Aggregatec	Aggregatec	NG	329.653	13434.25	1285.647	46.39574	0.055933	0.009458	5.36264
SACRAMEN	2026	T7 tractor	Aggregatec	Aggregatec	DSL	983.6076	121654.6	12491.82	167.0321	0.000213	0.026255	14.88641
SACRAMEN	2026	T7 tractor (	Aggregatec	Aggregatec	DSL	315.1325	21426.03	1424.702	40.92259	7.13E-05	0.006432	3.647145
SACRAMEN	2026	T7 utility	Aggregatec	Aggregatec	DSL	25.35167	513.9241	291.5442	0.937106	1.24E-06	0.000147	0.083518

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2026	T7IS	Aggregatec	Aggregatec	GAS	3.659869	470.3722	73.22667	0.923951	3.94E-05	6.91E-05	0.097526
SACRAMEN	2026	UBUS	Aggregatec	Aggregatec	GAS	234.1604	17678.92	936.6416	38.42024	0.000249	0.000512	4.05538
SACRAMEN	2026	UBUS	Aggregatec	Aggregatec	DSL	0.928071	76.34291	3.712282	0.098038	3.22E-06	1.54E-05	0.008737
SACRAMEN	2026	UBUS	Aggregatec	Aggregatec	NG	500.1088	47782.97	2000.435	107.0739	0.342088	0.021828	12.37611
						1232104	41135078	6080798	14986.86	0.881895	0.82627	1536.931

Phase 3 Operation

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	24.00	1000sqft	0.55	24,000.00	0
Enclosed Parking with Elevator	200.00	Space	1.80	35,000.00	0
Unenclosed Parking with Elevator	1,000.00	Space	9.00	165,600.00	0
Apartments Mid Rise	150.00	Dwelling Unit	3.95	96,000.00	401
Strip Mall	41.40	1000sqft	0.95	41,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2030
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	316.1	**CH4 Intensity (lb/MWhr)**	0.008	**N2O Intensity (lb/MWhr)**	0.001

1.3 User Entered Comments & Non-Default Data

Phase 3 Operation - Sacramento County, Annual

Project Characteristics - SMUD intensity factor adjusted for 2030 RPS compliance (60% renewable)

Land Use - See appendix for modeling inputs

Construction Phase - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Off-road Equipment - Operation only

Trips and VMT - Operation only

Grading - Operation only

Architectural Coating - Operation only

Vehicle Trips - Mobile sources modeled separately

Energy Use - Energy modeled separately

Water And Wastewater - Water demand accounts for landscaping demand from data provided by applicant

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	32,700.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	98,100.00	0.00
tblArchitecturalCoating	ConstArea_Parking	12,036.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	64,800.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	194,400.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00

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tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	300.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	3.71	0.00
tblEnergyUse	LightingElect	5.33	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	2.98	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	2,687.00	0.00
tblEnergyUse	NT24NG	0.68	0.00
tblEnergyUse	NT24NG	0.93	0.00
tblEnergyUse	T24E	460.92	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.98	0.00
tblEnergyUse	T24E	3.26	0.00
tblEnergyUse	T24NG	7,061.10	0.00
tblEnergyUse	T24NG	12.42	0.00
tblEnergyUse	T24NG	4.49	0.00
tblLandUse	LandUseSquareFeet	80,000.00	35,000.00
tblLandUse	LandUseSquareFeet	400,000.00	165,600.00
tblLandUse	LandUseSquareFeet	150,000.00	96,000.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.008
tblProjectCharacteristics	CO2IntensityFactor	590.31	316.1
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.001
tblTripsAndVMT	VendorTripNumber	60.00	0.00
tblTripsAndVMT	WorkerTripNumber	213.00	0.00
tblTripsAndVMT	WorkerTripNumber	43.00	0.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	2.46	0.00

tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	9,773,103.84	5,837,735.00
tblWater	IndoorWaterUseRate	4,265,609.95	0.00
tblWater	IndoorWaterUseRate	3,066,602.39	2,190,000.00
tblWater	OutdoorWaterUseRate	6,161,304.60	0.00
tblWater	OutdoorWaterUseRate	0.00	1,825,000.00
tblWater	OutdoorWaterUseRate	2,614,406.10	0.00
tblWater	OutdoorWaterUseRate	1,879,530.50	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2020	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
2021	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
Maximum	**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**

	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	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**

Phase 3 Operation - Sacramento County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.7841	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Energy	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
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	27.3612	0.0000	27.3612	1.6170	0.0000	67.7861
Water						0.0000	0.0000		0.0000	0.0000	2.8402	6.6509	9.4912	9.9400e-003	6.2000e-003	11.5866
Total	**0.7841**	**0.0179**	**1.5589**	**8.0000e-005**	**0.0000**	**8.6400e-003**	**8.6400e-003**	**0.0000**	**8.6400e-003**	**8.6400e-003**	**30.2014**	**9.2092**	**39.4105**	**1.6294**	**6.2000e-003**	**81.9932**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.7841	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Energy	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
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	13.6806	0.0000	13.6806	0.8085	0.0000	33.8931
Water						0.0000	0.0000		0.0000	0.0000	2.8402	6.6509	9.4912	9.9400e-003	6.2000e-003	11.5866
Total	**0.7841**	**0.0179**	**1.5589**	**8.0000e-005**	**0.0000**	**8.6400e-003**	**8.6400e-003**	**0.0000**	**8.6400e-003**	**8.6400e-003**	**16.5208**	**9.2092**	**25.7300**	**0.8209**	**6.2000e-003**	**48.1001**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**45.30**	**0.00**	**34.71**	**49.62**	**0.00**	**41.34**

3.0 Construction Detail

Construction Phase

Phase 3 Operation - Sacramento County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	12/31/2019	5	0	
2	Site Preparation	Site Preparation	1/29/2020	1/28/2020	5	0	
3	Grading	Grading	2/12/2020	2/11/2020	5	0	
4	Building Construction	Building Construction	3/25/2020	3/24/2020	5	0	
5	Paving	Paving	5/19/2021	5/18/2021	5	0	
6	Architectural Coating	Architectural Coating	6/16/2021	6/15/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 10.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 3 Operation - Sacramento County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading		0			
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase 3 Operation - Sacramento County, Annual

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
Demolition	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.3 Site Preparation - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Fugitive Dust	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
Off-Road	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
Total	**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**

3.4 Grading - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Total	**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**

3.5 Building Construction - 2020

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Off-Road	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
Paving	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
Total	**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**

3.6 Paving - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

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	tons/yr										MT/yr					
Archit. Coating	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
Off-Road	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
Total	**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**

3.7 Architectural Coating - 2021

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	tons/yr										MT/yr					
Hauling	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
Vendor	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
Worker	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618
Enclosed Parking with Elevator	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618
General Office Building	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618
Strip Mall	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618
Unenclosed Parking with Elevator	0.576778	0.034729	0.211659	0.106131	0.012287	0.004450	0.018380	0.025480	0.001877	0.001519	0.005480	0.000610	0.000618

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	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
Enclosed Parking with Elevator	0	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
General Office Building	0	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
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	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
Enclosed Parking with Elevator	0	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
General Office Building	0	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
Strip Mall	0	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
Unenclosed Parking with Elevator	0	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.7841	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Unmitigated	0.7841	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0932					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0476	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Total	**0.7841**	**0.0179**	**1.5589**	**8.0000e-005**		**8.6400e-003**	**8.6400e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**2.5582**	**2.5582**	**2.4900e-003**	**0.0000**	**2.6205**

6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0932					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0476	0.0179	1.5589	8.0000e-005		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2.5582	2.5582	2.4900e-003	0.0000	2.6205
Total	**0.7841**	**0.0179**	**1.5589**	**8.0000e-005**		**8.6400e-003**	**8.6400e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**2.5582**	**2.5582**	**2.4900e-003**	**0.0000**	**2.6205**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.4912	9.9400e-003	6.2000e-003	11.5866
Unmitigated	9.4912	9.9400e-003	6.2000e-003	11.5866

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.83774 / 0	6.2359	7.2100e-003	4.5000e-003	7.7587
Enclosed Parking with Elevator	0 / 1.825	0.9158	2.0000e-005	0.0000	0.9173
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.19 / 0	2.3394	2.7100e-003	1.6900e-003	2.9106
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.4911**	**9.9400e-003**	**6.1900e-003**	**11.5866**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.83774 / 0	6.2359	7.2100e-003	4.5000e-003	7.7587
Enclosed Parking with Elevator	0 / 1.825	0.9158	2.0000e-005	0.0000	0.9173
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.19 / 0	2.3394	2.7100e-003	1.6900e-003	2.9106
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.4911**	**9.9400e-003**	**6.1900e-003**	**11.5866**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.6806	0.8085	0.0000	33.8931
Unmitigated	27.3612	1.6170	0.0000	67.7861

