# **Appendices**

# **Appendix FEIR-1**

Draft EIR Comment Letters

#### CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

- **DATE:** July 19, 2022
- TO: Vincent P.Bertoni, Director of Planning Department of City Planning
- Attn: Rey Fukuda, City Planner Department of City Planning
- **FROM:** Rowena Lau, Division Manager Wastewater Engineering Services Division LA Sanitation and Environment

#### SUBJECT: 1360 N VINE STREET PROJECT - NOTICE OF COMPLETION AND AVAILABILITY OF DRAFT ENVIRONMENTAL IMPACT REPORT

This is in response to your June 9, 2022 Notice of Completion and Availability of Draft Environmental Impact Report for the proposed mixed-use project located at 1348-1360 N. Vine Street, Los Angeles, CA 90028. LA Sanitation, Wastewater Engineering Services Division has received and logged the notification. Upon review, it has been determined the project is in the final stages of the California Environmental Quality Act review process and requires no additional hydraulic analysis. Please notify our office in the instance that additional environmental review is necessary for this project.

If you have any questions, please call Christopher DeMonbrun at (323) 342-1567 or email at chris.demonbrun@lacity.org

RL/CD: sa

c: Julie Allen, LASAN Michael Scaduto, LASAN Christine Sotelo, LASAN Christopher DeMonbrun, LASAN



Rey Fukuda <rey.fukuda@lacity.org>

### 1360 N. Vine Street Project - LADWP Comment Letter Forthcoming

Martin, Jazmin <Jazmin.Martin@ladwp.com> To: "rey.fukuda@lacity.org" <rey.fukuda@lacity.org> Cc: "Styers, Marshall" <Marshall.Styers@ladwp.com> Mon, Jul 25, 2022 at 4:00 PM

Good afternoon Rey,

I am sending this note to let you know that the Los Angeles Department of Water and Power (LADWP) has prepared comments on the 1360 N. Vine Street Project but the comment letter is still being finalized and routed for signature. We recognize that the Notice requested comments by July 25, 2022 and will be sending you the signed letter just as soon as it is finalized.

Thank you for your understanding,

#### **Jazmin Martin**

Environmental Specialist, Environmental Planning and Assessment

Los Angeles Department of Water and Power

111 N. Hope Street, Room 1044, Los Angeles, CA 90012

Jazmin.Martin@ladwp.com | (213) 367-1768



<sup>-----</sup>Confidentiality Notice-----

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Eric Garcetti, Mayor



BUILDING A STRONGER L.A.

Board of Commissioners Cynthia McClain-Hill, President Cynthia M. Ruiz, Vice President Jill Banks Barad-Hopkins Mia Lehrer Nicole Neeman Brady Chante L. Mitchell, Secretary

Martin L. Adams, General Manager and Chief Engineer

July 25, 2022

Mr. Rey Fukuda City of Los Angeles Department of City Planning 221 North Figueroa Street, Room 1350 Los Angeles, CA 90012

Dear Mr. Fukuda:

Subject: 1360 North Vine Street Project

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments on the 1360 North Vine Street Project (Project) located at 1360, 1358, 1356, 1354, 1352, 1350, 1348, 1334, and 1330 North Vine Street, 6274, 6272, 6268, 6262, 6264, 6256, 6258, 6256 1/4 and 1/2, 6254 and 6254 1/2 West De Longpre Avenue, 6265, 6261, 6255, 6251, 6249, 6253 and 6253 1/2, 6245, and 6241 1-8 West Afton Place, Los Angeles, CA 90028. The mission of LADWP is to provide clean, reliable water and power to the City of Los Angeles.

Based on our review of the Draft Environmental Impact Report (EIR) prepared for the Project, we respectfully submit the comments below:

#### **Comments:**

#### Joint:

1. This response shall not be construed as an approval for any project.

#### Water System:

#### IV.L.1 Utilities and Service Systems – Water Supply and Infrastructure

 Page IV.L.1-1: The second paragraph under 1. Introduction states that a Water Supply Assessment (WSA) along with a copy of Resolution No 021144 is included in Appendix U of the Draft EIR. However, Appendix U includes the board letter, Resolution without the Resolution number, and the WSA. The Resolution in the current document should be replaced with the approved Resolution that contains the Resolution number No. 021144. See Resolution No. 021144 enclosed. Mr. Rey Fukuda Page 2 July 25, 2022

If you have any questions regarding the comments, please contact Mr. Marshall Styers of my staff, at (213) 367-3541 or Marshall.Styers@ladwp.com.

Sincerely,

Charles C. Holloway Manager of Environmental Planning and Assessment

MS:gn Enclosure c/enc: Mr. Marshall Styers

#### CASE: CPC-2016-3777-GPA-VZC-HD-BL-DB-MCUP-ZAS-SPR-ADDRESS: 1330-1360 Vine; 6254 -6274 De Longpre ; 6241-6265 Afton Place ALSO VTT 74613 ENV 2016-3778-EIR

Hollywood Heritage commented in 2017 on a residential Project at 1360 Vine St., presented in the NOP for this EIR. We cited adverse impacts to the Afton Square California Register Historic District. We also asked for specificity on the restoration of the 6 buildings in the District.

Now the Project has returned; it is now a DEIR for 2 different "maybe" projects—the earlier "Residential Option" (but a changed and improved design), and a "Commercial Option", filed in May 2022. Both are roughly is the same size (3X FAR allowed, 1.7 x allowed density bonus units). Both Options request a General Plan Amendment and a Zone Change (from residential to commercial for land remaining residential) which we find unnecessary and insupportable. "Waivers" are requested that drastically increase the residential project's size (density bonus figured on density bonus). The DEIR land use and zoning calculations appear to have errors, and the DEIR cherry picks Land Use "goals", rather than evaluating the specific, intended, clear land use provisions. This is still correctable.

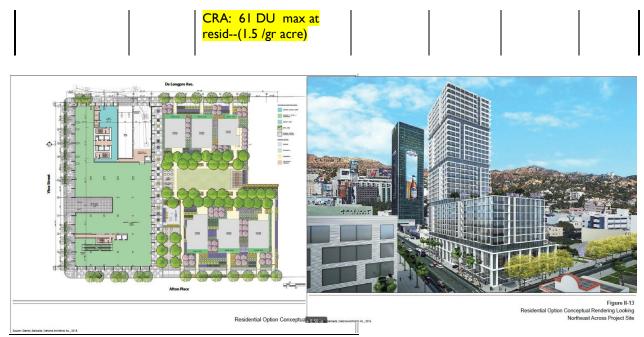
Approximately half of the land purchased by the developer is in the Afton Square California Register Historic District. The eastern 7 lots, residentially zoned, have 6 bungalows and one emptied apartment building within the District's boundary. The Project does retain the 6 bungalows, and does not build the new large building inside of the District boundary. But we show that the proposed rearrangement of bungalows in both options fails to retain the character-defining features of the District, and is erroneously found in the DEIR to have no significant effect.

#### PERTINENT PROJECT BACKGROUND

|  | <u>Lot Area</u> | <u>Permissable Devt</u>  | <u>Proposed</u><br><u>Devt</u>               | <u>Height</u><br><u>Allowed</u> | <u>Proposed</u><br><u>Height</u>                             | <u>Parking</u>    |
|--|-----------------|--|--|---------------------------------|--|-------------------|
| Vine addresses+ I<br>lot<br>Lots 15-18         | 27,272 sf       | Subarea 170; FAR 2:1 "D"<br>C4-2D-SN; Note 26<br>R4 residential=68 DU<br>54,544 sf | Grocery:<br>55,000 sf<br>Retail<br>5,000 sf  | Not stated                      | 262 ft   | 2 sp<br>/1,000 sf |
| De Longpre-<br>Lot 13                          | 6,758 sf        | FAR 2:1<br>TQ C2-2D<br>Resid units <mark>16??</mark> DU<br>13,516 sf               | Unclear<br>use: in<br>bungalows:<br>8,988 sf | ???                             |  |                   |
| De Longpre and<br>Afton<br>Lots 14,19,20       | 20,752 sf       | Subarea 290; FAR 2:1 "D"<br>R4-2D note 26<br>Resid units:_51 DU<br>41,504 sf       |  | 30'<br>2 stories                | 262 ft on 1 <sup>st</sup><br>residen. Lot<br>east of<br>Comm |                   |
| De Longpre and<br>Afton<br>Lots 11,12,21,22,23 | 34,506 sf       | Subarea 295; FAR 1.5:1;<br>R3-1 XL<br>Resid units:_43 DU<br>51,759 sf              |  | 30'<br>2 stories                |  |                   |
| .TOTAL   | 81,050 sf       | <mark> 78 DU</mark><br> 6 ,323 sf<br>(178 x 1.35 = 240 DU)                         | 429 DU<br>484,421 sf<br>5.98) FAR            |                                 |  |                   |

#### **Project Request Residential Option**

ONNI Vine – 1330-1360 Vine, Hollywood Heritage Inc Response- DEIR



**Note re plans and renderings**: The technical analysis in sections of the DEIR appears in quite a number of places to conflict with its Project Description and Executive Summary.

<u>**Project Request-- Commercial Option**</u> The western third of the land is commercially zoned; 55,000 sf of development is allowed on it. The request is for 463,521 sf of commercial development—8  $\frac{1}{2}$  X what is allowed. The Historic Resources Technical Report shows the Commercial Option as seeming less tall, but really bulky and sun-blocking tower with 8 levels of subterranean parking. The DEIR Project Description doesn't match: it shows the building as the same as the Residential Option, with the label saying "Residential Option". The EIR Project Description should be recirculated it appears.

|                     | <u>Lot</u><br>Area | Permissable Devt        | <u>Proposed</u><br>Devt | <u>Height</u><br>Allowed | Proposed<br>Height | Parking  |
|---------------------|--------------------|-------------------------|-------------------------|--------------------------|--------------------|----------|
| Vine addresses+     | 27,272             | Subarea 170; FAR 2:1    | Devi                    | Allowed                  |                    | 2/1000   |
| l lot               | sf **              | C4-2D-SN; Note 26*      |                         |                          |                    | required |
| Lots 15-18          | •                  | 54,544 sf               |                         |                          |                    |          |
| De Longpre-         | 6,758 sf           | FAR 2:1                 |                         |                          |                    |          |
| Lot 13              |                    | TQ C2-2D                |                         |                          |                    |          |
|                     |                    | 13,516 sf ???           |                         |                          |                    |          |
| De Longpre and      | 20,752             | Subarea 290; FAR 2:1    |                         | 30'                      |                    |          |
| Afton               | sf                 | R4-2D note 26           |                         | 2 stories                |                    |          |
| Lots 14,19,20       |                    | 41,504 sf               |                         |                          |                    |          |
| De Longpre and      | 34,506             | Subarea 295; FAR 1.5:1; |                         | 30'                      |                    |          |
| Afton               | sf                 | R3-1 XL                 |                         | 2 stories                |                    |          |
| Lots 11,12,21,22,23 |                    | 51,759 sf               |                         |                          |                    |          |
| .TOTAL              | 89,290             | <mark>55,544 sf</mark>  | <mark>463,521 sf</mark> |                          |                    |          |
|                     | sf                 | <mark>commercial</mark> |                         |                          |                    |          |
|                     |                    |                         |                         |                          |                    |          |

\* Can exceed 2:1 with approved Transportation Plan – see 506 and 518etc \*\* miscalculated in the DEIR



**<u>Historic Status:</u>** Please see our discussion of Cultural Resources in Attachment #1. These bungalows in the Project's ownership are exceptionally important, and the importance has not been fully described in the EIR.

- <u>California Register District</u>: The structures at 6254, 6258, and 6264 De Longpre and the structures at 6241, 6245, 6251, and 6255 Afton Place are located in the Afton Place California Register District (within the land purchased by the developer and considered a part of the Project)
  - Some of these addresses per letter from the State Office of Historic Preservation dated March 14, 1990 are National Register Eligible
  - Listed per ZIMAS 1995 Status code 2D2

#### ENTITLEMENT SUMMARY

This Project violates the zoning for the properties proposed to be developed. The appropriate request is a Zone Variance application.

**Entitlement Applications**: The central entitlement request is:

- <u>GPA: General Plan Amendment</u>—Change residential parcels in the California Register District from Medium Density Residential to Regional Center.
- <u>VZC HD- Vesting Zone and Height District Change</u> from C4-2D-SN to (Q) C4-2-SN for the 4 westerly parcels, and from TQ C@-2D and R4-2D and R3-1XL to Q C4-2 for the remaining 9 parcels.
- <u>VTT (Vesting Tentative Tract)</u> and <u>SPR (Site Plan Review)</u> requests, which require Findings
- <u>BL: Building line removal (effectively a setback line) along Vine St.</u>
- <u>DB: Density Bonus: (LAMC 12.22.A.25)</u> compliance review selecting on meu incentives. But the added surprise is a (LAMC 12.22.A.25 (g) (3) request--\_A "Waiver of Development Standards" to permit an approximately 50% area increase within the C4 zoned parcels to permit 475,433 sf in the C4 zone, as opposed to roughly 54,500 sf. This violates multiple current laws.

The Project is so far out of Land Use conformance as to request a General Plan Amendment and Zone and Height District Change. By definition the Project conflicts with all applicable Plans and Zoning, and fails to meet the "D" conditions. Findings must reflect that.

<u>Missing Entitlement Applications</u>: As noted above, a Variance request with required Findings is the appropriate entitlement request, not a spot zoned General Plan Amendment. Further, the critical Redevelopment Plan processes and approvals with Findings per the Redevelopment Plan are required:.

- <u>The DEIR is vague about Redevelopment Plan</u>: on Page I-19 "Any land use approvals that may be required under the Hollywood Redevelopment Plan and the LAMC". The ENV Application was clearer: "Findings as required per the Hollywood Redevelopment Plan Sec 506.2.3 to allow the Project to be constructed with an FAR of 6:1 across the site. "We challenge that those findings can be made. We know that many land use planning constraints are on this Project and missed by the DEIR.
- <u>Redevelopment Plan Amendment</u> is required for the Land Use change requested from Residential to Regional Center Commercial
- <u>Redevelopment Plan Variation</u>: "Regional Center Commercial" carries with all of the requirements in the Redevelopment Plan as summarized in our list below. Most importantly, public benefits such as historic preservation are required, and the 6:1 FAR cannot be used on the Harold Way parcels. We believe the project does not meet Redevelopment Plan requirements, so the design must be revised, a Redevelopment Plan Variation processed, which in order to make findings would also trigger a revision to the Project design.
- <u>"Unified Development"</u> We have observed other LA/Hollywood projects required to make this application. We recommend a clear statement as to why or why not it is not required here.

**Brief Review of Significant Adverse Effects:** Our more detailed review of the DEIR for pertinent comments on pertinent Chapters is included in Attachment A.