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	69	14.0064	0.8278	0.0000	34.7002
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	22.32	4.5308	0.2678	0.0000	11.2248
Strip Mall	43.47	8.8240	0.5215	0.0000	21.8611
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**27.3612**	**1.6170**	**0.0000**	**67.7861**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	34.5	7.0032	0.4139	0.0000	17.3501
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	11.16	2.2654	0.1339	0.0000	5.6124
Strip Mall	21.735	4.4120	0.2607	0.0000	10.9306
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**13.6806**	**0.8085**	**0.0000**	**33.8930**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2030	All Other B	Aggregatec	Aggregatec	DSL	459.6609	21746.85	3861.151	24.5309	1.37E-05	0.003856	2.186268
SACRAMEN	2030	LDA	Aggregatec	Aggregatec	GAS	709747.4	23397686	3311415	5763.76	0.150224	0.158896	608.3833
SACRAMEN	2030	LDA	Aggregatec	Aggregatec	DSL	7960.516	273992.7	37685.53	50.22292	9.57E-05	0.007894	4.476019
SACRAMEN	2030	LDA	Aggregatec	Aggregatec	ELEC	30723.62	1200676	149837.9	0	0	0	0
SACRAMEN	2030	LDT1	Aggregatec	Aggregatec	GAS	73141.68	2276861	334156.2	661.4106	0.019807	0.018494	69.814
SACRAMEN	2030	LDT1	Aggregatec	Aggregatec	DSL	74.26615	1088.647	259.3938	0.52016	4.82E-06	8.18E-05	0.046358
SACRAMEN	2030	LDT1	Aggregatec	Aggregatec	ELEC	1609.921	63988.44	7889.978	0	0	0	0
SACRAMEN	2030	LDT2	Aggregatec	Aggregatec	GAS	234188.8	7403481	1078222	2204.764	0.06771	0.059413	232.7199
SACRAMEN	2030	LDT2	Aggregatec	Aggregatec	DSL	1974.815	68441.83	9419.155	16.95218	5.09E-05	0.002665	1.51083
SACRAMEN	2030	LDT2	Aggregatec	Aggregatec	ELEC	6254.807	171872.7	30657.21	0	0	0	0
SACRAMEN	2030	LHD1	Aggregatec	Aggregatec	GAS	14437.5	453287.8	215097.2	464.392	0.009238	0.013109	49.01806
SACRAMEN	2030	LHD1	Aggregatec	Aggregatec	DSL	13641.03	439869.7	171587	243.3834	0.003407	0.038256	21.69107
SACRAMEN	2030	LHD2	Aggregatec	Aggregatec	GAS	2115.309	67182.92	31514.96	78.48003	0.001129	0.001858	8.283819
SACRAMEN	2030	LHD2	Aggregatec	Aggregatec	DSL	5132.585	164942.9	64561.46	102.274	0.001237	0.016076	9.114968
SACRAMEN	2030	MCY	Aggregatec	Aggregatec	GAS	32922.54	203129.9	65845.07	51.49675	0.091863	0.015778	5.435647
SACRAMEN	2030	MDV	Aggregatec	Aggregatec	GAS	153104.3	4597116	695429.1	1680.004	0.050965	0.041376	177.3298
SACRAMEN	2030	MDV	Aggregatec	Aggregatec	DSL	4521.458	150846.7	21362.06	49.19651	5.76E-05	0.007733	4.384542
SACRAMEN	2030	MDV	Aggregatec	Aggregatec	ELEC	4179.206	116835.9	20601.93	0	0	0	0
SACRAMEN	2030	MH	Aggregatec	Aggregatec	GAS	2401.982	21378.13	240.2943	37.50081	0.000156	0.000401	3.958331
SACRAMEN	2030	MH	Aggregatec	Aggregatec	DSL	1110.852	9152.646	111.0852	9.532718	5.1E-05	0.001498	0.849585
SACRAMEN	2030	Motor Coa	Aggregatec	Aggregatec	DSL	133.2594	15581.9	1945.588	23.95656	4.22E-05	0.003766	2.135081
SACRAMEN	2030	OBUS	Aggregatec	Aggregatec	GAS	482.1242	18484.3	9646.342	33.01659	0.000594	0.000632	3.485007
SACRAMEN	2030	PTO	Aggregatec	Aggregatec	DSL	0	31418.86	0	59.27036	3.96E-05	0.009316	5.282354
SACRAMEN	2030	SBUS	Aggregatec	Aggregatec	GAS	191.6287	8653.611	766.5148	7.936219	0.000591	0.000186	0.837693
SACRAMEN	2030	SBUS	Aggregatec	Aggregatec	DSL	937.9608	29245.97	10823.94	38.35969	0.00015	0.00603	3.418732

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2030	T6 Ag	Aggregatec	Aggregatec	DSL	13.35776	61.68211	58.77415	0.081817	6.82E-08	1.29E-05	0.007292
SACRAMEN	2030	T6 CAIRP h	Aggregatec	Aggregatec	DSL	136.6622	24239.58	1995.268	19.61092	9.99E-06	0.003083	1.747784
SACRAMEN	2030	T6 CAIRP sı	Aggregatec	Aggregatec	DSL	77.94866	3589.18	1138.05	3.233766	1.65E-06	0.000508	0.288203
SACRAMEN	2030	T6 instate c	Aggregatec	Aggregatec	DSL	284.5435	17303.33	1286.41	21.56235	1.86E-05	0.003389	1.921702
SACRAMEN	2030	T6 instate c	Aggregatec	Aggregatec	DSL	2554.137	126943	11547.15	148.4008	0.000105	0.023327	13.22593
SACRAMEN	2030	T6 instate h	Aggregatec	Aggregatec	DSL	1939.846	209110.3	22385.55	199.1208	0.000105	0.031299	17.74625
SACRAMEN	2030	T6 instate s	Aggregatec	Aggregatec	DSL	6073.963	270668.6	70092.69	271.8139	0.000143	0.042725	24.22488
SACRAMEN	2030	T6 OOS hea	Aggregatec	Aggregatec	DSL	75.92639	13485.13	1108.525	10.90769	5.55E-06	0.001715	0.972127
SACRAMEN	2030	T6 OOS sm	Aggregatec	Aggregatec	DSL	41.65002	1897.38	608.0903	1.713446	8.73E-07	0.000269	0.152708
SACRAMEN	2030	T6 Public	Aggregatec	Aggregatec	DSL	4641.636	72695.49	14079.63	96.07219	0.000196	0.015101	8.562245
SACRAMEN	2030	T6 utility	Aggregatec	Aggregatec	DSL	187.2302	3112.892	2153.147	3.237952	2.46E-06	0.000509	0.288576
SACRAMEN	2030	T6TS	Aggregatec	Aggregatec	GAS	1838.756	83408.91	36789.83	147.5979	0.00243	0.002319	15.57944
SACRAMEN	2030	T7 Ag	Aggregatec	Aggregatec	DSL	15.14229	55.15206	66.62609	0.133319	6.31E-07	2.1E-05	0.011882
SACRAMEN	2030	T7 CAIRP	Aggregatec	Aggregatec	DSL	854.417	170906.8	12474.49	224.334	0.000633	0.035262	19.99332
SACRAMEN	2030	T7 CAIRP c	Aggregatec	Aggregatec	DSL	67.46232	12429.13	304.9945	19.63177	2.81E-05	0.003086	1.749643
SACRAMEN	2030	T7 NNOOS	Aggregatec	Aggregatec	DSL	1162.605	208358.8	16974.04	267.744	0.00097	0.042086	23.86216
SACRAMEN	2030	T7 NOOS	Aggregatec	Aggregatec	DSL	340.7991	67154.86	4975.667	90.56157	0.000296	0.014235	8.071122
SACRAMEN	2030	T7 other po	Aggregatec	Aggregatec	DSL	11.13096	2043.896	84.59532	3.05323	3.88E-06	0.00048	0.272113
SACRAMEN	2030	T7 POAK	Aggregatec	Aggregatec	DSL	51.9459	7810.198	394.7889	12.05176	1.84E-05	0.001894	1.074089
SACRAMEN	2030	T7 Public	Aggregatec	Aggregatec	DSL	5345.982	108256.4	16216.15	196.4868	0.000714	0.030885	17.5115
SACRAMEN	2030	T7 Single	Aggregatec	Aggregatec	DSL	2026.818	158231.7	23389.2	232.3279	0.000367	0.036519	20.70577
SACRAMEN	2030	T7 single c	Aggregatec	Aggregatec	DSL	433.8523	30834.39	1961.429	55.37132	9.08E-05	0.008704	4.93486
SACRAMEN	2030	T7 SWCV	Aggregatec	Aggregatec	DSL	532.1123	21700.03	2075.238	84.78019	7.12E-05	0.013326	7.555868
SACRAMEN	2030	T7 SWCV	Aggregatec	Aggregatec	NG	360.5665	14698.02	1406.209	47.55513	0.05675	0.009694	5.496647
SACRAMEN	2030	T7 tractor	Aggregatec	Aggregatec	DSL	1094.81	128202.7	13904.09	162.7523	0.000228	0.025582	14.50498

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	CO2_TOTE	CH4_TOTE	N2O_TOTE	Fuel Consu
SACRAMEN	2030	T7 tractor (	Aggregatec	Aggregatec	DSL	364.341	25435.66	1647.171	45.84738	8.08E-05	0.007207	4.086057
SACRAMEN	2030	T7 utility	Aggregatec	Aggregatec	DSL	26.12163	528.958	300.3987	0.884148	1.28E-06	0.000139	0.078798
SACRAMEN	2030	T7IS	Aggregatec	Aggregatec	GAS	4.378608	596.9609	87.60719	1.101839	4.51E-05	8.41E-05	0.116303
SACRAMEN	2030	UBUS	Aggregatec	Aggregatec	GAS	276.605	20883.45	1106.42	43.446	0.000306	0.000669	4.585864
SACRAMEN	2030	UBUS	Aggregatec	Aggregatec	DSL	0	0	0	0	0	0	0
SACRAMEN	2030	UBUS	Aggregatec	Aggregatec	NG	591.8562	56534.42	2367.425	126.6161	0.404412	0.025812	14.63489
						1332874	43068139	6535915	14138.99	0.865458	0.787258	1448.324

Table 6-1

Preliminary Utility Load Summary Table

CNUMC, CUP, OUT-PATIENT, MOB, DORM, RETAIL/PARKING & SOM LOCATED at ELK GROVE CAMPUS

Utility Provider			SMUD	Building Generators	City of Elk Grove			City of Elk Grove	PG&E	
		sqft	Normal Power peak demand	Emerg Power peak demand	Water peak demand	Water avg demand	Water Consumption	Sewer Volumn	Natural Gas Consumption	Remarks
			kWh/year	kW	gpm	gpd	gpy	gpy	CFH/yr	
Factor			**kwh/sqft**		**x avg gpm**	**gpd per sqft**		**x % of metered water**	**cfh/sqft**	
			35		**5**	**0.2**		**0.4**	**40**	
Existing Utility Loads										
SOM		109,800	3,843,000		80	22,000	8,030,000	3,212,000	4,392,000	
Subtotals - Existing Loads			**3,843,000**		**80**	**22,000**	**8,030,000**	**3,212,000**	**4,392,000**	
			kwh/sqft		**x avg gpm**	**gpd per sqft**		**x % of metered water**	**cfh/sqft**	
			35		**5**	**0.2**		**0.9**	**115**	
			20			**0.15**		**0.4**	**40**	
									21	
New Utility Loads										
PHASE I										
CNUMC-PH1	Hospital - Phase 1 - 12 stories above + 1 basement	596,790	20,887,700		410	119,000	43,435,000	39,091,500	68,630,900	
CUP-PH1	Central Plant - Phase 1 - 2 Stories	28,800	1,008,000		100	6,000	2,190,000	1,971,000	-	
PHASE 2										
CNUMC-PH2	Hospital - Phase 2 - East Tower addition	103,210	3,612,400		70	21,000	7,665,000	6,898,500	11,869,200	
Out-Patient-PH2	Out-Patient - 4 stories above + 1 basement	168,500	5,897,500		120	34,000	12,410,000	11,169,000	19,377,500	
MOB-PH2	MOB - 5 stories above	100,000	3,500,000		70	20,000	7,300,000	6,570,000	11,500,000	
Retail Parking-PH2	Retail floor estimation only.	54,400	1,088,000		30	8,000	2,920,000	2,628,000	1,142,400	
PHASE 3										
Dorm -PH3	Dormitory - 5 stories above	120,000	2,400,000		60	18,000	6,570,000	5,913,000	4,800,000	
Retail Parking - PH3	Retail floor estimation only.	41,400	828,000		20	6,000	2,190,000	1,971,000	869,400	
SOM	New School - 2 stoies	109,800	3,843,000		80	22,000	8,030,000	3,212,000	4,392,000	
Parking/Sport-PH3	Sport floor estimation only	35,000	700,000		20	5,000	1,825,000	1,642,500	735,000	
Subtotals- Proposed Load			**42,756,600**		**880**	**253,000**	**92,345,000**	**79,095,500**	**123,316,400**	
Total CNSUMC Load Increase after Project			**38,913,600**		**800**	**231,000**	**84,315,000**	**75,883,500**	**118,924,400**	

Attachment D

Solar Generation Estimates

PV WATT - INPUTS

Size (kW) = Area * (1 kW/m2) * PV efficiency

Areas		Efficiencies		
Rooftop		Standard	Crystalline Silicon	15%
55,000	sf	Premium	Crystalline Silicon	19%
5,110	m2	Thin Film	Thin Film	10%
85%	Coverage	System Losses		
4343	m2	Default		14%
4,343	Area, m2			
19%	PV efficiency			
825.2	**Size, kW**			

TARGET

Desired Output	
26,500,000	kBtu from energy model
31,800,000	kBtu assuming 20% increase for uses not in model yet
10,120,942	**kWh**

PV WATT - OUTPUT

High End		Low End	
Module - Premium		**Module - Standard**	
1,327,446	kWh/year	1,202,584	kWh/year
20	Tilt	20	Tilt
4,170,835	kBtu/year	3,778,519	kBtu/year
13%	**of Desired Output**	**12%**	**of Desired Output**

Standard

SYSTEM INFO

RESTORE DEFAULTS

Modify the inputs below to run the simulation.

DC System Size (kW):	652
Module Type:	Standard
Array Type:	Fixed (open rack)
System Losses (%):	14.08 Loss Calculator
Tilt (deg):	20
Azimuth (deg):	180

Draw Your System

Click below to customize your system on a map. (optional)

Advanced Parameters

RETAIL ELECTRICITY RATE

To automatically download an average annual retail electricity rate for your location, choose a rate type (residential or commercial). You can change the rate to use a different value by typing a different number.

Rate Type:	Commercial
Rate ($/kWh):	0.138

Premium

SYSTEM INFO

RESTORE DEFAULTS

Modify the inputs below to run the simulation.

DC System Size (kW):	825
Module Type:	Premium
Array Type:	Fixed (open rack)
System Losses (%):	14.08
Tilt (deg):	20
Azimuth (deg):	180

Loss Calculator

Draw Your System

Click below to customize your system on a map. (optional)

Advanced Parameters

RETAIL ELECTRICITY RATE

To automatically download an average annual retail electricity rate for your location, choose a rate type (residential or commercial). You can change the rate to use a different value by typing a different number.

Rate Type:	Commercial
Rate ($/kWh):	0.138

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at https://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

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RESULTS

2,537,432 kWh/Year*

System output may range from 2,478,564 to 2,589,196 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Value ($)
January	2.91	114,232	15,798
February	3.72	130,929	18,107
March	5.43	205,477	28,417
April	6.70	246,331	34,068
May	7.46	274,687	37,989
June	8.01	283,542	39,214
July	8.06	289,546	40,044
August	7.98	288,067	39,840
September	6.93	241,652	33,420
October	5.47	203,267	28,112
November	3.87	142,252	19,673
December	2.99	117,449	16,243
Annual	5.79	2,537,431	$ 350,925

Location and Station Identification

Requested Location	elk grove, ca
Weather Data Source	Lat, Lon: 38.41, -121.38 0.9 mi

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The energy output range is based on analysis of 30 years of historical weather data for nearby , and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

Latitude	**38.41° N**
Longitude	**121.38° W**

PV System Specifications *(Commercial)*

DC System Size	**1577 kW**
Module Type	**Premium**
Array Type	**Fixed (open rack)**
Array Tilt	**20°**
Array Azimuth	**180°**
System Losses	**14.08%**
Inverter Efficiency	**96%**
DC to AC Size Ratio	**1.2**

Economics

Average Retail Electricity Rate	**0.138 $/kWh**

Performance Metrics

Capacity Factor	**18.4%**

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at https://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

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RESULTS

1,578,453 kWh/Year*

System output may range from 1,541,833 to 1,610,654 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Value ($)
January	2.91	71,060	9,828
February	3.72	81,447	11,264
March	5.43	127,821	17,678
April	6.70	153,235	21,192
May	7.46	170,874	23,632
June	8.01	176,382	24,394
July	8.06	180,117	24,910
August	7.98	179,197	24,783
September	6.93	150,324	20,790
October	5.47	126,446	17,487
November	3.87	88,490	12,238
December	2.99	73,061	10,104
Annual	5.79	1,578,454	$ 218,300

Location and Station Identification

Requested Location	elk grove, ca
Weather Data Source	Lat, Lon: 38.41, -121.38 0.9 mi

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The energy output range is based on analysis of 30 years of historical weather data for nearby , and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

Latitude	**38.41° N**
Longitude	**121.38° W**

PV System Specifications *(Commercial)*

DC System Size	**981 kW**
Module Type	**Premium**
Array Type	**Fixed (open rack)**
Array Tilt	**20°**
Array Azimuth	**180°**
System Losses	**14.08%**
Inverter Efficiency	**96%**
DC to AC Size Ratio	**1.2**

Economics

Average Retail Electricity Rate	**0.138 $/kWh**

Performance Metrics

Capacity Factor	**18.4%**

Appendix B

Transportation Analysis

FEHR PEERS

TECHNICAL MEMORANDUM

Date: September 6, 2019

To: Pat Angell, Ascent Environmental

From: Carly Panos & David B. Robinson, Fehr & Peers

Subject: ***California Northstate University – AB 900 Analysis***

RS19-3789

Fehr & Peers has completed a transportation efficiency and vehicle miles traveled analysis for the proposed California Northstate University (CNU) project located in the City of Elk Grove. This memorandum provides information regarding the methodology and results of the analysis for the purposes of the Assembly Bill 900 application. Additional analysis and a complete transportation impact study will be completed and provided during preparation of the Environmental Impact Report. It is important to note that the proposed project will be constructed in three phases. The transportation efficiency analysis was completed for the project at full build out. Total daily VMT is provided by development phase.

Project Description

The proposed project includes expanding the existing CNU, which consists of one 109,800 square foot building, to include a hospital, outpatient building, medical office building, dormitories, administrative offices, restaurant and retail space, and three parking garages. An existing 76,000 square foot office building and seven commercial buildings totaling approximately 68,500 square feet will be demolished with phased construction of the project.

The project is located southwest of the Elk Grove Boulevard/West Taron Drive intersection. Access is proposed via one existing driveway on Elk Grove Boulevard, four existing driveways on West Taron Drive, and three existing driveways on Riparian Drive.

Consistent with the requirements of the *City of Elk Grove Climate Action Plan: 2019 Update*, the project also includes a Transportation Demand Management (TDM) Plan. The Climate Action Plan (CAP), CAP measure TACM-3 (Intercity Transportation Demand Management) focuses on implementing TDM strategies to reduce the use of single-occupancy vehicle trips, with a target of achieving a 15 percent reduction in project vehicle trips and associated vehicle miles of travel (VMT).

To aid the development of TDM plans, the City of Elk Grove developed the City of Elk Grove Transportation Demand Management Plan Guidelines. The guidelines identify TDM measure by category that include marketing and promotion, bike facilities, transit benefits, commuter benefits, and parking facilities. The guidelines outline the requirements for each TDM plan and identifies the following for each TDM measure:

- Measure Requirements – describes the transportation amenity being provided, the amount/frequency of the amenity, and the property owner's responsibilities. Each TDM measure is assigned a point value between one and five. The higher the value the more effective the measure is a reducing vehicle travel
- Compliance Requirements – identifies the required actions and obligations of the applicant or property owner's for compliance with the TDM measure during the development review phase of the project
- TDM Plan Annual Progress Report – identifies the annual reporting requirement for the property owners of TDM coordinator, which include the number of employees participating in the plan (i.e., by measure) and the commute mode share of employees, along with other performance measures that demonstrate performance

The TDM Plan is required to include all required measures and a set of optional TDM measures that total to a minimum of 10 points.

Table 1 summarizes the measures included in the proposed project's TDM Plan. Consistent with the guidelines, the plan includes all required measures and 28 points of optional measures. A detailed description of the TDM measures is attached.