- Findings for 35% density Bonus on top of Density Bonus: We believe the Land Use calculations
  for the Residential Option are unclear. They appear incorrect based on our research into the
  original Council motions and entitlements. We further specifically request scrutiny in the DEIR
  and notice to the Public of the Public Hearing on a further Density Bonus achieved through a
  "Waiver". The code section says:
  - The Density Bonus isn't Hollywood Heritage's subject, but the gargantuan project it leads to, and the e Findings for public benefit (as required when requesting a 6:1 FAR) are. 36 deed restricted units out of 429 is 8%--appears to fail at the purpose and specifics of the underlying DB (Density Bonus) request.
  - "The Incentive will have a Specific Adverse Impact upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the Specific Adverse Impact without rendering the development unaffordable to Very Low-, Low- and Moderate-Income households. Inconsistency with the zoning ordinance or general plan land use designation shall not constitute a specific, adverse impact upon the public health or safety."
- <u>Significant Adverse Effects for California Register Historic District:</u> The direct effect of a request to build 2 <sup>1</sup>/<sub>2</sub> or 3X times the maximum allowable development, and over 8 times the development expected on the commercially-zoned property, is adverse. Our attachments address this in more detail. Using this current EIT, and its conclusions re Cultural resources, as a basis for entitlement Findings is insupportable. (Doubling the construction square footage with the parking garages, in one option 8 levels below grade, is extensive and potentially damaging. Hollywood Heritage has provided specific language previously to City planning for better-crafted conditions regarding vibration and underpinning.)

• <u>Aesthetics:</u> As noted below, the glare, shade and shadow effects of the Options affect the surrounding historic areas. The supporting analyses confuse the options and the designs, and should be revised and reissued to the public. These effects may very well be adverse; the architectural designs are not developed enough to truly evaluate. As well, as noted below, the TPA does not create an exemption from this analysis.

**Preferred Alternative**: The DEIR <u>should</u> identify a preferred Option, and revise the EIR to consistently reflect that Option. The DEIR is plagued by comingling of analyses and omissions for each proposed development option. A preferable project per Hollywood Heritage includes

- Preservation Plan: See "Cultural Resources".
- <u>All De Longpre and Afton Place frontages</u> in the California Register Historic District returned to residential use with the homes in their current locations, and the District's character-defining features retained.
- <u>No zone change to commercial zoning</u> is needed nor should be requested. In order to use any FAR from created for the residentially zoned land (or currently on it) a formal and public process is required: a formal development rights transfer through a CUP process used formerly by City Planning, (or is it a Unified Development process). Or something else.
- <u>Project Conditions</u>: Any future development rights on the current land parcels in the District must be reduced to current use and square footage, with some allowance for I story additions, ADU's, garages, etc serving the homes.
- The Project subterranean parking can be built below the whole site using a Zone Variance, which has as a Condition of Approval the conservation of the bungalows under a façade easement.

<u>**Cumulative Impacts</u>**: Hollywood Heritage has found data in the DEIR that undercounts contributions to cumulative impacts, We reserve the right to provide that data in the future.</u>

**Entitlement Findings :** We point out that any Findings must be based in a comprehensive review all the Land Use Plans being referenced and in effect—such as zoning, current Community Plan, Redevelopment Plan, General Plan Framework. The DEIR does not have that, and is deficient.

Planning has a purpose. It establishes what growth, and locations for growth, are positive, sustainable, and coordinated in terms of infrastructure and environment. It lays the "blueprint" for orderly growth. In Hollywood, developers routinely ask for and receive entitlements worth \$20 - \$120 million of land value free from the City Council, bringing inequity, lopsided effects on livability, endangering adjoining investments and homes, etc.

This project is a threat to Afton Square. Planning and zoning was in place in which Afton Square could grow a bit, but continue to be viable- both as an historic District and truly as stakeholders' homes in Hollywood. Blasting through that with this project serves no public purpose. There is an opportunity here to revise the "ask" and revise the design. Onni has responded in the past. They have improved the project. The designs are so "iffy" and preliminary even they don't know what the market can bear or what they want to build. We suggest transforming the entitlements "ask" and the project for a compliant and stellar outcome.

Respectfully submitted HOLLYWOOD HERITAGE Brian Curran Jr

#### Att: Attachment I—HHI DEIR detailed response

#### ATTACHMENT I

#### HHI DEIR Detailed Response

This Attachment accompanies and incorporates the memo it is attached to

**<u>Project Description:</u>** The Project Description is inadequate and incomplete. See following. The project description and Executive Summary are inconsistent with technical reports.

**<u>EIR Alternatives Analysis</u>**: The DEIR includes Alternatives as required by CEQA, and should select the environmentally superior alternative. Hollywood heritage has proposed features of the environmentally superior project. We reserve the right to add iur conclusion in the future.

**<u>EIR and Implementation of Current Mitigations Already in Effect</u>:** The DEIR should have recited and includes compliance with, and implementation of, Mitigation Measures carried over and currently effective from the Hollywood Community Plan and the Hollywood Redevelopment Plan.

#### I: Aesthetics:

The EIR must review aesthetics—including Shade and Shadow (including glare) and night lighting effects on an historic district. The analysis stating that TPAs need not consider aesthetic impacts has a major omission: TPA exemptions for aesthetic effects are NOT allowed for evaluations of effects on historical and cultural resources per CAC 21099 (d) (1), and reflected in the City of Los Angeles ZI 2452; .

d)(1) Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment.
 (2)(A) This subdivision does not affect, change, or modify the authority of a lead agency to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers provided by other laws or policies.

(B) For the purposes of this subdivision, aesthetic impacts do not include impacts on historical or cultural resources."

The DEIR must analyse these effects fully, and unless the project is changed significantly, will very likely trigger Mitigation Measures. Since Hollywood Heritage last reviewed this project, the developer has responded to concerns about aesthetics in the Historic District, re-designing the residential building to minimize sun-blocking effects and eliminating outdoor residential balconies. The new design appears to be highly preliminary. We have worked successfully with other developers to adjust facades facing into the historic district. We suggest this project be conditioned in the DEIR for a stakeholders review of façade materials, reflectivity. Scale elements etc for compatibility.



We find the aesthetics discussion inadequate. We will review in detail, but the DEIR should:

- <u>Provide full and accurate description of the building aesthetics</u> as experienced <u>by the public</u>. trees and nature following normal patterning at the <u>ground level</u>; and limitations of interruption of light and air to existing dwellers.
- <u>Provide full shade and shadow studies</u>: Full shade and shadow studies for loss of sunlight are required.
- Provide specifics on building reflectivity, glare analysis, and mitigation measures. "
- <u>Provide description of night lighting;</u>
- <u>Provide full renderings and drawings of grade level aesthetics</u>, to provide a factual basis for an analysis of effects both to the historic district and the pedestrian environment
- <u>Include the required Mitigation Measure for Design Review</u>. The schematic early design nature of the drawings means that the Project—if approved—must include specific design review conditions.

XI: Land Use and Planning The Land Use section DEIR has errors, omissions, and incorrect calculations. (For example, the current Vine St. commercially zoned 4 lots are 27, 272 approx sf lot area, not 55,000). Statements of conformance with the General Plan Elements; the Hollywood Community Plan; and the Hollywood Redevelopment Plan are cherry picked- omitting a genuine discussion of compliance for vague platitudes which might be favorable to this project.

The Land Use discussion in this EIR must state clearly and honestly the conflicts with current adopted Plans—EIR discussion and Findings for entitlement actions cannot be based on the changes that the Project entitlements <u>request</u>! Findings needed for these entitlement requests cannot be based on an EIR that pre-supposes the entitlements "would" or "will" happen. This is deficient and must be corrected.

- **Non-conformance with Conservation Element of General Plan**: Cite precise language and how the project complies, or doesn't, conform in the FEIR
- Non-conformance with the Framework: The EIR is required to be accurate, not selecting one positive section out of many Framework goals and procedures to report on. Case in point:
  - The Framework Goal to "provide a pattern of development consisting of distinct districts, centers, boulevards, and neighborhoods that are differentiated by their functional role, scale, and character" is hardly supported by a density 2.5 times that permissible and a 262' height encroaching into a 2 story 30' height district.
- Non-conformance with current Hollywood Community Plan:
  - As noted earlier—the request for a General Plan Amendment is de facto evidence of the project's non-conformance with Land Use Plans Land Uses non-conforming with current Community Plan—this must be clearly disclosed.
  - $\circ\,$  Interconnection to the Redevelopment Plan, as  $\,$  mandated in the Plan Text of the Hollywood Community Plan  $\,$

| CPC 86-  | Historic Listing and Protection Requirement: . CRA was required in this case to list all      |
|----------|---|
| 835 GPC  | National Register Status Code 1-3 buildings as Cultural Heritage landmarks, affording         |
| Cultural | Cultural Heritage permit reviews. CRA extended this to Status Code 4's. City created a ZI (ZI |
| Heritage | 1812) so that Plan Checkers send applicants back to CRA. City Planning now is conducting      |
| nentage  | these reviews   |
|          |   |

- <u>Removal of D Conditions:</u> The DEIR must state explicitly the requirements for removing "D" conditions and applying for a higher FAR. The DEIR must state that "D" conditions in the first place have not been met :
  - Conformance with the Hollywood Redevelopment Plan (non compliant due to requested density in excess of 4.5:1 without procedure followed)
  - Conformance with a CRA-adopted Transportation Plan under Sec 518.1 (noncompliant due to CRA Transportation Plan never adopted, CRA and City of LA non-compliant with requirement to complete such a plan)
  - Conformance with any applicable Design Plan (none applies at this address)
  - No Disposition and Development Agreement or Owner Participation Agreement (City may do this with a public hearing)
  - Approval by the City Planning Commission (this complies)
- - **Non conformance with the Redevelopment Plan:** "D" Conditions coordinated in 1990 with the Hollywood Community Plan reflected the decision to keep this portion of Vine Street at a low density and height near the residential neighborhoods. Justifications for a 6:1 FAR request by this project based on a commercial Plan change will not be found in the Redevelopment Plan. A Redevelopment Plan Amendment following state guidelines and making required findings would be a part of this entitlement process. Hollywood heritage finds this approach would be precedent-setting; unsupportable; unnecessary; and have cumulative impacts. Pertinent sections which the DEIR must state and analyze are:

| Sec<br>409                    | <b>Design Review:</b> All rehabilitation undertaken in the Project Areadetermined by the Agency to be or architectural and/or historical significance shall be rehabilitated in accordance with the Secretary of the Interior Standards   |
|-------------------------------|---|
| Sec 505                       | <b>Environmental quality in residential historic districts:</b> Within portions of the Project Area designated for residential use there are clusters of single family homes and architecturally and/or historically significant buildings or groups of buildings. There is also a need for additional parking. Therefore, in order to enhance the environmental quality of residential areas Design(s) for Development may be adopted to: 1) Ensure that the scale, density, bulk and general architectural style of new development is compatible with the architectural and/or historical features of a neighborhood; 2) Reduce the permitted density of an area below that density otherwise permitted in order to preserve clusters of houses; and 3) Ensure that an appropriate amount of parking is provided for residents of the area |
| Sec<br>506.2.3                | <b>Public benefit required:</b> any development exceeding 4.5:1 FAR must have a binding written agreement (formerly with the Redevelopment Agency, now transferred to City Planning) to show how the project meets obligations for public purpose, defined as "such as the provision of additional open space, cultural facilities, public parking, or the rehabilitation of an architecturally or historically significant building; and document the contribution and cumulative impact of peak hour trips and of totaled floor area within the Regional Center Commercial designation.   |
| Sec<br>505.4<br>and<br>506.3: | <b>Design/permit</b> review: Agency must review commercial uses in residential areas and residential uses in commercial areas. Findings of conformance must be made, following analysis of stated requirements (This project does not meet stated requirements)   |
| Sec<br>511                    | <b>TDRs</b> "The Agency shall promulgate procedures for such transfer proposals(and shall) obtain adequate assurances that the building from which the density transfer is taken are preserved and the development on the site to which the density is transferred will occur in conformity with the Redevelopment Plan, the objectives of special districts as established by the Plan and if applicable, any adopted Design for Development"  |
| Sec<br>511                    | <b>Listing/Public Information:</b> "Agencyshall maintain publicly available list of all buildings within the Project Area which it determines to be architecturally and/or historically significant." Selma LaBaig District was recognized as an historic resource by CRA   |

| Sec<br>511     | <b>Protection requirement- delay of any kind of permit/ delay of demolition</b> : Buildings listed by CRA, CHM, CHRIS, and National Register deemed to be of architectural significance; eligible for procedures for design review for alterations and for delay of demolition for 180 days process, extendable to 360 days.  |
|----------------|---|
| Sec<br>511     | <b>Scorched Earth- bonus denial:</b> "The Agency shall deny requests for housing incentive units, development in the Regional Center Commercial designation above an FAR of 4.5:1 and variations for sites on which a structure determined by the agency to be significant was demolished after the adoption of this Plan or is proposed to be demolished". (Note exempts SB 1818 increase) |
| Sec<br>407.1.4 | <b>Design Review:</b> All development plans (whether public or private) shall be subject to review and approval by the Agency. IThe City of Los Angeles received this responsibility through the "Transfer Ordinance).  |

- <u>Redevelopment Plan-- Hollywood Core Transition District Plan and Sunset Plan:</u>
  - As well, the Redevelopment Plan outlines measures to protect fragile residential neighborhoods such as Afton Square, whose zoning was known 3 decades ago to be far too intense for the current homes. "D" conditions and zoning restrictions were purposely placed by City Planning and coordinated with CRA. Referral to the Cultural Heritage Commission, historic surveys, and lower density multifamily zoning were tools of CRA. The Redevelopment Plan sought to ameliorate the conflict of the Community Plan's density with existing development in these bungalow districts, although they were not officially listed until after the Redevelopment Plan adoption.. No building permits could be issued, without amelioration of damaging effects from traffic, etc. The recent adopted Sunset Plan—although not a perfect document at all—did formally reflect CRA's commitment to Afton Square California Register District as a protected neighborhood.

| Sec 505 | It is an important goal of this Plan to maximize the opportunity for housing choices.        |
|---------|--|
|         | Therefore, the Plan designates six residential categories in the Project Area which permit a |
|         | variety of housing choices in order to encourage the preservation and enhancement of the     |
|         | varied and distinctive residential character of the community, preserve stable single-family |
|         | residential neighborhoods, and provide multiple-family dwelling units. All new housing shall |
|         | be developed in accordance with the densities indicated below: For this project              |
|         | Medium: Up to 40 units per gross acre  |

- Non-conformance with Zoning
  - <u>Missing reference to multiple ZI's for the property</u>some listed in ZIMAS, some applicable but not listed
  - o Land Use: project proposes\_removal of residential zoning—thus non-compliant
  - <u>Height District: The Height District, especially on the residentially zoned lots, was 30'</u> for reason..
  - There is no justification, hardship, or genuine offsetting benefits. This exacerbates a damaging practice by LA City Planning of granting excess development rights to individual developers, effectively "taking" rights from other property owners. The cumulative effect of all these projects must be quantified now in this EIR.

**IV:** Cultural Resources: As noted below, the DEIR misses the special nature and significance of these specific bungalows; the necessity of a full evaluation of District features and effects on the District as a whole; and misses the special emphasis in planning handled for 35 years by the CRA to keep this rare and remaining Hollywood historic district intact. We recommend that the technical report appendix and the DEIR be updated as follows. Right now we recommend clearing up the many inconsistencies, and the actual proposals for the bungalows is unclear.

1. <u>Buildings to be demolished</u>: Hollywood Heritage has no comment on the findings regarding addresses 6272 De Longpre; 1330 Vine Street; 1348 Vine St; and 6241 Afton.