Table 1 – Proposed Project TDM Plan

TDM Category	TDM Measure	Required	Optional	Measure Points
Marketing and Promotion	Transportation Marketing Services	X		-
Bike Facilities	Short-Term Bicycle Parking		X	1
	Long-Term Bicycle Parking			2
	Improved Access to Bike Network			1
	Showers and Locker Rooms			3
On-Site Amenities	On-Site Cafe			3
Transit	Subsidized Transit Passes			3
Commuter Benefits	Shuttle Bus Service			5
	Carpooling Program			3
	Guaranteed Ride Home			4
Parking Facilities	Parking Cash Out Program			3
			Total	28

Source: Fehr & Peers, 2019

TDM+ was used to estimate a range of TDM reductions that could be expected from the TDM strategies like those listed in **Table 1**.

TDM+ incorporates the effects of numerous land use strategies as well as various travel incentives/disincentives. The VMT calculations applied in TDM+ are based on strategies identified in the California Air Resources Board's *Zero Carbon Buildings Study*, which in turn draws from the 2010 CAPCOA manual *Quantifying Greenhouse Gas Mitigation Measures*. These reductions are exclusive of built environment variables like land use mix and density, which are accounted for in our internalization estimate, developed using MXD+.

The TDM strategy reductions have been limited in effectiveness to only land uses where there is supporting research or case studies to support the reductions. The reductions reflect the suburban (single-family) environment of the project location.

TDM+ identified a range of overall reduction for the entire project between 4% and 31%. Based on this evaluation, the 15% reduction applied for the project analysis is achievable. The results of the TDM+ evaluation are attached.

Assembly Bill 900

Assembly Bill (AB) 900 allows qualifying leadership projects to expedite their environmental review process, upon signature of the Governor. In order to qualify as a leadership project, a project must demonstrate that it will achieve at least 15 percent greater transportation efficiency than comparable projects and will not result in any net additional greenhouse gas emissions, among other things. For the purposes of this analysis, transportation efficiency of the proposed project is compared to existing development and a comparable project.

Public Resources Code Section 21180 notes that transportation efficiency is the number of vehicle trips made by employees, visitors, or customers of the residential, retail, commercial, sports, cultural, entertainment, or recreational use project divided by the total number of employees, visitors, and customers. Vehicle miles traveled (VMT) is provided to support greenhouse gas emissions analysis.

Analysis Methodology

To calculate the transportation efficiency, we used local data and trip rates published in the Institute of Transportation Engineers (ITE) 10th Edition Trip Generation Manual to determine trip generation for both the existing and proposed project. **Table 2** displays the trip generation. Trip generation calculations are attached.

Table 2 – Trip Generation															
Land Use (ITE Code)	Quantity	Vehicle Trip Rate							Vehicle Trips						
		Daily	AM			PM			Daily	AM			PM		
		Total	In	Out	Total	In	Out	Total	Total	In	Out	Total	In	Out	Total
Existing Development Trip Generation															
CNU Building (550)	109.8 ksf	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
Office (710)	76 ksf	9.74	1.00	0.16	1.16	0.18	0.97	1.15	740	76	12	88	14	73	87
Shopping Center (820)	68.5 ksf	37.75	0.58	0.36	0.94	1.83	1.98	3.81	2,586	40	24	64	125	136	261
								Existing Trips	6,185	208	64	272	180	296	476
								Internal Trips[3]	288	27	8	35	31	50	81
								Pass By Trips[1]	89				43	46	89
								Total Existing External Trips	**5,808**	**181**	**56**	**237**	**106**	**200**	**306**
Comparable Project (Buildout) Trip Generation															
Hospital and Supporting Uses (610)	733.3 ksf	10.72	0.61	0.28	0.89	0.31	0.66	0.97	7,861	444	209	653	227	484	708
Outpatient Clinic (610)	168.5 ksf	10.72	0.61	0.28	0.89	0.31	0.66	0.97	1,806	102	48	150	52	111	163
Medical Office (720)	100 ksf	34.80	2.17	0.61	2.78	0.97	2.49	3.46	3,480	217	61	278	97	249	346
CNU Building (550)	109.8 ksf	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
Dormitory[2]	300 beds	2.11	0.03	0.04	0.07	0.08	0.08	0.16	633	10	11	21	24	24	48
High-Turn Over Restaurant (932)	41.4 ksf	112.18	5.47	4.47	9.94	6.06	3.71	9.77	4,644	227	185	412	250	154	404
Retail (820)	51.4 ksf	37.75	0.58	0.36	0.94	1.83	1.98	3.81	1,940	30	18	48	94	102	196
Admin Office (710)	24 ksf	9.74	1.00	0.16	1.16	0.18	0.97	1.15	234	24	4	28	4	24	28
								Proposed Project Trips	23,457	1,146	564	1,710	789	1,235	2,021
								Internal Trips[3]	2,177	193	95	288	139	216	355
								Pass By Trips[1]	174				108	66	174
								Total Proposed Project External Trips	**21,106**	**953**	**469**	**1,422**	**542**	**953**	**1,492**

Notes:
[1] A 34% pass by trip reduction was applied to the existing shopping center during the PM peak hour. A 43% pass by trip reduction was applied to the proposed restaurant during the PM peak hour. Pass by reduction rates are based on data published in ITE's 3rd Edition *Trip Generation Handbook.*
[2] Trip rates for dormitories are based on data collected at two local privately operated student housing complexes.
[3] Internal trips were calculated using MXD+.
ksf = 1,000 square feet.
Source: Fehr & Peers, 2019

The number of employees, visitors, and customers was derived using a combination of data including information provided by CNU, trip generation, and average vehicle occupancy rates. **Table 3** displays the number of employees, visitors, and customers for both the existing development and proposed project at buildout.

Table 3 – Employee, Visitor and Customer Information	
Land Use	**Employee, Visitors, and Customers**
Existing Development	
CNU School Building	840
Office Building	400
Shopping Center	2,159
Total Employees, Visitors, and Customers	**3,399**
Proposed Project	
Hospital Employees	1,080
Nurses	840
Doctors	360
Patients	2,400
Visitors	3,000
CNU Students	1,200
CNU Staff	350
Retail	5,498
Total Employees, Visitors and Customers	**14,728**
Source: Fehr & Peers, 2019	

Transportation Efficiency

Daily trip generation and the number of employees, visitors, and customers were used to determine the transportation efficiency for the existing development and the proposed project at buildout. **Table 4** displays the results of the calculation. As shown, the proposed project will achieve at least 15% greater transportation efficiency than the comparable project. Therefore, the project complies with the AB 900 requirement.

Table 4 – Transportation Efficiency			
Development Scenario	**Daily Trips**	**Employees, Visitors and Customers**	**Transportation Efficiency Ratio**
Existing Development	5,808	3,399	1.71
Comparable Project (Buildout)	21,106	14,728	1.43
Proposed Project (With 15% TDM Reduction)	17,940	14,728	1.22
Source: Fehr & Peers, 2019			

Details of the transportation efficiency calculation, including the source of the employee, visitor, and customer estimates are attached.

Vehicle Miles Traveled

Vehicle miles of travel (VMT) for both the existing development and the proposed project by development phase. Moblie-sourced from StreetLight was used to obtain the average trip length for the existing CNU school building, the existing office building (ALLDATA), and the existing shopping center, as well as seven comparable hospitals and medical centers within the Sacramento region. **Table 5** displays the average trip length based on observed data on Mondays, Tuesdays, Wednesdays and Thursdays during March, April, September and October 2018.

Table 5 – Observed Daily Trip Counts and Daily Average Trip Lengths		
Location	**Number of Observations**	**Average Trip Length (Miles)**
Existing Development		
Existing CNU School Building	1,162	7.55
Existing Office Building	980	24.35
Existing Shopping Center	1,992	9.90
Comparable Hospitals		
Kaiser Permanente Roseville Medical Center	20,839	10.25
Kaiser Permanente South Sacramento Medical Center	17,148	8.75
Mercy General Hospital	7,119	11.05
Mercy Hospital of Folsom	2,075	11.35
Mercy San Juan Medical Center	10,948	10.20
Methodist Hospital of Sacramento	8,408	8.45
Sutter Roseville Medical Center	16,817	9.90
Hospital Weighted Average Trip Length		**9.78**
Source: StreetLight Data and Fehr & Peers, 2019		

The trip lengths were multiplied by the number of daily trips (excluding internal and pass by trips) provided to calculate average VMT. **Table 6** displays the VMT for the existing development and development phase for the comparable and proposed project. Detailed VMT calculations are attached.

Table 6 – Daily VMT by Development Phase		
Development Scenario		**VMT**
Existing Development		61,232
Comparable Project	Phase 1	102,607
	Phase 2	162,571
	Phase 3 (Buildout)	201,388
Proposed Project With 15% TDM Reduction	Phase 1	87,216
	Phase 2	138,185
	Phase 3 (Buildout)	171,180
Source: Fehr & Peers, 2019		

Detailed VMT calculations are attached.

Attachments

1. MARKETING AND PROMOTION

This measure category focuses on ensuring that employees are informed of the TDM Plan being implemented and understand all the available transportation amenities, services, and/or incentives.

TDM MEASURE	MEASURE REQUIREMENTS	COMPLIANCE REQUIREMENTS	MEASURE POINTS
Transportation Marketing Services	The building owner, in coordination with the building tenants, shall administer a comprehensive marketing and communication campaign which provides all tenants and employees at the project site with information about available transportation amenities, services, and/or incentives. Marketing services shall be provided by a TDM coordinator or a communications professional. Marketing services shall include, at a minimum, the following activities: 1. Promotions. The TDM coordinator or communications professional shall develop and deploy promotions to encourage the use of sustainable transportation modes. Marketing materials may include targeted messaging, communications campaigns, incentives (e.g., subsidized transit passes, employee parking cash out options), contests, and other creative strategies for existing and new employees. 2. Welcome Packets. New employees at the project site shall be provided with marketing information about the available transportation amenities, services, and/or incentives. For employees, the packet shall reflect options for major commute origins and offer one-on-one consultations.	The applicant or property owner shall provide the contact information for the provider of TDM marketing services, a description of qualifications, and a sample TDM Plan. City staff shall contact the designated provider and/or review the plan to verify that the applicant or property owner is prepared to offer marketing services in the time frame specified for project approval.	Required Measure

2. BIKE FACILITIES

This measure category encourages employees to use active modes of transportation to commute to and from work by providing convenient on-site amenities tailored to bike commuters.