- 2. <u>Standard of Review</u>: Hollywood Heritage asserts that the EIR should reflect a standard of review which is not delimited—not solely a review for "significant adverse effect". Compliance with the Secretary of the Interior Standards is required. The DEIR must include this nuance.
- 3. <u>New construction proposed in historic district—requires evaluation in EIR</u>: The proposed large scale Project proposed on Vine St. does not need to be evaluated as "new construction" in the Historic District. However, the extension of modern paving materials and changes to landscaping—shown preliminarily in Project drawings and crossing into the District should be changed. If those ideas are proposed to go forward, then Hollywood Heritage finds them non-conforming with the Standards; the effect must be staed and noted in the DEIR
- 4. <u>Uniqueness and importance of bungalows- missed in technical Report and DEIR</u>: Within the Afton Square Historic District, the identified six (6) one-story wood clad bungalows constitute over half of the 12 bungalows of similar architectural type in the district. These building types are represented on the western-most portion of the district, and define a unique residential character within the district as a whole. Analysis to identify patterns and characteristics within the district should be performed to accurately identify impacts to the historic district.
- 5. <u>Afton Square "district features" must be clearly defined in the DEIR</u>: Afton Square Historic District connects it to Hollywood's history and its socioeconomic and cultural context through <u>both</u> the vernacular architecture of the era <u>and</u> through the District urban features. The DEIR misses this important analysis. These narrow streets laid out with homes of the "teens" and their driveways, offers an ensemble that is a powerful reflection of Hollywood's roots. The District is more than isolated bungalows to be moved without respect for their setting and their presence for their neighbors. Districts themselves are acknowledged to have character-defining features (outlined here) which must be clearly described in the FEIR:
  - a. Characteristic lot size (frontage and depth) with consistency in front, side, and rear yards;
  - b. Street section with paved section, flanking parking, sidewalks, concrete driveways to the rear garages;
  - c. Landscaping, with street trees, low fencing, and lawns;
  - d. Characteristic one or two story building massing, with roof massing described; characteristic use of front porches', ,
  - e. Historic street lighting continuity
  - f. Materials, coloration, and aesthetics of the historic architectural styles. (Just as HPOZ's have color as an important District feature, these should also,.)
- 2. <u>DEIR must describe how and whether the Project retains District character-defining features</u>; The DEIR fails to evaluate proposed changes to the bungalow use and locations. In fact, drawings and text are inconsistent from Technical Report to DEIR. As both Afton Place and deLongpre Ave have District building across from these bungalows, physical changes to setbacks, locations of side yards, etc on the Project site affects other District properties. Alterations as suggested in the project drawings and the Technical Appendix are not in keeping with the Standards. Those proposals should be eliminated from the FEIR. (Hollywood Heritage can provide the legal basis for this on request).
- 3. <u>Preservation Plan for 6 Bungalows a Mitigation Measure:</u> This CUL-PDF is a positive feature. We believe that it must be a Mitigation Measure, due to the relocation and reinstallation of bungalows that is proposed. The Preservation Plan will include a full description of the buildings' character-defining features and their current condition, as well as District character-defining features:
  - a. The Preservation Plan Mitigation Measure must require review and OHR approval <u>prior</u> <u>to</u> issuance of any building or alteration permits.
  - b. Buildings' relocations must be subject to alteration permits, having architectural plans clearly documenting existing character-defining features-to-remain. Materials such as

brick will be salvaged, not demolished; concrete must be salvaged for chemical testing. Storage off the project site should not be allowed. Protection measures for the existing historic fabric must be prescribed. No requirement for structural upgrades is required consult the State Historic Building Code and Hollywood Heritage.

- c. The report should be prepared by a qualified historic architect with 10 years minimum experience.; monitored by a qualified monitor (multiple site visits during preparation for relocation) and the Office of Historic Resources.
- d. Prior to acceptance by OHR, the report should be available for public review and public input be required. Homes that have been stripped or badly treated could be reconstructed based on evidence or vernacular examples.
- 4. <u>Proposed demolition of garages</u>: Hollywood heritage is still formulating a position on demolition of garages.
- 5. <u>Disassembly and new locations for the bungalows</u>: Hollywood Heritage finds that the proposed new locations for bungalows in not compliant with the Secretary of the Interior Standards.
  - a. A Feasibility Study by qualified construction managers, historic architect, and building mover should evaluate possible moving schemes and the security of the buildings in each option.
  - b. Bungalows should return to their prior locations
  - c. Bungalows should have distinct front, side, and rear yards, in keeping with the historic District urban patterning. That area may be counted by the Project as its "open space", but it should not be used by commercial tenant, the public, or condo dwellers.
  - d. 6255 Afton should return to its current location.
  - e. Bungalows should have their own back yards and side yards- as required for fire safety; habitability; and normalcy.
- 6. <u>Afton Square Historic District formally recognized by National Register listed on California Register in 1998</u>: By 1994 four of Hollywood's historic neighborhoods had been lost to new development, reducing by <sup>1</sup>/<sub>2</sub> the intact remaining area and type. These neighborhoods were primarily made up of working class housing, that provided shelter for motion picture industry employees and support services. (The upper middle class residential districts in the hillsides did not suffer the same fate.) In 1994, due to evaluations required by the State of California and FEMA, the previously identified districts of Vista del Mar/ Carlos, Serrano, and Selma-LeBaig were formally determined eligible for the National Register of Historic Places through consent agreement between the State of Historic Preservation and the Keeper of the National Register The Afton/DeLongpre district, which had been recognized by CRA in its 1986 survey, joined this group in 1995. By virtue of that status, the districts were included in the California Register when it was implemented in 1998.
- 7. A Statement of Over-riding Consideration cannot be used for Cultural Resources, as the project is in a very conceptual stage and can be easily altered to avoid any non-conformancw with the Standards and any significant effect on the District.
- 8. <u>Cumulative effect</u>: The DEIR must acknowledge the cumulative degradation of the historic setting due to other new insensitive projects proposed in the near vicinity. A stellar job of restoration and compatible treatment of the historic district and these 6 bungalows will itself have a cumulative effect. Anything less is a dangerous precedent for the other vulnerable historic districts in Hollywood.

<u>**Traffic:**</u> Hollywood Heritage reserves the right to add in our analysis for this Chapter of the DEIR in the future.

- I. Effect of traffic and parking structure entrances on Historic District:
- 2. Effect of traffic on safety and street parking for the Historic District

3. <u>Missing calculations</u>: The DEIR omits calculations required by the Redevelopment Plan. There was a solid rationale in the Hollywood Community Plan to condition any increases in Regional Center density to a completion or a solution for infrastructure improvements—especially roads and parking. CRA did a considerable amount of work, and their 2:1 FAR calculations are available to update .There was a solid rationale CRA be3ing required to do the monitoring and the improvements, or to re-allocate development locations and implement real solutions. CRA did quite a bit of this—now the mandate is transferred to the City of Los Angeles as of 2019:

| Redev   | Monitoring traffic: Required to make annual reports on buildout of FAR in Regional Center  |  |  |  |
|---------|--|--|--|--|
| Plan    | relative to traffic metrics; required to review all density increases above 4.5:1 and when |  |  |  |
|         | Regional Center density reaches 2:0:1 FAR to establish specific methods and mechanisms to  |  |  |  |
| Sec     | acquire open space or otherwise restrict or decrease density                               |  |  |  |
| 506.2.3 | The 2:1 FAR threshold has been exceeded.   |  |  |  |
| 1       |  |  |  |  |

#### Greenhouse Gases

The EIR must quantify the effect of demolition, excavation, and new construction on greenhouse gasses.



523 West Sixth Street, Suite 826 Los Angeles, CA 90014

213 623 2489 OFFICE 213 623 3909 FAX laconservancy.org

July 22, 2022

Sent Electronically

Rey Fukuda City of Los Angeles, Department of City Planning 221 N. Figueroa Street, Suite 1350 Los Angeles, CA 90012 Email: <u>rey.fukuda@lacity.org</u>

#### RE: <u>Draft Environmental Impact Report on the 1360 N. Vine</u> <u>Street Project, ENV-2016-3778-EIR</u>

Dear Rey Fukuda:

On behalf of the Los Angeles Conservancy, I am writing to comment on the Draft Environmental Impact Report (EIR) on the 1360 N. Vine Street Project (Project). The Project, which is within the boundaries of the California Register Afton Square Historic District, proposes to develop a mixed-use building on an 81,050 square-foot site with one of two options: a Residential Option and an Office Option.

The Residential Option would develop a new high-rise building with four levels of subterranean parking with up to 429 new residential units, including 36 units for very low income households, a grocery store, and commercial retain space. This option would rehabilitate and adaptively reuse six contributing bungalows for either restaurant use or twelve residential units.

The Office Option would construct a new high-rise building with eight levels of subterranean parking, 463,521 square-feet of office uses, as well as restaurant uses. Under this option, the contributing bungalows would be rehabilitated and adaptively reused as either restaurant space or nine residential units

The Conservancy recognizes the less than significant impacts to historic resources as assess by GPA Consulting. However, we believe Residential Option Alternative 3 is the most preferable as it is more compatible with the adjacent Afton Square Historic District because of its lower scale residential use while still meeting most of the project goals. We formally request a meeting with the project team to discuss the topics detailed below.



# I. Afton Square Historic District is listed on the California Register of Historic Places

The Afton Square Historic District was designated a California Register historic district following the 1994 earthquake and remains eligible for listing on the National Register. The period of significance for the district is 1916-1939 representing its period of development. In 1914, the tract opened for sale; however, property development was slow comparatively as revealed through the Sanborn maps provided in the Historic Resources Technical Report. When the Historic District was determined eligible for listing, there were fifty-one contributing and twelve non-contributing properties for a total of 63 properties. The Historic District with its diversity of housing types conveys a significant history of early Hollywood residential development. Like many other Historic Districts and Historic Preservation Overlay Zones (HPOZ), Afton Square is an integral source of naturally occurring affordable housing.

Afton Square is one of three California Register Historic Districts in the former Hollywood California Redevelopment Agency (CRA) area. With weaker protections compared to HPOZs, Hollywood's California Register Historic Districts have seen large-scale development projects encroach on these areas. Often, the scale and massing of new development that occurs on the district boarders are not compatible with the adjacent historic built environment. While these projects fall outside the boundaries, they have the potential to affect a district's integrity by altering its feeling and setting. This is primarily an issue for districts that are low-scale multifamily and single-family residences. Special consideration should be given to districts in areas with development pressures such as Hollywood.

Additionally, the movement of contributing structures within a historic district should be used only as a last resort. Despite the Project's less than significant impacts to historic resources, a precedent may be set for future development that pursues rearranging buildings in a less sensitive manner.

#### II. Bungalows should remain as housing

The Conservancy urges the applicant to rehabilitate and maintain the residential use of the historic bungalows within the Afton Square Historic District. As the City of Los Angeles grapples with an unprecedented housing crises, it's imperative that the applicant retain existing housing stock within the project site. Additionally, through maintaining these residential units rehabilitation efforts will continue to convey Afton Square's significance as an early Hollywood housing tract while utilizing existing housing stock.

# III. Residential Option Alternative 3 and Office Option Alternative 4 are the Environmentally Superior Alternative

The Draft EIR presents four Project Alternatives including the No Project/No Build Alternative. Of these, Residential Option Alternative 3: Development in Accordance with Existing Zoning and Hollywood Community Plan Update Alternative as well as Office Option Alternative 4: Development in Accordance with Hollywood Community Plan Update Alternative are deemed



the environmentally superior alternatives. Both projects would substantially reduce the height of the proposed Project to a more compatible scale with the adjacent historic district while meeting most of the Project objectives.

As proposed Residential Option Alternative 3 would reduce the building height from 32-stories to 8-stories while providing 422 residential units of which 60 units are reserved for affordable housing. Additionally, this alternative would retain commercial spaces on the ground floor. As with the proposed Project, this alternative would relocate the six bungalows to the eastern portion of the project site and adaptively reuse. Furthermore, Residential Option Alternative 3 reduces the Project's footprint and has the opportunity to provide a more effective transition between higher density new development and lower-scale historic resources.

Office Option Alternative 4 would redevelop the site with a mid-rise, six-story mixed-use building consisting of office uses and ground floor restaurant uses. The six bungalows would be relocated to the eastern portion of the project site and reused as nine residential units.

Of the two environmentally superior alternatives, the Conservancy recommends the applicant pursue Residential Option Alternative 3 as a means to increase housing stock through a Project that is more compatible with the existing historic environment. The fact that an environmentally superior alternative may be more costly or fails to meet all project objectives does not necessarily render it infeasible under CEQA.<sup>1</sup> Reasonable alternatives must be considered "even if they substantially impede the project or are more costly."<sup>2</sup> Likewise, findings of alternative feasibility or infeasibility must be supported by substantial evidence.<sup>3</sup>

#### IV. The Conservancy requests a meeting with the Project team.

We appreciate the project team's willingness to meet with Conservancy staff on previous projects and we request a meeting to discuss the proposed plan further. We would appreciate the opportunity to engage with the developer and its team to better understand the needs and goals, and assess how the Project may be designed more sensitively with the historic built environment for a greater win-win outcome.

#### V. Conclusion

The Conservancy recommends the applicant pursue Residential Option Alternative 3: Development in Accordance with Existing Zoning and Hollywood Community Plan Update Alternative. This alternative, along with Office Option Alternative 4, are deemed the environmentally superior alternative. Both options would greatly reduce the Project size while meeting most of the Project objectives.

<sup>&</sup>lt;sup>3</sup> Public Resources Code § 21081.5.



<sup>&</sup>lt;sup>1</sup> Guideline § 15126.6(a).

<sup>&</sup>lt;sup>2</sup> San Bernardino Valley Audubon Soc'y v. County of San Bernardino (1984), 155 Cal.App.3d 738, 750; Guideline § 15126(d)(1).

#### About the Los Angeles Conservancy:

The Los Angeles Conservancy is the largest local historic preservation organization in the United States, with nearly 5,000 members throughout the Los Angeles area. Established in 1978, the Conservancy works to preserve and revitalize the significant architectural and cultural heritage of Los Angeles County through advocacy and education.

Please do not hesitate to contact me at (213) 430-4203 or <u>afine@laconservancy.org</u> should you have any questions or concerns.

Sincerely,

Avian Scott Fine

Adrian Scott Fine Senior Director of Advocacy

cc: Hollywood Heritage Craig Bullock, Planning Director for Council District 13





T 510.836.4200 F 510.836.4205 1939 Harrison Street, Ste. 150 Oakland, CA 94612 www.lozeaudrury.com rebecca@lozeaudrury.com

Via Email

June 9, 2022

Rey Fukuda, Planning Assistant City of Los Angeles Planning Department 221 N. Figueroa Street, Suite 1350 Los Angeles, CA. 90012 rey.fukuda@lacity.org Vince Bertoni, AICP, Director City of Los Angeles Planning Department 200 N. Spring Street, Room 525 Los Angeles, CA 90012 vince.bertoni@lacity.org

Holly L. Wolcott, City Clerk City of Los Angeles 200 N. Spring Street, Room 360 Los Angeles, CA 90012 cityclerk@lacity.org

#### Re: CEQA and Land Use Notice Request for 1360 N. Vine Street Project (ENV-2016-3778-EIR; SCH 2017061063)

Dear Mr. Fukuda, Mr. Bertoni, and Ms. Wolcott:

I am writing on behalf of Supporters Alliance for Environmental Responsibility ("SAFER"), regarding the 1360 N. Vine Street Project (ENV-2016-3778-EIR; SCH 2017061063), including all actions related or referring to the proposed construction of a mixed-use building on an 81,050 square foot site with one of two options: a Residential Option (high-rise building with up to 429 residential units and four levels of subterranean parking) and an Office Option (high-rise building with approximately 463,521 square feet of office uses and eight levels of subterranean parking), located at 1360 North Vine Street in the City of Los Angeles ("Project").

We hereby request that the City of Los Angeles ("City") send by electronic mail, if possible or U.S. Mail to our firm at the address below notice of any and all actions or hearings related to activities undertaken, authorized, approved, permitted, licensed, or certified by the City and any of its subdivisions, and/or supported, in whole or in part, through contracts, grants, subsidies, loans or other forms of assistance from the City, including, but not limited to the following:

- Notice of any public hearing in connection with the Project as required by California Planning and Zoning Law pursuant to Government Code Section 65091.
- Any and all notices prepared for the Project pursuant to the California Environmental Quality Act ("CEQA"), including, but not limited to:
  - Notices of any public hearing held pursuant to CEQA.
  - Notices of determination that an Environmental Impact Report ("EIR") is required for the Project, prepared pursuant to Public Resources Code Section 21080.4.

June 9, 2022 CEQA and Land Use Notice Request for 1360 N. Vine Street Project (ENV-2016-3778-EIR; SCH 2017061063) Page 2 of 2

- Notices of any scoping meeting held pursuant to Public Resources Code Section 21083.9.
- Notices of preparation of an EIR or a negative declaration for the Project, prepared pursuant to Public Resources Code Section 21092.
- Notices of availability of an EIR or a negative declaration for the Project, prepared pursuant to Public Resources Code Section 21152 and Section 15087 of Title 14 of the California Code of Regulations.
- Notices of approval and/or determination to carry out the Project, prepared pursuant to Public Resources Code Section 21152 or any other provision of law.
- Notices of any addenda prepared to a previously certified or approved EIR.
- Notices of approval or certification of any EIR or negative declaration, prepared pursuant to Public Resources Code Section 21152 or any other provision of law.
- Notices of determination that the Project is exempt from CEQA, prepared pursuant to Public Resources Code section 21152 or any other provision of law.
- Notice of any Final EIR prepared pursuant to CEQA.
- Notice of determination, prepared pursuant to Public Resources Code Section 21108 or Section 21152.

Please note that we are requesting notices of CEQA actions and notices of any public hearings to be held under any provision of Title 7 of the California Government Code governing California Planning and Zoning Law. This request is filed pursuant to Public Resources Code Sections 21092.2 and 21167(f), and Government Code Section 65092, which require local counties to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

Please send notice by electronic mail or U.S. Mail to:

Rebecca Davis Molly Greene Colby Gonzales Lozeau Drury LLP 1939 Harrison Street, Suite 150 Oakland, CA 94612 rebecca@lozeaudrury.com molly@lozeaudrury.com colby@lozeaudrury.com

Please call if you have any questions. Thank you for your attention to this matter.

Sincerely,

Molly Grune

Molly Greene Lozeau | Drury LLP



T 510.836.4200 F 510.836.4205 1939 Harrison Street, Ste. 150 Oakland, CA 94612 www.lozeaudrury.com Amalia@lozeaudrury.com

Via Email

July 25, 2022

Rey Fukuda, City Planner Department of City Planning City of Los Angeles 200 N. Spring Street Los Angeles, CA 90012 rey.fukuda@lacity.org

# Re: Comment on Draft Environmental Impact Report, 1360 N. Vine Street Project (SCH 2017061063; ENV-2016-3778-EIR)

Dear Mr. Fukuda:

I am writing on behalf of Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Draft Environmental Impact Report ("DEIR") prepared for the 1360 N. Vine Street Project (SCH 2017061063; ENV-2016-3778-EIR), including all actions related or referring to the proposed construction of a 361-foot high-rise building with four levels of subterranean parking consisting of up to 429 residential units or 303-foot high rise office building with eight levels of subterranean parking located at 1360 North Vine Street in the City of Los Angeles ("Project").

After reviewing the DEIR, we conclude that the DEIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts. SAFER requests that the Planning Division address these shortcomings in a revised draft environmental impact report ("RDEIR") and recirculate the RDEIR prior to considering approvals for the Project.

We reserve the right to supplement these comments during review of the Final EIR for the Project and at public hearings concerning the Project. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997).

Sincerely,

amalia Bonky Frientes

Amalia Bowley Fuentes



### VIA E-MAIL

July 25, 2022 Rey Fukuda, City Planner City of Los Angeles, Department of City Planning 221 N. Figueroa Street, Suite 1350 Los Angeles, CA 90012 Em: rey.fukuda@lacity.org

> RE: Draft Environmental Impact Report for the City of Los Angeles, 1360 N. Vine Street Project; Case Nos. ENV-2016-3778-EIR; CPC-2016-3777-GPA-VZC-HD-BL-DB-MCUP-ZAD-SPR; CPC-2016-3775-DA; VTT-74613 (SCH No. 2017061063).

Dear Rey Fukuda:

On behalf of the Southwest Regional Council of Carpenters ("**SWRCC**" or "**Southwest Carpenters**"), my Office is submitting these comments on the Draft Environmental Impact Report ("**Draft EIR**" or "**DEIR**") for the 1360 N. Vine Street Project ("**Project**"), which is requesting various approvals and actions from the City of Los Angeles ("**City**" or "**Lead Agency**").

The Project is proposed at various commercial and residential zoned lots at: 1360, 1358, 1356, 1354, 1352, 1350, 1348, 1334, and 1330 N. Vine Street, 6274, 6272, 6268, 6262, 6264, 6256, 6258, 6256 <sup>1</sup>/<sub>4</sub> and <sup>1</sup>/<sub>2</sub>, 6254 and 6254 <sup>1</sup>/<sub>2</sub> W. De Longpre Avenue, 6265, 6261, 6255, 6251, 6249, 6253, and 6253 <sup>1</sup>/<sub>2</sub>, 6245, and 6241 1-8 W. Afton Plane, Los Angeles, CA 90028 ("**Project Site**").

The Southwest Carpenters is a labor union representing more than 50,000 union carpenters in six states, including California, and has a strong interest in well-ordered land use planning, addressing the environmental impacts of development projects and equitable economic development.

Individual members of the Southwest Carpenters live, work and recreate in the area and surrounding communities and would be directly affected by the Project's environmental impacts. City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 2 of 39

SWRCC expressly reserve the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov't Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

SWRCC incorporate by reference all comments raising issues regarding the Project and its CEQA compliance, submitted prior to the Project approvals. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

Moreover, SWRCC request that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

The City should require community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-thejob experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

(March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling; see **Exhibits A-C**).

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

... labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.<sup>1</sup>

Recently, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component" can result in air pollutant reductions.<sup>2</sup>

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to "promote local hiring . . . to help achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions."<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* <u>https://laborcenter.berkeley.edu/</u><u>wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf</u>.</u>

<sup>&</sup>lt;sup>2</sup> South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* <u>http://www.aqmd.gov/docs/defaultsource/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10</u>.

<sup>&</sup>lt;sup>3</sup> City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* <u>https://www.hayward-ca.gov/sites/default/files/documents/General Plan FINAL.pdf</u>.

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 4 of 39

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to require that the City "[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint labor-management training programs, . . ."<sup>4</sup> In addition, the City of Hayward requires all projects 30,000 square feet or larger to "utilize apprentices from state-approved, joint labor-management training programs."<sup>5</sup>

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.<sup>6</sup>

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.<sup>7</sup> Some municipalities have tied local hire and skilled and trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

<sup>&</sup>lt;sup>4</sup> City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, available at <u>https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf</u>.

<sup>&</sup>lt;sup>5</sup> City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

<sup>&</sup>lt;sup>6</sup> California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* <u>https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf</u>.

<sup>&</sup>lt;sup>7</sup> Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* <u>http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf</u>.

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

The City should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and mitigate greenhouse gas, air quality and transportation impacts.

Also, the City should require the Project to be built to standards exceeding the current 2019 California Green Building Code and 2020 County of Los Angeles Green Building Standards Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

# I. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

## A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. (CEQA Guidelines § 15002(a)(1).) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed selfgovernment.' [Citation.]" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.) The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392; *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 503 [same].) City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 6 of 39

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. (CEQA Guidelines § 15002(a)(2) and (3); see also, Berkeley Keep Jets Over the Bay Committee v. Board of Port Com'rs (2001) 91 Cal.App.4th 1344, 1354 ("Berkeley Jets"); Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553; Laurel Heights Improvement Ass'n v. Regents of the University of California (1988) 47 Cal.3d 376, 400.) The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." (CEQA Guidelines § 15002(a)(2).) If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA Pub. Res. Code § 21081. (CEQA Guidelines § 15092(b)(2)(A–B).)

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to '*uncritically* rely on every study or analysis presented by a project proponent in support of its position.' A 'clearly inadequate or unsupported study is entitled to no judicial deference."" (*Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12).) Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. (*Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102, 131.) As the court stated in *Berkeley Jets*, 91 Cal.App.4th at 1355:

A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.

"The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been taken into account. [Citation.] For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 7 of 39

adequate opportunity to comment on that presentation before the decision to go forward is made." (*Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal. 4th 412, 449–450).)

### • Negative Declaration or Mitigated Negative Declaration.

Third, CEQA and CEQA Guidelines are strict and unambiguous about when a Negative Declaration ("**ND**") or a Mitigated Negative Declaration ("**MND**") may be used. A public agency must prepare an EIR whenever substantial evidence supports a "fair argument" that a proposed project "may have a significant effect on the environment." (Pub. Res. Code §§ 21100, 21151; Guidelines §§ 15002(f)(1) & (2), 15063; *No Oil, Inc. v. City of Los Angeles* ("*No Oil*") (1974) 13 Cal.3d 68, 75; *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 111-112.) "Said another way, if a lead agency is presented with a fair argument that a project <u>may</u>" – [not "will"] – "have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect." (Guidelines §§ 15064(f)(1) & (2) (emph. added); *No Oil, supra*, 13 Cal.3d 68, 75.)

"Substantial evidence" means "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (Guidelines § 15384(a).) "Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous...." (Pub. Res. Code § 21080(e)(2); see also Guidelines § 15384(a).)

The fair argument standard is a "low threshold" test for requiring the preparation of an EIR. (*No Oil, supra*, 13 Cal.3d at 84; *County Sanitation Dist. No. 2 of Los Angeles County v. County of Kern* (2005) 127 Cal.App.4th 1544, 1579 ("*County Sanitation*").) It "requires the preparation of an EIR where 'there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial . . . ." (*County Sanitation, supra*, 127 Cal.App.4th at 1580, quoting Guidelines § 15063(b)(1).) A lead agency may adopt an MND only if "there is <u>no</u> substantial evidence that the project will have a significant effect on the environment[]." (Guidelines § 15074(b) (emphasis added).)

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 8 of 39

Evidence supporting a fair argument of a significant environmental impact triggers preparation of an EIR regardless of whether the record contains contrary evidence. (*League for Protection of Oakland's Architectural and Historical Resources v. City of Oakland* (1997) 52 Cal.App.4th 896, 904-905.) "Where the question is the sufficiency of the evidence to support a fair argument, 'deference to the agency's determination is not appropriate ...." (*County Sanitation*, 127 Cal.App.4th at 1579, (emphasis added), quoting *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1317-1318.)

Further, it is the duty of the lead agency, not the public, to conduct the proper environmental studies. "The agency should not be allowed to hide behind its own failure to gather relevant data." (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.) "Deficiencies in the record may actually enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences." (*Id.*) The "lack of study . . . 'enlarge[s] the scope' of the fair argument which may be made 'based on the limited facts in the record' [Cit. omit.]" (*Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1382.)

Thus, refusal to complete recommended studies lowers the already low threshold to establish a fair argument. The "court may not exercise its independent judgment on the omitted material by determining whether the ultimate decision of the lead agency would have been affected had the law been followed.... The remedy for this deficiency was for the trial court to have issued a writ of mandate ...." (*Environmental Protection Information Center v. California Dept. of Forestry* (2008) 44 Cal.4th 459, 486.)

Both the review for failure to follow CEQA's procedures and the fair argument test are questions of law, i.e., *de novo* standard of review applies. (*Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435.) "Whether the agency's record contains substantial evidence that would support a fair argument that the project may have a significant effect on the environment is treated as a **question of law**. (*See, e.g., Consolidated Irrig. Dist. v. City of Selma* (2012) 204 Cal.App.4th 187, 207." (Kostka and Zischke, Practice Under the Environmental Quality Act, (2017, 2d ed.), at § 6.76 (emphasis added).) The Court gives no deference to the agency in the MND context.

In an MND context, the agency or the court should not *weigh* expert testimony or decide on the credibility of evidence; such weighing is for an EIR. As stated in *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 935:

Unlike the situation where an EIR has been prepared, neither the lead agency nor a court may "weigh" conflicting substantial evidence to determine whether an EIR must be prepared in the first instance. Guidelines section 15064, subdivision (f)(1) provides in pertinent part: "if a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect. (*No Oil* [, *supra*,] 13 Cal.3d 68 [118 Cal.Rptr. 34, 529 P.2d 66])." Thus, as *Claremont* itself recognized, "Consideration is not to be given contrary evidence supporting the preparation of a negative declaration. (*City of Carmel-by-the Sea v. Board of Supervisors* (1986) 183 Cal.App.3d 229, 244–245 [227 Cal.Rptr. 899]; *Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988 [165 Cal.Rptr. 514]." (*Claremont, supra,* 37 Cal.App.4th at p. 1168, 44 Cal.Rptr.2d 288.

### (Pocket Protectors, 124 Cal.App.4th at 935.)

In cases where it is not clear whether there is substantial evidence of significant environmental impacts, CEQA requires erring on the side of a "preference for resolving doubts in favor of environmental review." (*Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 332.) "The foremost principle under CEQA is that the Legislature intended the act to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259.)

### • CEQA Exemptions and Exceptions Thereto.

Fourth, where the Lead Agency chooses to dispose of CEQA by asserting a CEQA exemption, it has a duty to support its CEQA exemption findings by substantial evidence, including evidence that there are no applicable exceptions to exemptions. This duty is imposed by CEQA and related case law. (Guidelines § 15020 ["The Lead Agency shall not knowingly release a deficient document hoping that public comments will correct defects in the document."]; *see also, Citizens for Environmental Responsibility v. State ex rel. 14th Dist. Ag. Assn.* (2015) 242 Cal.App.4th 555, 568 ["The lead agency has the burden to demonstrate that a project falls within a categorical exemption and the agency's determination must be supported by substantial evidence"]; *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720, 732 [agency is required to

consider exemption exceptions "where there is some information or evidence in the record that the project might have a significant impact."]

The duty to support CEQA (and/or exemption) findings with substantial evidence is also required by the Code of Civil Procedure and case law on administrative or traditional writs. Under Code of Civil Procedure ("CCP") § 1094.5(b), an abuse of discretion is established if the decision is not supported by the findings, or the findings are not supported by the evidence. CCP § 1094.5(b). In *Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515 ("*Topanga*"), our Supreme Court held that "implicit in [Code of Civil Procedure] section 1094.5 is a requirement that the agency which renders the challenged decision must set forth findings to bridge the analytic gap between the raw evidence and ultimate decision or order." The agency's findings may "be determined to be sufficient if a court 'has no trouble under the circumstances discerning the analytic route the administrative agency traveled from evidence to action." *West Chandler Blvd. Neighborhood Ass'n vs. City of Los Angeles* (2011) 198 Cal.App.4th 1506, 1521- 1522. However, "mere conclusory findings without reference to the record are inadequate." *Id.* at 1521 (finding city council findings conclusory, violating *Topanga*).