TDM MEASURE	MEASURE REQUIREMENTS	COMPLIANCE REQUIREMENTS	MEASURE POINTS
Short-Term Bicycle Parking	For new office buildings, provide secure bicycle parking for five percent of the vehicular parking spaces being added, with a minimum of one space. Acceptable parking facilities shall be conveniently located near the building entrance and meet the requirements in 23.58.090 (D)(1) of the Elk Grove Municipal Code.	The applicant or property owner shall submit plans during the development review stage that identify the location and number of short-term bicycle parking spaces.	1
Long-Term Bicycle Parking	For new office buildings, provide secure bicycle parking for five percent of the vehicular parking spaces being added, with a minimum of one space. Acceptable parking facilities shall be conveniently located near the building entrance and shall meet one of the following: 1. Covered, lockable enclosures with permanently anchored racks for bicycles; 2. Lockable bicycle rooms with permanently anchored racks; or 3. Lockable, permanently anchored bicycle lockers.	The applicant or property owner shall submit plans during the development review stage that identify the location and number of long-term bicycle parking spaces.	2
Improved Access to Bike Network	The project shall design features which improve pedestrian and bicycle connectivity consistent with the City's Bicycle, Pedestrian, and Trails Master Plan and related planning efforts. The applicant shall provide pathways that are a minimum of 10 feet in width that allow pedestrians and cyclists to connect from adjacent roadways, bike lanes and sidewalks to the main entrance of a building(s). Applicants shall demonstrate, as part of the site design plans, that the proposed project includes pedestrian and bicycle infrastructure and connections to existing facilities.	The applicant or property owner shall submit plans during the development review stage that identify improved access to the City's bike network in the site designs.	1
Showers and Locker Rooms	For new office buildings, projects shall provide at least one shower and six clothes lockers for every 30 Bicycle Parking spaces, but no fewer than one shower and six clothes lockers.	The applicant or property owner shall submit plans during the development review stage that identify the location and number of showers and clothes lockers. City staff shall review the proposed plan to ensure that the included showers and clothes lockers meet the measure requirements.	3

3. On-Site Amenities

This measure category provides a set of on-site design features and amenities that assist employees in reducing single-occupancy vehicle trips during the workday.

TDM Measure	Measure Requirements	Compliance Requirements	Measure Points
On-Site Cafe	For new office buildings, projects shall provide an on-site café with full coffee and lunch menu services to help reduce coffee break and lunchtime vehicle trips.	The applicant or property owner shall submit information about the potential providers for the on-site cafe and a description of the services that would be offered at the project site. Information shall be submitted during the development review stage.	3

4. TRANSIT MEASURES

This measure category incentivizes employees that use transit as their primary commute mode. Transit measures shall only be included in the TDM Plan if the project site is located within 1/2 miles from a transit stop.

TDM MEASURE	MEASURE REQUIREMENTS		MEASURE POINTS
Subsidized Transit Passes	Provide free or subsidized monthly transit passes for on-site employees. Transit pass subsidies shall provide a minimum of $50 of monthly transit costs per employee. Publicize the availability of free or subsidized transit passes to employees through the new employee welcome package.	The applicant or property owner shall provide information on the method in which employees would be reimbursed or compensated for monthly transit costs and how this process would be managed for building tenants. This information will be verified by City staff before certificate of occupancy issuance.	3

5. COMMUTER BENEFITS

This measure category provides a set of commuter services and incentives that encourage employees to commute using modes other than single-occupancy vehicles.

TDM MEASURE	MEASURE REQUIREMENTS		MEASURE POINTS
Vanpool Program	The property owner shall implement an employer or building manager-sponsored vanpool program. The vanpool program would provide service between the project site and general locations where vanpool users live. The property owner shall purchase or lease vans for employee use and pay for mileage and maintenance of the vehicles. See Sac Region 511 website for vanpool incentives.	The applicant or property owner shall provide information on the method in which employees would be reimbursed or compensated for monthly vanpool costs and how this process would be managed for building tenants. This information will be verified by City staff before certificate of occupancy issuance.	4
Carpooling Program	Promote and provide discounts for employees who use rideshare services such as Waze Carpool, UberPOOL, and LyftLine	The applicant or property owner shall provide information on the method in which employees would be reimbursed or compensated for discounts when using rideshare services and how this process would be managed for building tenants. This information will be verified by City staff before certificate of occupancy issuance.	3
Bikeshare Program	Promote and provide discounts for employees who use bike or scooter share services, such as Gotcha, JUMP, SPIN, Lime, or other such services. Provide docks or other designated parking/storage area for the service on-site.	The applicant or property owner shall provide information on the method in which employees would be reimbursed or compensated for discounts when using these services and how this process would be managed for building tenants. This information will be verified by City staff before certificate of occupancy issuance.	1

TDM MEASURE	MEASURE REQUIREMENTS		MEASURE POINTS
Shuttle Bus Service	The applicant shall provide a service plan describing the hours of operation, stop location(s), routes, and headways for the shuttle service. The applicant or property owner shall also submit plans that identify the location and dimensions of potential shuttle stops at the project site and the proposed destination(s) stops. The plans shall identify any other relevant information that may be helpful in understanding potential conflicts at the proposed shuttle stop locations (e.g., proximity to transit stops, crosswalks).	The applicant or property owner shall submit a detailed service plan for the shuttle bus service which must be finalized and approved by the City before certificate of occupancy issuance.	5
Guaranteed Ride Home	The applicant shall submit a service plan describing the services provided by a Guaranteed Ride Home program. See Sacramento TMA for opportunity to participate in an existing program. Participants must pre-register in the program at no additional cost to the employee or employer and are eligible to use the Guaranteed Ride Home program as long as they have used a qualified commute alternative on the day they need assistance. 1. Qualified commute alternatives include carpool, vanpool, shuttles, transit, bicycling, and walking, and commute apps that are specifically for carpooling (such as Scoop and Waze Carpool). 2. Non-qualified commute alternatives include driving alone, motorcycles, and Transportation Network Companies/ride-hailing apps (such as Uber or Lyft) 3. Emergency-related side trips – such as picking up a sick child from school or getting a prescription filled at a pharmacy – are permitted. 4. Participants can be reimbursed a maximum of six times per calendar year (January-December).	The applicant or property owner shall submit a detailed service plan for the Guaranteed Ride Home program which must be finalized and approved by the City before certificate of occupancy issuance.	4

6. PARKING FACILITIES

This measure category focuses on discouraging trips made by private vehicles (particularly single occupancy vehicles) by controlling the supply of accessory parking spaces. Parking Facility measures shall only be included in the TDM Plan if the project site is located within 1/2 miles from a transit stop.

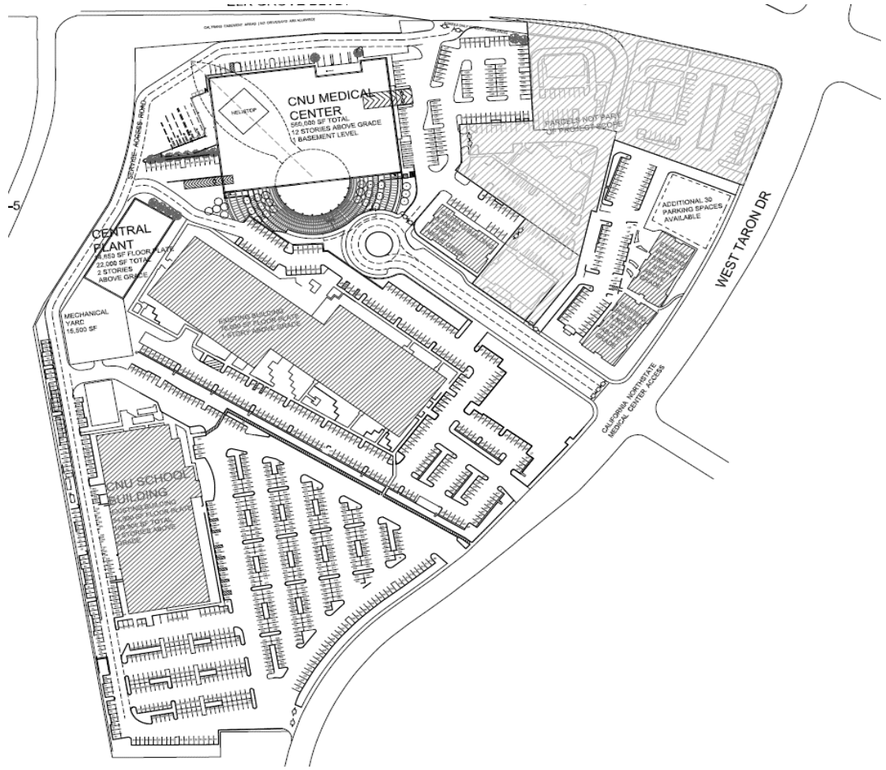
TDM MEASURE	MEASURE REQUIREMENTS		MEASURE POINTS
Parking Cash Out Program	Any tenant employer that subsidizes parking for its employees shall provide all employees with a choice of forgoing any subsidized/free parking for a cash payment equivalent to the cost of the parking space to the employer. Employers shall promote the program to all employees eligible to receive parking at a subsidized level.	The applicant, property owner, or TDM coordinator shall provide City staff with a signed letter agreeing to distribute the TDM Plan, including provisions for the Parking Cash Out Program, via new employee packets, tenant lease documents, and/or deeds. This information shall be submitted during the development review stage.	3
Unbundled Parking Requirement	50 percent of project parking spaces shall be leased or sold separately as part of the tenant or lease agreement rental so that tenants have the option of renting or buying a parking space at an additional cost, and would, thus, experience cost savings if they opt not to rent or purchase parking.	The applicant, property owner, or TDM coordinator shall submit a signed letter agreeing to distribute the TDM Plan, including provisions for the unbundled parking requirements as part of tenant lease documents, and/or deeds. This information shall be submitted during the development review stage.	3

TDM Reduction Summary Report: CNU Elk Grove Hospital				
Overall VMT Reduction: 4% to 31%				
	VMT % Reduction by Land Use			
Parking				
Parking1A: Increased Off-Street Fees				
Parking1B: Increased On-Street Fees				
Parking1D: Unbundled Parking				
Parking1E: Pay-as-you-Go Parking Rates				
Parking 2: Parking Supply				
Transit				
Transit 1: Subsidies	up to 2%	-	-	-
Transit 2A: Transit Frequency				
Transit 2B: Transit Coverage				
Transit 3A: Private Point-to-Point Shuttles	1% to 9%	up to 9%	up to 9%	up to 9%
Transit 3B: Last Mile Shuttle	up to 5%	up to 5%	up to 5%	up to 5%
Commute Programs				
Commute 1A: Commuter Incentives				
Commute 2: Commute Marketing Program	3% to 13%	3% to 13%	3% to 13%	3% to 13%
Commute 3: ERH	up to 1%	-	-	-
Commute 4: TNC Partnerships	up to 1%	-	-	-
Bike and Walk				
BikeWalk1: Secure Parking	up to 1%	up to 1%	up to 1%	up to 1%
BikeWalk2: Showers & Lockers	up to 1%	up to 1%	up to 1%	up to 1%
BikeWalk3: End of Trip Repair Stations	up to 1%	up to 1%	up to 1%	up to 1%
BikeWalk 4: Pedestrian-Oriented Design	up to 2%	up to 2%	up to 2%	up to 2%
BikeWalk 5: Bikeshare System & Subsidies				
Rideshare				
Rideshare 1: Carpool/Vanpool Incentives				
Rideshare 2: Ridematch Program	up to 6%	up to 6%	up to 6%	up to 6%
Rideshare 3: Carshare	up to 1%	up to 1%	up to 1%	up to 1%
Rideshare 4: Carshare Subsidy				
Total				
Total of all Measures	6% to 35%	3% to 29%	3% to 29%	3% to 31%

Trip Generation - Proposed Project (Phase 2)															
Land Use (ITE Code)	Quantity (ksf and beds for dorms)	Vehicle Trip Rate							Vehicle Trips						
		Daily	AM			PM			Daily	AM			PM		
			In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
Hospital and Supporting Uses* (610)	596.8	10.72	0.61	0.28	0.89	0.31	0.66	0.97	6,398	361	170	531	227	394	708
CNU School Building (550)	109.8	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
Office (710)	76	9.74	1.00	0.16	1.16	0.18	0.97	1.15	740	76	12	88	14	73	87
Shopping Center (820)	26.2	37.75	0.58	0.36	0.94	1.83	1.98	3.81	989	15	9	25	48	52	100
Proposed Project Trips									**10,986**	**544**	**219**	**764**	**330**	**606**	**1,023**
Internal Trips									**875**	**78**	**32**	**111**	**86**	**84**	**267**
Proposed Pass By Trips***									**43**				**21**	**22**	**43**
Total Project Trips									**10,068**	**466**	**187**	**653**	**223**	**500**	**713**

*Includes 29 ksf data center

***43% of PM peak hour trips for proposed restaurant and 34% of PM peak hour trips for existing Shopping Center were removed from daily totals to account for pass by trips during the PM peak hours. Daily pass by percentages were not available. Shopping center pass by was not applied to proposed retail as the proposed retail will be primarily geared towards students.



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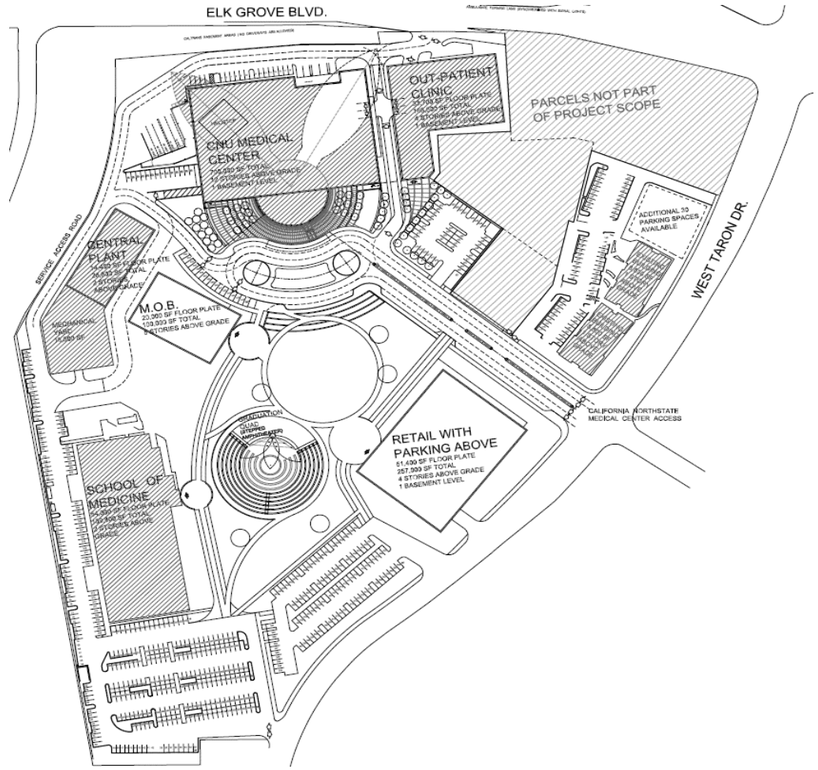
Trip Generation - Proposed Project (Phase 2)															
Land Use (ITE Code)	Quantity (ksf and beds for dorms)	Vehicle Trip Rate							Vehicle Trips						
		Daily	AM			PM			Daily	AM			PM		
			In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
Hospital and Supporting Uses* (610)	733.3	10.72	0.61	0.28	0.89	0.31	0.66	0.97	7,861	444	209	653	227	484	708
Outpatient Clinic (610)	168.5	10.72	0.61	0.28	0.89	0.31	0.66	0.97	1,806	102	48	150	52	111	163
Medical Office Building (720)	100	34.80	2.17	0.61	2.78	0.97	2.49	3.46	3,480	217	61	278	97	249	346
CNU School Building (550)	109.8	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
Retail (820)	51.4	37.75	0.58	0.36	0.94	1.83	1.98	3.81	1,940	30	18	48	94	102	196
Retail (820)	17.6	37.75	0.58	0.36	0.94	1.83	1.98	3.81	664	10	6	17	32	35	67
Proposed Project Trips									**18,610**	**895**	**370**	**1,266**	**543**	**1,068**	**1,608**
Internal Trips									**1,301**	**115**	**48**	**164**	**59**	**115**	**174**
Proposed Pass By Trips* **									**113**				**54**	**59**	**113**
Total Project Trips									**17,196**	**780**	**322**	**1,102**	**430**	**894**	**1,321**

*Includes 29 ksf data center

***43% of PM peak hour trips for proposed restaurant and 34% of PM peak hour trips for existing Shopping Center were removed from daily totals to account for pass by trips during the PM peak hours. Daily pass by percentages were not available. Shopping center pass by was not applied to proposed retail as the proposed retail will be primarily geared towards students.



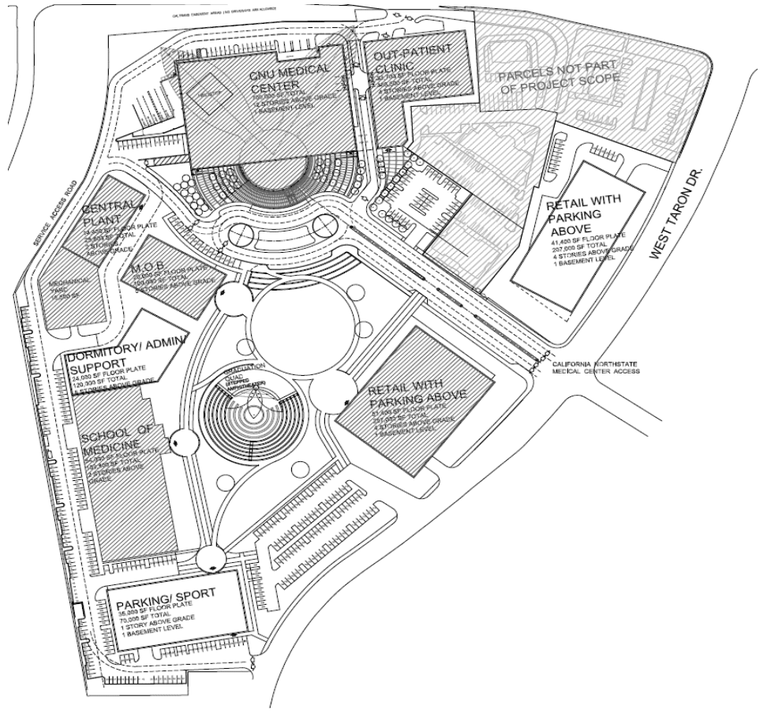
Trip Generation - Existing and Proposed Project (Buildout)