Further, CEQA exemptions must be narrowly construed to accomplish CEQA's environmental objectives. *California Farm Bureau Federation v. California Wildlife Conservation Bd.* (2006) 143 Cal.App.4th 173, 187 ("*California Farm*"); *Save Our Carmel River v. Monterey Peninsula Water Management Dist.* (2006) 141 Cal.App.4th 677, 697 ("These rules ensure that in all but the clearest cases of categorical exemptions, a project will be subject to some level of environmental review.")

Finally, CEQA procedures reflect a preference for resolving doubts in favor of environmental review. (*See*, Pub. Res. Code § 21080(c) [dispose of EIR only if "there is no substantial evidence, in light of the *whole record* before the lead agency, that the project *may* have a significant effect on the environment" or "revisions in the project .... Would avoid the effects or mitigate the effects to a point where *clearly* no significant effect on the environment would occur, *and* ...." Emph. added.]; Guidelines §§ 15061(b)(3) [common sense exemption only "where it can be seen with certainty ...."]; 15063(b)(1) [prepare an EIR "if he agency determines that there is substantial evidence that *any* aspect of the project, either *individually* or *cumulatively, may* cause a significant effect on the environment, *regardless* of whether the overall effect of the project is adverse or beneficial"]; 15064(h) [need to consider cumulative impacts of

past, other current and "probable future" projects]; 15070 [prepare a negative declaration only if "no substantial evidence, *in light of the whole record* before the agency, that the project *may* have a significant effect on the environment," or project "revisions would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, *and* (2) there is no substantial evidence, in light of the whole record before the project, that the project as revised *may* have a significant effect on the environment" emph. added]; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83-84 [interpret "significant impacts" so as "to afford the fullest possible protection"].)

B. <u>Due to the COVID-19 Crisis, the Lead Agency Must Adopt a Mandatory</u> <u>Finding of Significance that the Project May Cause a Substantial Adverse</u> <u>Effect on Human Beings and Mitigate COVID-19 Impacts.</u>

CEQA requires that an agency make a finding of significance when a Project may cause a significant adverse effect on human beings. PRC § 21083(b)(3); CEQA Guidelines § 15065(a)(4).

Public health risks related to construction work require a mandatory finding of significance under CEQA. Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.<sup>8</sup>

Southwest Carpenters recommend that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. Southwest Carpenters request that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Carpenters' experience with safe construction site work practices, Southwest Carpenters recommend that the Lead Agency require that while construction activities are being conducted at the Project Site:

<sup>&</sup>lt;sup>8</sup> Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* <u>https://www.sccgov.org/sites/</u> covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

#### **Construction Site Design:**

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

#### **Testing Procedures:**

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.

- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

#### <u>Planning</u>

• Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> See also, The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, available at <u>https://www.cpwr.com/sites/default/files/NABTU</u> <u>CPWR Standards COVID-19.pdf</u>; Los Angeles County Department of Public Works

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 14 of 39

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Lead Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.<sup>10</sup>

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The City should require the Project to be built using a workforce trained in ICRA protocols.

#### II. THE PROJECT MAY BE INCONSISTENT WITH THE DENSITY BONUS LAW AND CANNOT BE APPROVED.

Per the 2017 Initial Study, 19 affordable units (out of 35) will be developed *offsite* at a to be determined location. The 2022 Draft EIR provides no such disclosure and is silent about the location of the affordable units in the Project.

To the extent, the Project will provide 19 affordable units *offsite*, those 19 units do not qualify for the density bonus and cannot count towards the 11% required affordable housing under Govt. Code § 65915(i), which provides:

For the purpose of calculating a **density bonus**, the **residential units** shall be on **contiguous sites** that are the subject of one development application, but do not have to be based upon individual subdivision maps or parcels. The density bonus shall be permitted in geographic areas of

<sup>(2020)</sup> Guidelines for Construction Sites During COVID-19 Pandemic, *available at* <u>https://dpw.lacounty.gov/building-and-safety/docs/pw\_guidelines-construction-sites.pdf</u>.

<sup>&</sup>lt;sup>10</sup> For details concerning Southwest Carpenters's ICRA training program, *see* <u>https://icrahealthcare.com/</u>.

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 15 of 39

the housing development other than the areas where the units for the lower income households are located.

#### (Emph. added.)

Further, Govt. Code § 65915(b)(1) provides:

(b)(1) A city, county, or city and county **shall grant** one density bonus, the amount of which shall be as specified in subdivision (f), and, **if requested** by the applicant and consistent with the applicable requirements of this section, **incentives** or **concessions**, as described in subdivision (d), **waivers** or **reductions** of development standards, as described in subdivision (e), and **parking** ratios, as described in subdivision (p), **when** an applicant for a housing development seeks and agrees **to construct** a housing development, excluding any units permitted by the density bonus awarded pursuant to this section, **that will contain** at least any one of the following [affordable housing units]...

#### (Epmh. Added.)

Hence, the Developer must "construct" a housing development, that "will contain" affordable units. As such, the rehabilitation or off-site development do not qualify the "housing development" for the requested density bonus or related incentives, concessions, waivers.

Further, the EIR's project description suggests that the R5 zoning 200 sq/unit size or a 400 sq/unit is appropriate in this Project (DEIR, p. II-9—10). However, this may not be the case under the Replacement Requirement of the Density Bonus Law. Thus, under Govt. Code § 65915(c)(3)(A)-(D), a Project that seeks to demolish rent-stabilized units or units that are or have been rented to low-income people, must *replace* those units in the *equivalent* size, which is further defined as equivalent in the number of bedrooms and the size of units. Govt. Code also provides for a rebuttable presumption that people occupying the units to be demolished had low income.

Based on Zimas report, the Project site involves the following residential buildings with their number of bedrooms, size, and year of construction:

| Address                     | Bedrooms                  | Sq. Ft.      | Year Built | Rent<br>Stabilized |
|-----------------------------|---------------------------|--------------|------------|--------------------|
| 6241 1-8 W<br>Afton Pl.     | 13 bedrooms               | 6286 sq. ft. | 1959       | Yes                |
| 6245 W. Afton<br>Pl.        | 3 bedrooms                | 1788 sq. ft. | 1919       | No                 |
| 6254 De<br>Longpre          | 3 bedrooms                | 1508 sq. ft. | 1919       | No                 |
| 6249 to 6251 W.<br>Afton    | Building 1: 3<br>bedrooms | 1300 sq. ft. | 1939       | Yes                |
|                             | Building 2: 2<br>bedrooms | 1629 sq. ft. | 1919       | Yes                |
|                             | TOTAL: 5<br>bedrooms      |              |            |                    |
| 6255 W. Afton<br>Pl.        | 3 bedrooms                | 1564 sq. ft. | 1920       | No                 |
| 6256 and 5258<br>De Longpre | Building 1: 3<br>bedrooms | 1540 sq. ft. | 1953       | Yes                |
|                             | Building 2: 3<br>bedrooms | 1508 sq. ft. | 1919       | Yes                |
| 6262 and 6264<br>De Longpre | 3 bedrooms                | 1532 sq. ft. | 1920       | Yes                |

Based on the information above, there are at least 27 rent-stabilized units and bedrooms at the Project site (13,795 sq. ft. = average 510 sq. ft. per bedroom), and 9 not rent-stabilized units (4,860 sq. ft. = average 540 sq. ft. per bedroom), where the latter must be rebuttably presumed to be rented to lower income people. While the Project is providing 36 affordable units, per the Project description, it is unclear if those units: (1) are located *in* the new housing development; and (2) are of the equivalent size.

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 17 of 39

The location of the affordable units is also critical because of the requirement that the affordable units be *comparable* to the non-affordable units and be dispersed throughout the development is emphasized in the density bonus ordinance of various cities. E.g., under the Los Angeles City guidelines:<sup>11</sup>

Restricted dwelling units shall be **comparable in every manner to market rate dwelling units**, including total square footage, bedrooms size, closet space amenities, number of bathrooms, etc., **except in the quality of interior "finish" materials (e.g., floor and wall coverings)**. The design of restricted dwelling units should generally reflect the average number of bedrooms per dwelling units in the development. Restricted dwelling units shall not be confined to one type of dwelling unit within a development.

Location of Restricted Units within Mixed-Income Projects. **Restricted** dwelling units must be interspersed among market-rate dwelling units within the same building. They may not be grouped together on one level or in one or more "less desirable" corners or areas of the building. In multiple building developments, restricted dwelling units must be reasonably dispersed among the buildings.

(Emph. added.)

Similarly, the Hollywood Redevelopment Plan ("HRP") Section 410.2 provides:

The Agency shall not displace persons or families from their dwelling units unless and until there is a suitable housing unit available and ready for occupancy by such displaced person or family at rents comparable to those at the time of their displacement.

By virtue of the transfer of the CRA/LA Agency duties to the City, City is now bound by the HRP requirements and their compliance and must ensure people are not displaced, prior to the approval of the Project here.

<sup>&</sup>lt;sup>11</sup> Affordable Housing Incentives Guidelines: <u>https://planning.lacity.org/Code\_Studies/Housing/HouseIncentiveGuidelines.pdf</u>

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 18 of 39

The Draft EIR and its project description are silent and yet *must* disclose the location, size and quality of the affordable units that will be constructed at the Project site. City further must ensure that the Project meets the contiguous sites and equivalent quality requirement under the State Density Bonus Law and LA Local Guidelines, prior to approving any density bonus or related benefits.

Also, the EIR must be recirculated to disclose this information accurately about where the affordable units will be and what impacts such location will have, since without such disclosure it is impossible to verify if the Project will displace low-income people, in violation of the Density Bonus' replacement requirement and requirements of the applicable Hollywood Redevelopment Plan, Section 410.2.

Further, any violation of the state density bonus law or HRP by the Project will indicate significant impacts, including on the land use and population and housing, which are now impossible to assess in light of the missing information. As such, the EIR's CEQA analysis is incomplete. The EIR must be recirculated to provide the omitted information, to confirm or specify the location of the affordable units, as well as to analyze the Project's associated impacts in light of that additional information.

#### III. THE DRAFT EIR IS LEGALLY AND PREJUDICIALLY INADEQUATE AS IT OMITS CRITICAL INFORMATION.

The Draft EIR suffers from several procedural and substantive flaws and omissions. These omissions preclude informed and meaningful public participation by providing inaccurate information about the Project's scope and resultant impacts. As such, the Draft EIR's omissions are prejudicial, as detailed below.

In addition, the Draft EIR erroneously finds that all Project impacts will be less than significant, except for individual and cumulative on-site *construction* noise/vibration and only off-site *operational* noise (Office option) and further improperly finds there are no feasible mitigation measures for it. Further, to the extent the findings of infeasibility to mitigate the noise impacts as well as findings of no impacts or less than significant impacts are based on omissions, inadequate studies, deferred and illusory mitigation and inaccurate baseline and project description, those are fatally flawed, as detailed below.

## A. The Project Description Is Fatally Flawed As It Omits Critical Information.

The Draft EIR's inaccurate project description is fatal and requires revision and recirculation. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730 ["Since "[a]n accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR" (*id.* at p. 193, 139 Cal.Rptr. 396), even were the FEIR deemed to be adequate in all other respects, the selection and use of a "truncated project concept" violated CEQA and mandates the conclusion that the County did not proceed " 'in a manner required by law.'" (Cit. omit.).])

CEQA and related case law require a good faith disclosure and an accurate, finite and stable project description in the EIR. Such is not provided here.

## • Location and Quality of Affordable Units and Their Potential Off-Site Location.

As also noted above, the EIR's project description appears to conceal or omit a critical issue: the location and quality of affordable units. Thus, per the 2017 Notice of Preparation, the Project proposed:

Project includes the construction of up to **429 new residential units**, including 15 live-work units and **16 units** designated for **Very Low Income** households, a 55,000 sq. ft. grocery store, approx. 5,000 sq. ft. of neighborhood-serving commercial retail uses, up to 8,988 sq. ft. grocery store, approx. 5,000 sq. ft. of neighborhood-serving commercial retail uses, up to 8,988 sq. ft. of restaurant uses, and a minimum of 677 vehicle parking spaces. **Alternatively**, approx. 50,000 sq. ft. of office uses and approx. 5,000 sq. ft. of additional neighborhood serving commercial retail uses may be constructed in lieu of the 55,000 sq. ft. grocery store. The proposed uses would primarily be located **within one building** approx. 262.5 feet in height. Upon completion, approx. **484,421 sq. ft**. of floor area would be located within the Project site.

(NOP in July of 2017, emph. added.)<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> <u>https://ceqanet.opr.ca.gov/2017061063</u>

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 20 of 39

Per the 2022 Draft EIR, the Project is described as:

The Project proposes to develop a mixed-use building on an 81,050 square-foot site with one of two options: a Residential Option and an Office Option. Both options would demolish 32,844 square feet of commercial and vacant residential uses while retaining and rehabilitating six existing bungalows. The Residential Option would develop a new highrise building with four levels of subterranean parking consisting of up to 429 residential units, including 36 units designated for Very Low Income households, an approximately 55,000 square-foot grocery store, approximately 5,000 square feet of neighborhood-serving commercial retail uses, and 8,988 square feet of uses in the bungalows as either restaurant use or 12 residential units. The high-rise building would be approximately 361 feet tall when accounting for rooftop mechanical equipment. In conjunction with the existing bungalows to remain, the Residential Option would include a total of 484,421 square feet of development and a floor area ratio (FAR) of 5.98:1. The Office Option would develop a new high-rise building with eight levels of subterranean parking with approximately 463,521 square feet of office uses and 11,914 square feet of restaurant uses, as well as 8,988 square feet of uses in the bungalows as either restaurant use or nine residential units. The high-rise building would be approximately **303 feet** in height when accounting for rooftop mechanical equipment. In conjunction with the existing bungalows to remain, the Office Option would include a total of 484,423 square feet of development and an FAR of 5.98:1.

(DEIR Project Description per SCH Website, emph. added.)<sup>13</sup>

On the other hand, the 2017 circulated Initial Study<sup>14</sup> provides: "As part of the Project, an additional **19 units** designated for Very Low Income households would be developed **off-site at a location to be determined**." (2017 Initial Study, p. A-21, emph. added.)

The Draft EIR is silent about the possibility of off-site affordable units or the location of affordable units. This omission is prejudicial as it precludes meaningful and

<sup>&</sup>lt;sup>13</sup> <u>https://ceqanet.opr.ca.gov/2017061063/3</u>

<sup>&</sup>lt;sup>14</sup> See, 2017 Initial Study, esp. pp. <u>https://planning.lacity.org/eir/nops/1360%20Vine%20Street/InitialStudy\_Checklist.pdf</u>

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 21 of 39

informed analysis of the Project's impacts. Whether the Project provides on-site or off-site affordable units is critical to determine if the Project qualifies for the density bonus or incentives or waivers under the Govt. Code 65915 or further if it is compliant with the applicable Hollywood Redevelopment Plan, as discussed above, and derivatively if the Project may have significant impacts on land use, population and housing, as noted in the Section II, *supra*.

#### • Base Density and FAR in the EIR's Project Description.

The Draft EIR's project description provides misleading information about the Project's *base* density and floor area ratio ("FAR") permitted by the applicable zoning. In particular, it *inflates* the Project's *base* density and FAR, to understate the scope of changes it requests. For example, as provided above, the EIR claims that C4 zoning allows R5 lot distribution and its *base* density of 200 sf./unit. (DEIR, p. II-9—10, *supra*.)