	Land Use (ITE Code)	Quantity (ksf and beds for dorms)	Vehicle Trip Rate							Vehicle Trips						
			Daily	AM			PM			Daily	AM			PM		
				In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
Proposed Land Use	Hospital and Supporting Uses* (610)	733.3	10.72	0.61	0.28	0.89	0.31	0.66	0.97	7,861	444	209	653	227	484	708
	Outpatient Clinic (610)	168.5	10.72	0.61	0.28	0.89	0.31	0.66	0.97	1,806	102	48	150	52	111	163
	Medical Office Building (720)	100	34.80	2.17	0.61	2.78	0.97	2.49	3.46	3,480	217	61	278	97	249	346
	CNU School Building (550)	109.8	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
	Dormitory**	300	2.11	0.03	0.04	0.07	0.08	0.08	0.16	633	10	11	21	24	24	48
	High-Turn Over Sit Down Restaurant (932)	41.4	112.18	5.47	4.47	9.94	6.06	3.71	9.77	4,644	227	185	412	250	154	404
	Retail (820)	51.4	37.75	0.58	0.36	0.94	1.83	1.98	3.81	1,940	30	18	48	94	102	196
	Admin (710)	24	9.74	1.00	0.16	1.16	0.18	0.97	1.15	234	24	4	28	4	24	28
									Proposed Project Trips	**23,457**	**1,146**	**564**	**1,710**	**789**	**1,235**	**2,021**
									Internal Trips	**2,177**	**193**	**95**	**288**	**139**	**216**	**355**
									Proposed Pass By Trips* **	**174**				**108**	**66**	**174**
									Total Project Trips	**21,106**	**953**	**469**	**1,422**	**542**	**953**	**1,492**
Existing Land Use	CNU School Building (550)	109.8	26.04	0.84	0.25	1.09	0.37	0.80	1.17	2,859	92	28	120	41	87	128
	Office (710)	76	9.74	1.00	0.16	1.16	0.18	0.97	1.15	740	76	12	88	14	73	87
	Shopping Center (820)	68.5	37.75	0.58	0.36	0.94	1.83	1.98	3.81	2,586	40	24	64	125	136	261
									Existing Trips	**6,185**	**208**	**64**	**272**	**180**	**296**	**476**
									Internal Trips	**288**	**27**	**8**	**35**	**31**	**50**	**81**
									Existing Pass By Trips* **	**89**				**43**	**46**	**89**
									Total Existing Trips	**5,808**	**181**	**56**	**237**	**106**	**200**	**306**
									Net New Project Trips	**15,298**	**772**	**413**	**1,185**	**436**	**753**	**1,186**

*Includes 29 ksf data center

**Based on data collected at two local privately operated student housing apartment complexes. One was located on UC Davis and the other was within one mile of the UC Davis core campus

***43% of PM peak hour trips for proposed restaurant and 34% of PM peak hour trips for existing Shopping Center were removed from daily totals to account for pass by trips during the PM peak hours. Daily pass by percentages were not available. Shopping center pass by was not applied to proposed retail as the proposed retail will be primarily geared towards students.



Transportation Efficiency

Scenario	Daily Trips	Employees, Visitors, Customers	Efficiency Ratio
Existing Conditions	5,808	3,399	1.71
Comparable Project	21,106	14,728	1.43
Proposed Project (With TDM Reductions)	17,940	14,728	1.22

Existing Conditions		**Source**
CNU	840	Provided by Client
Office	400	Provided by Client
Retail Employees/Visitors	2,159	Daily Trips/2*Average Occupancy
Total	**3,399**	

Proposed Project (Buildout)		
Hospital Employees	1,080	Provided by Client
Nurses	840	Provided by Client
Doctors	360	Provided by Client
Patients	2,400	Provided by Client
Visitors	3,000	Provided by Client
CNU Students	1,200	Provided by Client
CNU Staff	350	Provided by Client
Retail Employees/Visitors	5,498	Daily Trips/2*Average Occupancy
Total	**14,728**	

Average Vehicle Occupancy 1.67

Federal Highway Administration (FHWA), 2017 NHTS Weighted Vehicle Occupancy Factors

https://www.fhwa.dot.gov/policyinformation/nhstable.cfm

VMT - Existing Conditions

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
CNU School	2,859	2,685	7.6	20,272
Office	740	695	24.4	16,923
Retail	2,586	2,428	9.9	24,037
Total	6,185	5,808		**61,232**

VMT - Proposed Project (Phase 1)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	6,398	5,863	9.8	57,341
CNU School	2,859	2,620	7.6	19,781
Office	740	678	24.4	16,513
Retail/Restaurant	989	906	9.9	8,973
Total	10,986	10,068		**102,607**

*Internalization based on MXD+

VMT - Proposed Project (Phase 1 - With TDM Reductions)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	5,438	4,984	9.8	48,740
CNU School	2,430	2,227	7.6	16,814
Office	629	576	24.4	14,036
Retail/Restaurant	841	770	9.9	7,627
Total	9,338	8,557		**87,216**

*Internalization based on MXD+

VMT - Existing Conditions

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
CNU School	2,859	2,685	7.55	20,272
Office	740	695	24.35	16,923
Retail	2,586	2,428	9.90	24,037
Total	6,185	5,808		**61,232**

VMT - Proposed Project (Phase 2)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	13,147	12,148	9.78	118,806
CNU School	2,859	2,642	7.55	19,945
Dorms		-	9.78	-
Retail/Restaurant	2,604	2,406	9.90	23,820
Total	18,610	17,196		**162,571**

*Internalization based on MXD+

VMT - Proposed Project (Phase 2 - With TDM Reductions)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	11,175	10,326	9.78	100,985
CNU School	2,430	2,245	7.55	16,953
Dorms	-	-	9.78	-
Retail/Restaurant	2,213	2,045	9.90	20,247
Total	15,819	14,616		**138,185**

*Internalization based on MXD+

VMT - Existing Conditions

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
CNU School	2,859	2,685	7.55	20,272
Office	740	695	24.35	16,923
Retail	2,586	2,428	9.90	24,037
Total	6,185	5,808		**61,232**

VMT - Proposed Project (Buildout)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	13,381	12,040	9.78	117,748
CNU School	2,859	2,572	7.55	19,422
Dorms*	633	570	9.78	5,570
Retail/Restaurant	6,584	5,924	9.90	58,648
Total	23,457	21,106		**201,388**

*Internalization based on MXD+

VMT - Proposed Project (Buildout - With TDM Reductions)

	Daily Trips	Daily (With Internal Trip Adjustment)*	Average Trip Length	VMT
Hospital / Data Center / Outpatient Clinic / MOB / Admin	11,374	10,234	9.78	100,086
CNU School	2,430	2,187	7.55	16,508
Dorms*	538	484	9.78	4,735
Retail/Restaurant	5,596	5,035	9.90	49,851
Total	19,938	17,940		**171,180**

*Internalization based on MXD+

Appendix C

Transportation Demand Management
Plan Letter of Commitment

CALIFORNIA NORTHSTATE UNIVERSITY

September 20, 2019

Scott Morgan, Deputy Director of Administration, State Clearinghouse Director
Governor's Office of Planning and Research
1400 Tenth Street
Sacramento, California 95814

Subject: California Northstate University Medical Center Project – LEED and Transportation Demand Management Plan Commitment

Dear Mr. Morgan:

I am writing to inform the Governor's Office of Planning and Research that California Northstate University has submitted an Application for the California Northstate University Medical Center Project (Project) seeking certification of the Project as an Environmental Leadership Development Project (ELDP) pursuant to AB 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011, as amended effective January 1, 2018, and codified in Public Resources Code Section 21178 et. seq.

As part of its Application, CNU commits to meeting the following requirements:

- CNU agrees to a binding commitment to delay operating the Project until it receives LEED Gold certification or better as required under Public Resources Code Section 21180(b). A Gold level certification target under the LEED rating system for Healthcare version 4 will encourage design and construction decisions meant to protect surrounding ecosystems, reduce energy use, water use, and GHG emissions, create healthier indoor environments, and promote environmental- and health-conscious sourcing of construction materials, all through an integrated design process.

  Achieving LEED Gold certification requires obtaining at least 60 points in eight categories: Integrative Process, Location & Transportation, Sustainable Sites, Energy & Atmosphere, Water Efficiency, Materials & Resources, Indoor Environmental Quality, Innovation, and Regional Priority. The result is a positive impact on resource conservation, the built environment, and the local community.

  LEED provides a level of flexibility for a project to choose the exact credits and project features. At the time of this Application, the exact LEED credits and project features that will be selected to achieve LEED Gold certification have not yet been finalized. However, some of the design features that are anticipated for contributing to the achievement of LEED Gold certification are listed below under their respective LEED categories:

  Integrative Process
  - The design team studied energy and water strategies during early design phases and held a four-hour-long integrated design team charrette, including the architect, owner, LEED consultant, and designers from lighting, MEP, civil, landscape, and structural scopes of work.

  Location & Transportation
  - The Project is located on a previously developed site.
  - The campus will provide bicycle storage and shower facilities.
  - Parking for the new building will have preferred parking areas for electric vehicles and charging infrastructure. This would include 166 electric vehicle parking spaces with chargers.

Sustainable Sites

- The sponsor plans to offset the development area with an off-site habitat protection project.
- Low-impact development rainwater management strategies will be used to manage runoff from the developed site for the 95th percentile of regional or local rainfall events.
- Rooftops and landscaping will use light colored materials meeting solar reflectance and low albedo requirements to reduce heat island effects.
- Exterior lighting will be directed downwards and shielded to prevent excessive light pollution.
- The new building includes access for patients, visitors, and staff to outdoor landscaped areas that serve as places of respite.

Water Efficiency

- Reduction of water use by 30-40 percent compared to a typical healthcare development will be achieved through the use of low-flow fixtures, cooling tower efficiency, and drought-tolerant landscaping.
- Water metering to track highest demand end uses will help maintenance and operations staff detect malfunctions.

Energy and Atmosphere

- Reduction of energy use by 7 percent compared to a typical healthcare development will be achieved through the use of higher efficiency condensing boilers, variable frequency drives (VFD) cooling tower fan controls, light-emitting diode (LED) lighting, and other energy conservation measures.
- Integrated rooftop photovoltaic panels will be used to produce on-site renewable energy.
- Enhanced commissioning will be used to verify installed systems are working as intended upon construction completion and start-up of operations.