To the contrary, the 2017 Initial Study makes clear the Project *needs* additional approvals to reach the *base* density the Draft EIR erroneously claims to have:

#### g. Density

The C4 zone, in conjunction with the Project Site's Regional Center Commercial land use designation and pursuant to LAMC Section 12.22-A, 18, permits density equivalent to the R5 (Multiple Residenital) zone, or one dwelling unit per 200 square feet of lot area. **With approval of the requested Zone Change,** the 55,000-square-foot portion of the Site located within the C4 zone would **permit a maximum of 275 dwelling units**. The 34,500-square-foot R3 zoned portion of the Site permits one dwelling unit **per 700** square feet of lot area, which would permit 44 **dwelling units** (34,500 SF/800 SF). Thus, a total of **319 dwelling** units would be permitted across the Site.

Pursuant to LAMC Section 12.22-A,25, the Project includes a request for a 35-percent density bonus for a total of 429 dwelling units by designating 11 percent of the permitted base density (35 units) for Very Low Income Households. The Project also requests approval of two onmenu incentives to: (1) calculate density prior to street dedications pursuant to LAMC Section 12.22-A,25(F)(7); and (2) average density across the Project Site pursuant to LAMC Section 12.22-A,25(F)(8). In addition, in accordance with LAMC Section 12.22-A,25.G(3), the Project also requests **two Waiver of Development Standards**: (1) to permit a **50-percent floor area increase** within the C4 zoned parcels; and (2) to permit **5 percent of the units** designated for Very Low Income households (16 units) to be located **on-site** and **6 percent** to be located **off site** (19 units).<sup>15</sup>

(2017 Initial Study, p. A-22, emph. added.)

The 2017 Initial Study further provides:

#### h. FAR and Setbacks

The lot area of the R3 zoned portion of the Project Site is 27,875 square feet with a 3:1 FAR, which would allow 83,625 square feet of floor area. The Project proposes 8,988 square feet of floor area with the R3 zone where the six historic bungalows would be relocated. With approval of the proposed Zone and Height District Change, the lot area of the C4 zoned portion of the Site after dedications is 53,175 square feet with a 6:1 FAR. Therefore, the C4 zoned portion of the Site would permit 319,050 square feet of floor area. The **Project requests a Waiver of Development Standard** to permit a **50-percent floor area increase** within the C4 zoned parcels to permit 475,433 square feet of floor area within the C4 zone. Overall, the total proposed FAR for the Project Site is 5:98:1.

The Project's frontage within the proposed C4 zone portion abutting Vine Avenue, Afton Plane, and De Longpre Avenue require no setbacks. As shown in the Conceptual Site Plan provided in Figure A-7 on page A-13, the relocated bungalows would observe the required 5-foot side yard setback along Afton Place and De Longpre Avenue, and a 15-foot rear yard along the eastern property line. As discussed below, pursuant to LAMC Section 12.32-R, a **building line removal is requested to remove the 10-foot building line** along Vine Street.

<sup>&</sup>lt;sup>15</sup> The Project is also non-compliant with the Hollywood Redevelopment Plan, Section 410.4 which mandates that new developments provide 15% affordable units, instead of the 11% as the Project claims to provide. There is also no evidence that the Redevelopment Plan area provided that number of affordable units on the aggregate. See also, Hollywood Redevelopment Plan, Section 410.2 [Replacement of Low-Income Units.]

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 23 of 39

(2017 Initial Study, pp. A-22-23, emph. added.)

As such, the EIR's presentation of the Project's *base* density of 319 units, which includes the 275 units in the C4 zoning, is erroneous since it is not based on what is *permitted* by the zoning but what is *yet to be* approved via zone change in C4 zone. Also, the *base* density calculation is based on several waivers: (1) to calculate the gross buildable area for purposes of base density; and (2) to average the density across the entire Project site.

However, the Draft EIR does not provide these distinctions and instead claims:

The C4 zone normally limits residential density to the R4 zoned standard of 400 square feet of lot area per dwelling unit; however, Los Angeles Municipal Code (LAMC) Section 12.22,18 permits mixed-use projects on commercially zoned sies designated as Regional Center Commercial to utilize the R5 zone density calculation of 200 square feet of lot area per dwelling unit.

•••

Two lots on the southern portion of the Project Site along Afton Place, and one lot on the northern portion of the Project Site, along De Longpre Avenue, are zoned R4-2D .... The R4 zone allows multiple dwelling and apartment house uses, requiring a minimum lot area of 400 square feet per dwelling unit...

(DEIR, pp. II-9 and II-10.)

As such, the Draft EIR is misleading as to the Project's scope/changes vis-à-vis the applicable zoning.

Similarly, the EIR's project description provides that the Height District in C4 zone imposes a maximum floor area ratio (FAR) of 6:1 (DEIR, p. II-9), but fails to note that the Project is still subject to the Hollywood Redevelopment Plan's requirement of 4.5:1 FAR (and height limitations), which may be increased but not to exceed 6:1 only upon specific findings to be made.

While the DEIR's project description mentions about the Redevelopment Plan, it fails to mention its significance as to FAR, height, and density, except for an inconspicuous note about the potential approvals and amendments of the Hollywood Redevelopment City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 24 of 39

Plan and LAMC in the discretionary actions and only the mentioning of 4.5:1 limit in the discretionary approvals for the *Office* alternative. (DEIR, pp. II-41-42.)

As such, the EIR's project description as to the *permitted* or *base* density and FAR is significantly misleading and understated, which, in turn, precludes the possibility of a meaningful evaluation of the Project's changes in the area and its impacts in the EIR.

#### • Omission of Hollywood Redevelopment Plan Limitations and Approvals.

For reasons noted above, the EIR's project description is defective since it fails to adequately disclose the limitations and importance of the Hollywood Redevelopment Plan applicable to the Project, including but not limited to density and height controls, affordable housing requirements, historic preservation requirements, and further the approval of the Hollywood Redevelopment Plan and LAMC amendments that the Project seeks, beyond listing only the 4.5:1 FAR change approval and only in the discretionary actions required for the "Office" option.

#### • Omission and Inaccurate Information About Historical Resources.

The EIR's project description is deficient in that it does not provide accurate information about the Project's impacts to the historical resources. First, the Draft EIR's project description does not clearly state that the six bungalows will be (1) removed, (2) moved to a different location off-site during the construction, and (3) moved back to a different location. It simply generalizes that the six bungalows will be relocated, without additional details indicating the scope of impact to those properties.

Second, the Draft EIR's project description does not mention the fact that there are other buildings that were once surveyed as potentially historical structures but are to be demolished (e.g., 1330 N. Vine Street) or might be adversely affected (e.g., 1313 N. Vine Street) as a result of the Project. This information is provided only in the Cultural Resources section.

Third and separately, the fact that the bungalows (to be removed, moved, and relocated) may be rehabilitated and adapted to *either* restaurant or residential uses make the Project description non-finite. The two uses are distinct, have different impacts, and require a different impact analysis. For example, restaurants have more water usage, produce more waste usage, require more energy, and may have longer hour operations, with the attendant impacts of traffic, noise, GHG emissions, air quality, etc. Restaurants may also require more public services (fire, police), especially if they

are to serve alcohol. To the contrary, residential uses typically do not involve intense or night-time activity.

Without an accurate and finite description of what kind of where the bungalows will be moved during the construction and thereafter, how it will be done, or what kind of uses the bungalows will be put to, the EIR's project description and further analysis and mitigation of impacts is tainted and impossible.

#### • Omission and Inaccurate Information About Applicable Zoning Restrictions and Reasonably Foreseeable Expansion.

The Draft EIR's project description fails to provide a good faith disclosure about the Project's scope of deviations and reasonably foreseeable future expansion. First, footnotes in the EIR's project description mention that the Residential building will be 32 stories, with a 15-foot rooftop mechanical parapet, and totaling 360 feet in height, whereas the Office building will be 17 stories, with a 30-foot rooftop mechanical parapet and 303 feet in height. (DEIR, p. II-1, fn. 3 & p. II-2, fn. 5.) There is no disclosure or explanation as to why a mechanical roof parapet is double the size for the Office building (as compared to the Residential building), raising the building height by almost 3 stories. To the extent the additional height accounts for anything other than the mechanical roof parapet or provides room for any further expansion of use, the EIR must provide such disclosure or explain the enormous difference. Lack of such information in the EIR's project description makes it vague and non-finite.

Second, the EIR's project description is inaccurate and misleading in the description of current zoning and allowed/permitted development standards. Thus, for example, the Draft EIR provides that the C4 zoning permits land uses permitted in the R4 Multiple Residential zone, which includes multiple dwellings. It further states that the "C4 zone normally limits residential density to the R4 zone standard of 400 square feet of lot area per dwelling unit. However, Los Angeles Municipal Code (LAMC) Section 12.22-A,18 permits mixed-use projects on commercially zoned sites designated as Regional Center Commercial to utilize the R5 zone density calculation of 200 square feet of lot area per dwelling unit." (DEIR, p. II-9.) However, the LAMC section 12.22-A,18 makes no such representation and is even inapplicable here. Thus, LAMC 12.22-A,18 provides, in pertinent parts:

(a) Any use permitted in the R5 Zone on any lot in the CR, C1, C1.5, C2, C4 or C5 Zones provided that such lot is located within the

Central City Community Plan Area or within an area designated on an adopted community plan as "Regional Center" or "Regional Commercial". Any combination of R5 uses and the uses permitted in the underlying commercial zone shall also be permitted on such lot. (Amended by Ord. No. 182,452, Eff. 4/4/13.)

(d) The residential and commercial **density**, maximum **floor area** or **height** otherwise permitted for any lot **shall not** be increased by reason of the existence of one or more air space lots.

(LAMC 12.22-A.18, emph. added.)<sup>16</sup>

As is evident here, LAMC 12.22-A,18 [re exceptions], if at all, expressly applies only to lots located within the *Central City Community Plan* Area, whereas the Project here is in the *Hollywood Community Plan* area; also, the site is designated as "Regional Center Commercial" only for the 8 westerly lots and not "Regional Center" or "Regional Commercial." (DEIR, p. II-9.)

Further, LAMC 12.22-A, 18 is about "*uses*," as distinct from *development standards* or *lot distribution*, such as the FAR or the size of the units to be built in a particular zone. Subdivision (d) contains a limitation as to the density and FAR or height, further confirming the fact that legislators in the LAMC knew about the distinction between *uses* and *development standards* and that the word *uses* should not include development standards by implication. (*Alatriste v. Cesar's Exterior Design, Inc.* (2010) 183 Cal.App.4th 656, 670 ["different language in [different] provisions" implies "that the legislature intended a different meaning in each statute"].) As such, the express language of the LAMC does not allow the lot distribution of R5 zoning to apply to C4 zone here, contrary to what the project description claims.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> <u>https://export.amlegal.com/api/export-requests/091e6358-d23f-4726-aca0-3b9ad838ac03/download/</u>

<sup>&</sup>lt;sup>17</sup> To the extent City relies on an *interpretation* - outside of the LAMC – that the word "uses" in the LAMC section implies "lot distribution," such interpretation is erroneous for the reasons stated. Also, the EIR's project description does not invoke the authority of the *interpretation* but rather the LAMC itself.

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 27 of 39

In addition, the Project is located within the Hollywood Redevelopment Plan<sup>18</sup> area and is subject to its density controls and requirements, regardless of the transfer of the Plan to the City from the CRA. (DEIR, p. II-10.) (*See* the Court's Ruling in Aids Healthcare Foundation v. City of Los Angeles, et al. Case No.: 34-2020-80003462 re LA Transfer of Redevelopment Plans from CRA to the City, declaring *all* plans transferred to the City and further that City cannot exceed the scope of the density bonus or trump Redevelopment Plan requirements in the Hollywood Redevelopment Plan area through conditional use permits or any other means.)<sup>19</sup>

The Hollywood Redevelopment Plan was first adopted in 1986 and then amended in 2003, and their respective EIRs included density and height limitations and controls, as well as historical resource protections, as part of mitigation measures.<sup>20</sup> As such, there is substantial evidence that exceeding those development controls and limits will amount to significant impacts that were not studied and mitigated as required by CEQA. Also, unlike claims in the Hollywood Community Plan Draft EIR, Section 502 of the Hollywood Redevelopment Plan applies only to *uses* as distinct from development standards in Section 503 and other sections. (See Hollywood Redevelopment, Section 502 "Maps" vs. Section 503 "Designs for Development", Section 504 "Variances", Section 505 "Residential Uses," pp. 19-21.) But the Draft EIR's project description of allowable uses does not mention about the Hollywood Redevelopment Plan's density limitations and controls of development standards and simply claims that R5's development standards are applicable under LAMC. This representation is inaccurate.

As such, the EIR's project description is misleading as it does not provide full disclosure about the development standards and restrictions applicable to the Project site and instead portrays a misleading picture about the *compatibility* of the Project with the applicable zoning, where there is none.

<sup>&</sup>lt;sup>18</sup> <u>https://planning.lacity.org/odocument/a73c7fe3-f197-47e4-8276-8a0126cd533c/</u> <u>HollywoodRedevelopmentPlan.pdf</u>

<sup>&</sup>lt;sup>19</sup> See, <u>https://www.aidshealth.org/wp-content/uploads/2022/04/ViewDocument.pdf</u>

<sup>&</sup>lt;sup>20</sup> See e.g., Hollywood Community Plan Draft EIR, pp. 4.10-22 & 4.10-23 at https://planning.lacity.org/eir/Hollywood CPU/Deir/files/4.10%20Land%20Use%20& %20Planning.pdf and Appendix M [Inventory of Mitigation Measures] to the HCPU EIR referenced in the HCPU EIR Land Use section at https://planning.lacity.org/eir/ Hollywood CPU/Deir/files/Appendix%20M%20Inventory%20of%20Mitigation%20Mea sures.pdf; see also Section in Cultural Resources in the HCPU EIR https://planning. lacity.org/eir/Hollywood CPU/Deir/files/4.5%20Cultural%20Resources.pdf

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 28 of 39

#### B. The Draft EIR's Baseline Is Inaccurate.

An accurate baseline is fundamental for an EIR: without it, the "analysis of impacts, mitigation measures and project alternatives becomes impossible." (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 953.) The Draft EIR's baseline is inaccurate for several reasons.

First, based on CEQA, the Draft EIR's baseline must be set as of the time the NOP was circulated – here, 2017. (CEQA Guidelines § 15125(a)(1).) Yet, the 2022 Draft EIR provides the "environmental setting" or baseline conditions without specifying any timing. On the other hand, a number of changes occurred in the Project area after 2017 that the EIR refers to (e.g., CRA/LA transfer in 2018, and respective litigation in 2021). The Draft EIR mentions about the CRA/LA transfer as if part of the baseline environmental setting and even claims that, due to CRA/LA's transfer, the City Council now can take any action as to the Redevelopment Plan amendments (DEIR, p. III-4.) To the extent the EIR's environmental setting describes conditions *after* 2017 and relies on those for its environmental setting, the Draft EIR's baseline is flawed, inflated, and inaccurate.

Second, the EIR's environmental setting description also claims that R5 zoning is applicable to the C4 zone by virtue of the LAMC 12.22.A-18 (DEIR, p. III-3.) For the reasons stated in the Section, supra [project description], the EIR's environmental setting section is also inaccurate.

Third, the EIR's "related projects" list in the environmental setting description is incomplete and outdated. While it does not provide the date of the sources where the related projects list was obtained (DEIR, p. III-6), the *chart* of the related projects indicates that the source is Fehr & Peers, 2018 (DEIR, p. III-12). As such, the list of the related projects in the 2022 EIR is inaccurate and outdated by 4 years, during which time *new* related projects could have been added or the scope of the listed projects could have significantly increased. This is in stark contrast to the EIR's other *updated* references to the changes in the Project area (e.g., CRA/LA transfer after 2018, Hollywood Community Plan update, etc.). The EIR's outdated list of related projects is prejudicial as it significantly curtails the cumulative impacts analysis of the Project in the Draft EIR.

In sum, the EIR's baseline environmental setting is inaccurate, tainting the EIR and its analysis of the Project's individual and cumulative impacts.

#### C. The Draft EIR's Analysis and Conclusions about the Project's Impacts or Mitigation Are Legally Inadequate *Ab Initio*, Due to the Procedural Errors and Flaws in the Project Description and Baseline.

For the reasons stated in the Sections, *supra* [re Project Description and Baseline or Environmental Setting], the EIR's impact analysis and conclusions are derivatively inaccurate, as a matter of law.

#### D. The Draft EIR's Conclusions of Historical Impacts Are Erroneous.

The Draft EIR's analysis of historical or cultural impacts is flawed for several reasons. First, the EIR's project description provides that the six bungalows that are part of the listed historical resource of Afton Square Historic District (Historic District) – a designated California Register historic district – would be relocated within the Project site, but their "ancillary buildings adjacent to the bungalows" will be demolished. (DEIR, pp. II-1 and II-2 & IV.B.33.) However, there is no information about *where* the six bungalows will be moved *during construction* (DEIR, p. IV.B.-34 ["The six historic bungalows within the Project Site would be temporarily removed from the Project Site during grading and construction activities ..... the bungalows would be returned to the eastern portion of the Project Site and rehabilitated in accordance with a Preservation Plan ..."]).<sup>21</sup> There is no information as to *where* they will be relocated

<sup>&</sup>lt;sup>21</sup> This information is provided in the Appendix C, Executive Summary, stating: "The six bungalows within the Historic District at 6245, 6249, 5255 Afton Place and 6254, 6256 and 6262 De Longpre Avenue would be relocated and rehabilitated within the eastern portion of the Project Site and would be used for commercial uses or as residential units. A feature of the Project is a Preservation Plan that would identify the character-defining features, assess the conditions, and make recommendations for the treatment of each bungalow in compliance with the Secretary of the Interior's Standards for Rehabilitation (Standards). Furthermore, the Preservation Plan would include a program for monitoring during the construction process. Projects that comply with the Standards are considered mitigated to a less than significant level." (DEIR, Appendix C, Executive Summary, pdf p. 4.) As evident from the description, there is no exact location or uses provided for the six bungalows after they will be relocated, there is no specific information provided as to where they will be kept while relocated, and where they will be relocated after the Project is complete, and there is no guarantee that the Preservation Plan will indeed ensure that the integrity of the six bungalows will be preserved. It is even questionable if the Preservation Plan applies here, where the bungalows will not just be "rehabilitated" but rather first relocated, kept at an unknown place, then somehow planted back in other locations within the Project site. Stated otherwise, while *pure rehabilitation* of the *stationary* historical resource bungalows in compliance with the Standards could have less than significant impacts, here, the Project is not only doing

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 30 of 39

*after* construction, and whether their removal/movement and then relocation to a *new location* will maintain the integrity of the Historic District, or whether *they* will maintain their *own* integrity in the course of relocation (DEIR, p. IV-B.32 ["Project Design Feature CUL-PDF-1: .... The Preservation Plan will include guidelines for *disassembling* the bungalows (in the event they *cannot* be moved *intact*) and protecting them from vandalism while they are being stored off the Project Site..." emph. added]) and *what* specific *uses* they will be put to and whether those uses will preserve or detract from the historical significance of the bungalows. To the extent the six bungalows will be put to restaurant uses or residential uses, they may not preserve their existing historical significance, as previously objected to by historical experts: "Onni wants to relocate the bungalows on the site, and either keep them as residences orconvert them to restaurants—changes that LA preservationists Richard Schave and KimCooper say, 'destroys historical context and changes the streetscape."<sup>22</sup>

Second, the EIR claims that the ancillary uses adjacent to the historic bungalows "are non-contributing features to the Historic Resources" and will be demolished, and later suggests those ancillary uses include structures "such as sheds and garages" (DEIR, p. II-9, IV.B-34). However, the Draft EIR does not provide an accurate and complete description of those ancillary structures or their features and thus prejudicially deprives the public of important information and the possibility to verify whether those are or are not contributing features to the Historic District.<sup>23</sup> The Draft EIR vaguely

Lastly, although some of these details are provided in Appendix C, the Draft EIR's failure to provide this information in the EIR itself makes the EIR inadequate in *quality*, since the public should not ferret out critical and relevant information in the appendices.

rehabilitation, but rather a more adverse and radical *removal, moving offsite to an unknown location,* and then *relocation onsite to an unknown location.* 

Further, the Appendix C provides Figure 2 and identifies the present location six bungalows (DEIR, Appendix C, p. 2), making clear that the De Longpre bungalows will be moved to Afton Place (to the east), thus significantly *limiting* the scope and sense of the "Historic District" to just Afton Place, whereas it now encompasses a larger area stretching from the Afton Place to the De Longpre Avenue. Thus, the Project affects the historic significance and integrity of the "Historic District," narrowing it down to just linear 6 bungalows located at Afton Place, next to a massive 32-story residential Project, which, in addition, secludes the bungalows from *other* historic buildings outside of the Project site (e.g., 1313 N. Vine St.) contributing the sense and integrity of the Historic District, albeit outside of it.

<sup>&</sup>lt;sup>22</sup> See, <u>https://la.curbed.com/2017/6/22/15848648/onni-sunset-vine-hollywood-development-apartments-renderings</u>

<sup>&</sup>lt;sup>23</sup> Per the CRA/LA Survey, <u>http://www.crala.org/internet-site/Projects/Hollywood/upload/HollywoodHistoricSurveyMatrix.pdf</u>

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 31 of 39

mentions about ancillary buildings at De Longpre avenue and Afton Place, claiming that they were or should have been included in the 1994 determination of eligibility, but it provides neither that 1994 determination nor the reasons why those were determined to be ineligible in 1994. (DEIR, p. IV.B-36.) As such, the public cannot be meaningfully informed about whether in fact the ancillary structures are or are not contributing to the Historic District and require preservation.

Third, Appendix C to the Draft EIR (at pdf p. 115) makes clear that: (1) properties in the Historic District were built from 1916 to 1939; (2) some of potentially significant historical resources apart from the six bungalows were damaged during the earthquake and were therefore no longer deemed historical; and (2) the Historic District's boundary was narrowed over time because some properties that could have been eligible as a historical resource were secluded due to the earthquake and therefore no longer part of the Historic District. As such, contrary to the Appendix C or DEIR's assumptions that the removal, movement, and relocation of the six bungalows elsewhere will not have significant impacts or will preserve the integrity of the Historic District or buildings themselves, there is substantial evidence that the historic significance of the six bungalows and the Historic District will be adversely affected in the processes contemplated by the Project. In fact, Appendix C does not guarantee that the relocation of the six bungalows will preserve their integrity. It only provides that the impacts would be less than significant because the Project will follow the Preservation Plan, which happens after they are removed, moved, and replanted, and which solely requires that the Applicant retain a professional with five years of experience, hold discussions with contractor to discuss minimizing collateral damage, and prepare memoranda to summarize findings, make necessary recommendations and document construction with digital photographs, to be submitted to the Office of Historic Resources for concurrence. (DEIR, Appendix C, pp. 60-61.)

Further, Appendix C provides:

[T]he precise methods for rehabilitating the bungalows would be addressed in the Preservation Plan, which would be prepared in accordance with the Standards. Projects are considered to have a less than significant impact if they comply with the Standards. Furthermore, the Preservation Plan would include construction monitoring to ensure compliance with the Standards through the construction process.

(DEIR Appendix C, p. 64.)

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 32 of 39

Beyond lacking substantial evidence, this optimistic conclusion that bungalows and their historic significance will not be impacted by relocation and rehabilitation is based on *improperly deferred mitigation* of preparing a Preservation Plan *post-approval* of the Project. The Project's Initial Study was circulated as early as in 2017, which contemplated the relocation/rehabilitation of the bungalows, and there is no legal impediment or justification as to why such a Preservation Plan was not already prepared.

Fourth, DEIR Appendix C mentions that there are other potentially eligible historical resources that are outside of the Historic District; e.g., 1313 Vine Street across from the Project site and 6272 De Longrpre Avenue, 6241 Afton Place, and 1330 and 1348 Vine Street, located at the Project site and to be demolished. Yet, Appendix C adopts and relies on the Applicant's own retained GPA Consulting firm's evaluation, which concluded that those properties are not eligible for designation as a historical resources and thus are not subject to CEQA. As for 1313 N. Vine St. property directly across from the modern 32-story building the Project proposes, Appendix C claims that the Project's impacts would be less than significant on 1313 N. Vine St. since that resource is outside of the Project site. Yet, as it appears, the only reason 1313 N. Vine St. was not included in the Historic District is because it was physically isolated from the Historic District by virtue of the street and other historical resources that were damaged due to the earthquake or alterations over time. However, even though across from the Project site, 1313 N. Vine property still fits into the general theme of the Historic District adjacent to it and its historic significance will be affected by the Project further isolating it from the Historic District by the Project that is admittedly "not compatible with the size, scale, or design of the contributing buildings within the Historic District." (DEIR, Appendix C, Executive Summary, pdf p. 5.)

As to 1330 N. Vine Street and other potentially historical resources that were surveyed as a potential historical resource, Appendix C and the Applicant's Historical Report conclude that they are not eligible as a historical resource. Yet, Appendix C and the GPA report do not follow a *more stringent* view of historic preservation required for the Project site by virtue of it being within the Hollywood Redevelopment Plan area. While Appendix C mentions about the Hollywood Redevelopment Plan and concedes that at least two properties 1313 N. Vine Street and 1330 N. Vine Street (at the Project site) were surveyed and listed as a historical resource in the 2010 and 2020 CRA/LA City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 33 of 39

Historical Surveys, it nonetheless concludes that those will not be impacted. (DEIR, Appendix C, p. 4.)

Fifth, the Draft EIR admits that its Cultural Resources section fully relies on the GPA's Historical Report (DEIR, p. IV.B-1). Yet, GPA's report plainly *ignores* CRA/LA's findings in *two* surveys in the Hollywood Redevelopment Plan area which listed additional properties to have historical significance. As such, GPA's Historical Report and derivatively the Draft EIR improperly ignore the Hollywood Redevelopment Plan's more stringent requirements for identification and preservation of new historical resources. To the extent the City has now adopted the CRA/LA's duty to independently review properties for historical resource eligibility, as well as to abide by the prior determinations of the CRA/LA, its reliance on GPA's historical report and the DEIR's reliance on its conclusions is erroneous and runs counter to the Hollywood Redevelopment Plan's requirements and City's duties – upon CRA/LA transfer – to independently review and further to honor the already reviewed properties which were found to be historically significant by CRA/LA.

Tellingly, the Draft EIR and Appendix C (GPA report) do not focus on the *prohibitory* provisions in the Hollywood Redevelopment Plan but only assume that the *rehabilitation* provisions in the Redevelopment Plan apply here. However, as noted before, the Project here is not simply *rehabilitating* but actually *removing* the historical resources, *moving* those to an off-site location, and then *relocating* the historical resources first, before any rehabilitation can begin.

Further, the Draft EIR is misleading as to the *City's authority* to remove and move the historical resources. Thus, the Draft EIR appears to rely, without support, on the Hollywood Redevelopment Plan's *inapplicable* provisions at Sections 409.1 and 409.2 to justify its *movement* of the historical resources. The Draft EIR claims that, under Sections 409.1 and 409.2 of the Hollywood Redevelopment Plan, CRA/LA provides for retention and rehabilitation of buildings and is further authorized to move or cause to move structures that can be rehabilitated to a different location, and further claims that now the City Council – by virtue of the transfer of CRA/LA's powers to the City – is also authorized to allow such relocation. Not so.

The Hollywood Redevelopment Plan's Section 409.1 and 409.2 are not limited to historical resources, but are about: (1) the retention, preservation, and rehabilitation of properties *owned* by the CRA/LA (HCP 409.1); and (2) moving of "standard structures". Particularly, HRP Section 409.2 provides:

#### 409.2 Moving of Structures

As may be **necessary** in carrying out this **Plan**, the Agency is authorized to move or to cause to be moved any **standard** structure or building or any structure or building which can be rehabilitated to a location within or outside the Project Area.

(HCP, Section 409.2, emph. added.)

Here, there is no "necessity" to move the six bungalows to carry out the Redevelopment Plan; it is needed only to the Applicant to carry out its own project. Moreover, the six bungalows are by far not "standard" structures but are part of the Historic District. As such, the EIR's presumption that City, under HRP, is authorized to allow the relocation of the six bungalows is misplaced.

In fact, the Draft EIR omits the *applicable* provisions in the Hollywood Redevelopment Plan and the related settlements it is bound by. Thus, HRP Section 511 applies to this case and the Project area and emphasizes the need and stringent process aimed at preservation of historical resources, including coordination of those preservation activities with the Cultural Heritage Commission of the City.

In addition, as part of the litigation settlements related to the Hollywood Redevelopment Plan and its litigation settlement with Hollywood Heritage, City is obligated and bound to abide by all historical preservation efforts under the HRP.<sup>24</sup>

Further, HRP Section 505.1 provides:

#### 505.1 Very High

Very High: Up to 130 units per gross acre.

Development within the Very High designation is intended to provide a high density housing choice within Hollywood. Development above 80

<sup>&</sup>lt;sup>24</sup> See a copy of the 2009 settlement agreement between CRA/LA, City of LA and Hollywood Heritage, starting at pdf p. 33 at <u>http://clkrep.lacity.org/onlinedocs/2017/17-0871\_rpt\_CAO\_08-04-2017.pdf</u>;

See also comment letters about the importance of historical preservation int he Hollywood Redevelopment Plan at

https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/(H)%20Remainder%20of %20Administrative%20Record/Public%20Comments/Comments%20on%20Deir/202006 01%201550%20F.%20Offenauser%20HC%20EIR%20response%20Hollywood%20Herita ge.pdf; and http://clkrep.lacity.org/onlinedocs/2013/13-1482-S3\_pc\_3-19-2019.pdf

units per gross acre shall be reviewed and approved by the Agency to ensure architectural quality, to ensure that parking is provided which will be sufficient to serve the needs of the occupants of the development, and to ensure that architecturally and/or historically significant buildings within a development site are, to the extent practical, preserved.

The Agency shall review and approve development above **80 units** per gross acre. The review shall include an examination of architectural plans (including landscaping, **circulation** and **parking** and **elevation** drawings) to determine compatibility with the character, scale and architecture of the neighborhood, and to ensure that **sufficient parking** is provided.

(HCP, Section 505.1, p. 22, emph. added.)

Also, HRP provides:

The Agency shall, within five (5) years following the adoption of the First Amendment to this Plan, prepare a **detailed design plan** for this area which **addresses preservation** of **architecturally** and/or **historically significant buildings, parking, circulation** and views to and from the Hollywood Hills including the **height, orientation** and **massing** of new development within this District.

(HRP, Section 505.2, pp. 22-23, emph. added.)

Further, HRP provides:

1) Encourage **preservation**, **restoration** and **appropriate reuse** of historically or architecturally significant structures;

2) Assure that new development is **sympathetic** to and complements the **existing scale** of development; ...