Materials & Resources:

- Construction and demolition waste management strategies will be used to divert at least 50 percent of total construction and demolition materials from landfills.
- Whole building life-cycle assessment will be conducted to help identify strategies to reduce environmental impacts embodied in materials, such as reducing the amount of cement in concrete.
- Several building product disclosure documents will be included in the materials specifications.
- All LED lighting eliminates potential mercury contamination, while lead, copper, and cadmium will be avoided except where necessary for radiation and magnetic resonance imaging (MRI) shielding.
- Partitions, casework, and spaces will be designed for future flexibility.

Indoor Environmental Quality

- Low-emitting materials will be installed.
- Indoor air quality will be regularly tested.
- High level of individual controls will be used to provide lighting and thermal comfort for patients and staff.
- High number of patient rooms will offer quality views.

Innovation

- The Project team will select many credits from among the Innovation Catalog, Pilot Credits Catalog, or other innovative project design or construction achievements to improve environmental performance.

Regional Priority

- Extra points awarded for strategies that warrant extra consideration, due to a project design addressing local stresses on the environment, include:
  - Sourcing of raw materials
  - Rainwater management
  - Outdoor water use reduction
  - Indoor water use reduction

- CNU commits to meeting the requirement set forth in Public Resources Code Section 21183(c), which requires that the Project demonstrate that it will achieve at least 15 percent greater transportation efficiency than comparable projects in the following manner:

1. Prior issuance of building permits, the Applicant shall develop and submit a TDM Plan to the City of Elk Grove for review. The TDM Plan shall be reviewed by City staff and finalized and approved prior to certificate of occupancy issuance.

2. The TDM Plan shall be developed according to the City of Elk Grove Transportation Demand Management Plan Guidelines; and thus, shall comply with the following requirements:

   Measure Requirements. Each measure is described in a level of detail which allows the applicant to adhere to the requirements of the measure while providing flexibility for implementation for individual projects. The measure includes a description of the transportation amenity being provided, the amount/frequency of this amenity, and the property owner's responsibilities.

   Compliance Requirements. Compliance information is provided that specifies the required actions and obligations of the applicant or property owner's for compliance with the TDM measure during the development review phase of the project.

   TDM Plan Requirements. To develop a successful TDM strategy, a TDM Plan should include a variety of measures which work in conjunction to form a comprehensive strategy. The TDM Guidelines include a variety of both required and optional measures to be included in the final TDM Plan. The required measure shall be included in all TDM Plans submitted to the City. Each optional TDM measure is assigned a point value based on its importance and effectiveness. **The TDM Plan submitted by the Applicant to the City shall include all required measures and a set of optional measures that total a minimum of 28 points, as detailed in the AB 900 Transportation Analysis for the Project conducted by Fehr & Peers (see Appendix B of the application).**

   TDM Plan Annual Progress Report. Property owners or the TDM coordinator for individual projects are required to submit annual progress reports on implementation of the TDM Plan beginning one year after the date of TDM Plan approval by the City. If the responsible party fails to submit an annual report demonstrating implementation of the TDM Plan within sixty days following the established date for annual report submittal, an administrative citation will be issued pursuant to EGMC Chapter 1.12. Projects which have made a good faith effort to carry out the provisions of the plan as determined by the TDM administrator and/or have achieved significant VMT reductions shall be recognized for their accomplishments by the City. The required items to be included in the Annual Progress Report are:

   1. Contact information of TDM coordinator
   2. Sample of marketing materials provided to new employees about the TDM program

3. Number of employees participating in each TDM measure offered to employees
4. Commute mode share of employees at the project site
5. Other information demonstrating implementation of specific TDM measures

3. The following TDM measures were accounted for in the AB 900 Application for the purposes of increasing transportation efficiency; and thus, at a minimum, shall be implemented and are included as commitments in this letter.

    a. Transportation Marketing Services
    b. Short-Term Bicycle Parking
    c. Long-Term Bicycle Parking
    d. Improved Access to Bike Network
    e. Showers and Locker Rooms
    f. On-Site Café
    g. Subsidized Transit Passes
    h. Shuttle Bus Service
    i. Carpooling Program
    j. Guaranteed Ride Home
    k. Parking Cash Out Program

    The TDM Plan commitments outlined in this letter will be incorporated into the Project's Environmental Impact Report (EIR) as Project design features or mitigation measures. The Applicant shall agree to comply with all Project design features and mitigation measures contained in the EIR through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement with the lead agency, the City of Elk Grove.

Sincerely,

Alvin Cheung, PharmD, MHSA
President & CEO
California Northstate University, LLC

cc: Sarah Kirchgessner, City of Elk Grove

OFFICE OF THE GOVERNOR

GOVERNOR'S CERTIFICATION GRANTING STREAMLINING FOR

THE CALIFORNIA NORTHSTATE UNIVERSITY MEDICAL CENTER PROJECT

IN THE CITY OF ELK GROVE

I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the Jobs and Economic Improvement Through Environmental Leadership Act of 2011, Public Resources Code Section 21178 et seq., make the following determinations:

The proposed California Northstate University Medical Center project, a commercial facility in the City of Elk Grove, will invest more than $1.5 billion dollars in the California economy, create jobs, reduce energy usage and use clean energy, and promote infill development. A copy of the Project's Application, which contains information supporting this certification, is attached as Exhibit 1. All materials associated with this application are available online at: http://www.opr.ca.gov/ceqa/california-jobs.html

1. Project Applicant: California Northstate University

2. Project Description: The Applicant proposes to develop the CNU Medical Center on 24.4 acres that would be guided by a District Development Plan. The development plan would provide for overall site plan approval and establish development elements, including, but not limited to, parking, landscaping, pedestrian improvements, and other features that are common across the site. CNU is proposing to expand its facilities and services to provide emergency and other medical-related services in the western portion of the City through redevelopment of several CNU-owned parcels adjacent to the existing CNU School of Medicine. At buildout the Project would consist of an expanded pharmacy and medical college, an acute care hospital (400 patient beds) with a helistop, an outpatient clinic, a medical office building, two public parking structures with accessory retail, a dormitory, one student parking structure with rooftop sports facilities, a central plant and mechanical yard, public gathering spaces, and surface parking. The Project would employ approximately 4,000 people. The Project's dormitory would include 150 units to house 300 students.

The Project would consist 1,818,590 square feet of facilities and 7,167 parking spaces at buildout that would be constructed over three phases.

3. Lead Agency: City of Elk Grove

4. The project meets the criteria set forth in Public Resources Code Section 21180(b)(1). It is

    a. A commercial project (see Exhibit 1, page 3-1);
    b. Designed to be eligible for LEED ND Gold rating (see Exhibit 1, pages 3-1 to 3-3);
    c. Designed to achieve a 15-percent greater standard for transportation efficiency than for comparable projects (see Exhibit 1, pages 3-3 to 3-5 and Exhibit 2);
    d. Located on an in-fill site (see Exhibit 1, pages 3-5 to 3-6);
    e. Consistent with the Sustainable Communities Strategy for the Sacramento region (see Exhibit 1, pages 3-6).

5. The size and scope of the project clearly establish that the project entails a minimum investment of $100 million in California through the time of the completion of construction in compliance with Public Resources Code Section 21183(a) (see Exhibit 1, page 3-7).

6. The project applicant has provided information establishing that the prevailing and living wage requirements of Public Resources Code Section 21183(b) will be satisfied (see Exhibit 1, page 3-7).

7. The project applicant has provided information establishing that the project will not result in any net additional greenhouse gas emissions (see Exhibit 1, pages 3-7 and 3-8), and the Executive Officer of the California Air Resources Board (CARB) has made the determination that the project does not result in any net additional greenhouse gas emissions in compliance with Public Resources Code Section 21183(c) (see CARB Determination dated December 19, 2019, attached as Exhibit 4).

8. The project applicant has provided information establishing that the project will comply with the requirements for the commercial and organic waste recycling of Public Resources Code Chapter 12.8 (commencing with Section 42649) and 12.9 (commencing with Section 42649.8) of Part 23 of Division 30, as applicable in compliance with Public Resources Code Section 21183(d) (see Exhibit 1, page 3-8).

9. The project applicant has provided documentation reflecting a binding agreement establishing the requirements set forth in Public Resources Code

sections 21183(e), (f), and (g) to undertake mitigation measures, to pay the costs for hearing by the Court of Appeal, and to pay the costs of preparing the record of proceedings (see Exhibit 1, page 3-8, and Exhibit 3).

10. This certification covers the project variant that has been analyzed in the application.

Therefore, I hereby certify that the California Northstate University Medical Center Project is an eligible project under the Jobs and Economic Improvement Through Environmental Leadership Act of 2011, Public Resources Code Section 21178 et seq.

GAVIN NEWSOM
Governor of California
December 30, 2019

HOLLY J. MITCHELL
CHAIR

SENATE MEMBERS
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WILLIAM W. MONNING
JIM NIELSEN
DR. RICHARD PAN
ANTHONY J. PORTANTINO
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JEFF STONE

California Legislature

JOINT LEGISLATIVE BUDGET COMMITTEE

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LEGISLATIVE ANALYST

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JAY OBERNOLTE
LUZ RIVAS
SHIRLEY N. WEBER

January 27, 2020

Ms. Kate Gordon, Director
Governor's Office of Planning and Research
State of California
1400 Tenth Street
Sacramento, California 95814

Dear Ms. Gordon:

On December 30, 2019, you informed me that Governor Newsom had determined that the California Northstate University project in the City of Elk Grove is eligible for streamlined judicial review as initially established under Chapter 354 of 2011 (AB 900, Buchanan).

Assembly Bill 900 provides a streamlined California Environmental Quality Act review process for construction projects that qualify as environmental leadership development projects (ELDPs). Among other requirements, ELDPs must make substantial financial investments within our state; create new high wage and highly skilled jobs; and not result in any net additional greenhouse gas emissions, as determined by the California Air Resources Board.

Based on the information you have provided, and a subsequent review by the Legislative Analyst's Office, I concur with the Governor's determination that the project meets the AB 900 criteria set forth in Public Resources Code section 21178 et seq.

Sincerely,

Holly J. Mitchell
Chair

cc: Members of the Joint Legislative Budget Committee
Ms. Keely Martin Bosler, Director of Finance