(HRP, Section 506.2.1, p. 26, emph. added.)

Lastly, for purposes of density in the Regional Center Commercial area, as here, HRP provides:

#### 506.2.3 Regional Center Commercial Density

Development within the **Regional Center Commercial** designation **shall** not exceed the equivalent of an average floor area ratio (F.A.R.) of **4.5:1** for the entire area so designated.

• • • •

The Agency may permit development in excess of 4.5:1 F.A.R. up to **but not to exceed 6:1 F.A.R.** or such other density as may be permitted by future amendments to the Community Plan, **only if** the Agency makes the **following findings** and determinations:

1. The proposed development **conforms** with the **provisions** and **goals** of the Redevelopment Plan and any applicable Design(s) for Development or requirements of the Hollywood Boulevard District or Hollywood Core Transition District.

2. Permitting the proposed development serves a **public purpose objective** such as: the provision of **additional open space**, **cultural facilities**, **public parking**, or the **rehabilitation** of an **architecturally** or **historically** significant building.

3. Any **adverse environmental effects** especially impacts upon the **transportation** and **circulation** system of the area caused by proposed development shall be **mitigated** or are overridden by other social, economic or physical considerations, and statements of findings are made.

•••

(HRP Section 506.2.3, pp. 28-29, emph. added.)

The Draft EIR does not mention about these *prohibitory* and *more stringent* findings or requirements of the Hollywood Redevelopment Plan, but only assumes that the relocation or the bungalows somehow fits the rehabilitation and preservation requirement of the HRP. And even if appropriate findings could be made to increase the 4.5:1 FAR to 6:1 (which cannot be made in this case), it is clear that the Project far exceeds the maximum permitted 6:1 FAR since its 5.98:1 FAR is only based on *gross averaging* of the FAR along the entire Project site *yet* to be approved and because the Project seeks a significant 50% increase in FAR and a waiver of development standards for residential zoning as part of its approvals.

In its Hollywood Community Plan update EIR, City expressly admitted that the various limitations of the Hollywood Redevelopment Plan, including those of density, height, and historic preservation, were adopted as mitigation measures of the respective EIRs. Thus, the Project's violations or attempt to override those limitations

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 37 of 39

suggests that Project may have significant impacts, including but not limited to cultural resources, as well as air, traffic, etc.

In sum, to the extent the HRP's more stringent limitations as to the density, height, and historical preservation were part of the mitigation measures of its respective EIRs for the initial adoption of HRP in 1986 and its subsequent amendment in 2003, the fact that the Project and its Draft EIR *ignore* those limitations suggests that the Project may have significant impacts that have not been properly disclosed or mitigated, in violation of CEQA.

#### E. The Draft EIR's Conclusions of No Land Use or Population Impacts Are Erroneous.

The Draft EIR's conclusions as to the land use impacts are erroneous since it omits the requirements of the Hollywood Redevelopment Plan and further understates the applicable zoning restrictions, as detailed in the Project Description Section, *supra*.

Similarly, the Draft EIR's conclusions as to the population and housing impacts are erroneous as the Project appears to displace low-income people from rent-stabilized homes in the Project area and fails to provide proper and equivalent replacement or adequate affordable housing, as required by state density bonus law and the Hollywood Redevelopment Plan, as detailed above.

# F. The Draft EIR's Alternatives Are Legally Inadequate In View of the EIR's Failure to Provide an Accurate Project Description and Project Objectives.

The Draft EIR's analysis of alternatives is legally inadequate for several reasons. First, the alternatives are manifestly erroneous since they are based on the flawed project description and flawed baseline environmental setting, which particularly understate the Project's impacts, including historical, as detailed, *supra*. As a result, the alternatives do not seek to avoid or substantially reduce certain significant impacts that the Project may have, simply because those impacts were never identified.

Second, the Draft EIR's project objectives are vague and at the same improperly mirror the Project, amounting to a pro-forma analysis. (DEIR, pp. II-12—13.) As such, the project objectives do not provide guidance in crafting alternatives that will reduce the Project's impacts and also fail to analyze the infeasibility of certain alternatives as a result. (*See We Advocate Through Environmental Review v. County of Siskiyou* (2022) 78 Cal.App.5th 683, 692-694, esp. 694 [the "no project" alternative's

City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 38 of 39

infeasibility was not established because of the "unreasonably narrow project objectives"].)

Third, since the EIR erroneously concludes that the Project will not have impacts on historical resources by virtue of adherence to the Preservation Plan (as detailed, *supra*), it improperly fails to include an alternative where the historical resources would remain in place and intact and will not be moved around. Yet, such an alternative would have been feasible. City was on notice of the strong objections of the public and preservationists to the Project's removal and relocation of the Historic District or historical properties therein and the stringent requirements of the Redevelopment Plan and therefore the Draft EIR had to consider an alternative to preserve the historical resources in place and to keep those intact. It did not. There is also no *legal* infeasibility to justify the Applicant's choice not to preserve the historic district and not to move the buildings. The City's failure to include such an alternative to preserve the historical resources in place as mandated by the Redevelopment Plan makes the range of alternatives manifestly inadequate. Further, City's failure to make a written finding of infeasibility of such an alternative is fatal to the Draft EIR.

Fourth, the EIR's discussion of alternatives is also incomplete as it does not list a *preferred* alternative, distinct from an environmentally superior one. This is further problematic here, where the Project itself is proposed in *two* Options: Residential and Commercial. As in *Washoe Meadows Community v. Department of Parks & Recreation* (2017) 17 Cal.App.5th 277, 288-289 ("Washoe Meadows"), the EIR here with two inaccurately described development options and their respective alternatives presents a "moving target" (*id.*) and precludes informed decisionmaking.

In sum, the EIR's description of Alternatives is inadequate in both quality and quantity and the EIR is therefore legally inadequate to be certified. The Draft EIR must be recirculated to provide a preferred alternative, an accurate list of objectives that is consistent with the applicable zoning and land use policies (including but not limited to the Hollywood Redevelopment Plan policies), and a range and description of feasible alternatives, to allow a meaningful and informed evaluation of the Project's and its Alternatives' impacts and to enable an informed choice.

#### IV. CONCLUSION.

In view of the above-noted concerns, we respectfully request that the EIR be recirculated to include the omitted information and to provide a complete and City of Los Angeles, 1360 N. Vine Street Project July 25, 2022 Page 39 of 39

meaningful analysis, identification, and mitigation of impacts as CEQA requires. "CEQA contemplates *serious* and not superficial or pro forma consideration of the potential environmental consequences of a project." (*Leonoff v. Monterey County Bd. of Supervisors* (1990) 222 Cal.App.3d 1337, 1347, 272 Cal.Rptr. 372; emphasis added; *Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 593, fn. 3.)

If the City has any questions or concerns, please feel free to contact my Office.

Sincerely,

Naira Soghbatyan Attorneys for Southwest Regional Council of Carpenters

#### Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (**Exhibit A**);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

### **EXHIBIT A**



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> Paul E. Rosenfeld, PhD (310) 795-2335 prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai 155 South El Molino, Suite 104 Pasadena, CA 91101

#### Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

#### Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."<sup>1</sup> CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.<sup>2</sup>

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> "California Emissions Estimator Model." CAPCOA, 2017, available at: http://www.aqmd.gov/caleemod/home.

 <sup>&</sup>lt;sup>2</sup> "California Emissions Estimator Model." CAPCOA, 2017, available at: http://www.aqmd.gov/caleemod/home.
 <sup>3</sup> "CalEEMod User's Guide." CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-

source/caleemod/01\_user-39-s-guide2016-3-2\_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.<sup>4</sup>

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

"VMT<sub>d</sub> =  $\Sigma$ (Average Daily Trip Rate i \* Average Overall Trip Length i) n

Where:

n = Number of land uses being modeled."5

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

"Emissions<sub>pollutant</sub> = VMT \* EF<sub>running,pollutant</sub>

Where:

Emissions<sub>pollutant</sub> = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

EF<sub>running,pollutant</sub> = emission factor for running emissions."<sup>6</sup>

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

#### Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.<sup>7</sup> In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.<sup>8</sup> The default number of construction-related worker trips is calculated by multiplying the

<sup>&</sup>lt;sup>4</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* <u>http://www.aqmd.gov/docs/default-source/caleemod/02\_appendix-a2016-3-2.pdf?sfvrsn=6</u>, p. 14-15.

<sup>&</sup>lt;sup>5</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* <u>http://www.aqmd.gov/docs/default-source/caleemod/02\_appendix-a2016-3-2.pdf?sfvrsn=6</u>, p. 23.

<sup>&</sup>lt;sup>6</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* <u>http://www.aqmd.gov/docs/default-source/caleemod/02\_appendix-a2016-3-2.pdf?sfvrsn=6</u>, p. 15.

<sup>&</sup>lt;sup>7</sup> "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* <u>http://www.aqmd.gov/docs/default-</u> source/caleemod/01 user-39-s-guide2016-3-2 15november2017.pdf?sfvrsn=4, p. 34.

<sup>&</sup>lt;sup>8</sup> CalEEMod User Guide, *available at:* <u>http://www.caleemod.com/</u>, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.<sup>9</sup> Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."<sup>10</sup> Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.<sup>11</sup> The operational home-to-work vehicle trip lengths are:

"[B]ased on the <u>location</u> and <u>urbanization</u> selected on the project characteristic screen. These values were <u>supplied by the air districts or use a default average for the state</u>. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added).<sup>12</sup>

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).<sup>13</sup>

| Worker Trip Length by Air Basin |               |               |  |  |  |
|---------------------------------|---------------|---------------|--|--|--|
| Air Basin                       | Rural (miles) | Urban (miles) |  |  |  |
| Great Basin Valleys             | 16.8          | 10.8          |  |  |  |
| Lake County                     | 16.8          | 10.8          |  |  |  |
| Lake Tahoe                      | 16.8          | 10.8          |  |  |  |
| Mojave Desert                   | 16.8          | 10.8          |  |  |  |
| Mountain Counties               | 16.8          | 10.8          |  |  |  |
| North Central Coast             | 17.1          | 12.3          |  |  |  |
| North Coast                     | 16.8          | 10.8          |  |  |  |
| Northeast Plateau               | 16.8          | 10.8          |  |  |  |
| Sacramento Valley               | 16.8          | 10.8          |  |  |  |
| Salton Sea                      | 14.6          | 11            |  |  |  |
| San Diego                       | 16.8          | 10.8          |  |  |  |
| San Francisco Bay Area          | 10.8          | 10.8          |  |  |  |
| San Joaquin Valley              | 16.8          | 10.8          |  |  |  |
| South Central Coast             | 16.8          | 10.8          |  |  |  |
| South Coast                     | 19.8          | 14.7          |  |  |  |
| Average                         | 16.47         | 11.17         |  |  |  |
| Minimum                         | 10.80         | 10.80         |  |  |  |
| Maximum                         | 19.80         | 14.70         |  |  |  |
| Range                           | 9.00          | 3.90          |  |  |  |

<sup>&</sup>lt;sup>9</sup> "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* <u>http://www.aqmd.gov/docs/default-</u> <u>source/caleemod/01</u> user-39-s-guide2016-3-2 15november2017.pdf?sfvrsn=4, p. 34.

<sup>&</sup>lt;sup>10</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at:

http://www.aqmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 15. <sup>11</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* 

http://www.aqmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.

<sup>&</sup>lt;sup>12</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at:

http://www.aqmd.gov/docs/default-source/caleemod/02\_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21. <sup>13</sup> "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* <u>http://www.aqmd.gov/docs/default-</u>

<sup>&</sup>lt;u>source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4</u>, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

#### Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.<sup>14</sup> In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

| Local Hire Provision Net Change                                  |        |  |
|--|--------|--|
| Without Local Hire Provision                                     |        |  |
| Total Construction GHG Emissions (MT CO <sub>2</sub> e)          | 3,623  |  |
| Amortized Construction GHG Emissions (MT CO₂e/year)              | 120.77 |  |
| With Local Hire Provision  |        |  |
| Total Construction GHG Emissions (MT CO2e)                       | 3,024  |  |
| Amortized Construction GHG Emissions (MT CO <sub>2</sub> e/year) | 100.80 |  |
| % Decrease in Construction-related GHG Emissions                 | 17%    |  |

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

<sup>&</sup>lt;sup>14</sup> "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* <u>http://www.aqmd.gov/docs/default-source/caleemod/05\_appendix-d2016-3-2.pdf?sfvrsn=4</u>, p. D-85.

#### Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

MHaran

Matt Hagemann, P.G., C.Hg.

Paul Rosupeld

Paul E. Rosenfeld, Ph.D.

#### Attachment A

| Location Type | Location Name   | Rural H-W<br>(miles) | Urban H-W<br>(miles) |
|---------------|-----------------|----------------------|----------------------|
| Air Basin     | Great Basin     | 16.8                 | 10.8                 |
| Air Basin     | Lake County     | 16.8                 | 10.8                 |
| Air Basin     | Lake Tahoe      | 16.8                 | 10.8                 |
| Air Basin     | Mojave Desert   | 16.8                 | 10.8                 |
| Air Basin     | Mountain        | 16.8                 | 10.8                 |
| Air Basin     | North Central   | 17.1                 | 12.3                 |
| Air Basin     | North Coast     | 16.8                 | 10.8                 |
| Air Basin     | Northeast       | 16.8                 | 10.8                 |
| Air Basin     | Sacramento      | 16.8                 | 10.8                 |
| Air Basin     | Salton Sea      | 14.6                 | 11                   |
| Air Basin     | San Diego       | 16.8                 | 10.8                 |
| Air Basin     | San Francisco   | 10.8                 | 10.8                 |
| Air Basin     | San Joaquin     | 16.8                 | 10.8                 |
| Air Basin     | South Central   | 16.8                 | 10.8                 |
| Air Basin     | South Coast     | 19.8                 | 14.7                 |
| Air District  | Amador County   | 16.8                 | 10.8                 |
| Air District  | Antelope Valley | 16.8                 | 10.8                 |
| Air District  | Bay Area AQMD   | 10.8                 | 10.8                 |
| Air District  | Butte County    | 12.54                | 12.54                |
| Air District  | Calaveras       | 16.8                 | 10.8                 |
| Air District  | Colusa County   | 16.8                 | 10.8                 |
| Air District  | El Dorado       | 16.8                 | 10.8                 |
| Air District  | Feather River   | 16.8                 | 10.8                 |
| Air District  | Glenn County    | 16.8                 | 10.8                 |
| Air District  | Great Basin     | 16.8                 | 10.8                 |
| Air District  | Imperial County | 10.2                 | 7.3                  |
| Air District  | Kern County     | 16.8                 | 10.8                 |
| Air District  | Lake County     | 16.8                 | 10.8                 |
| Air District  | Lassen County   | 16.8                 | 10.8                 |
| Air District  | Mariposa        | 16.8                 | 10.8                 |
| Air District  | Mendocino       | 16.8                 | 10.8                 |
| Air District  | Modoc County    | 16.8                 | 10.8                 |
| Air District  | Mojave Desert   | 16.8                 | 10.8                 |
| Air District  | Monterey Bay    | 16.8                 | 10.8                 |
| Air District  | North Coast     | 16.8                 | 10.8                 |
| Air District  | Northern Sierra | 16.8                 | 10.8                 |
| Air District  | Northern        | 16.8                 | 10.8                 |
| Air District  | Placer County   | 16.8                 | 10.8                 |
| Air District  | Sacramento      | 15                   | 10                   |

| Air District | San Diego       | 16.8         | 10.8  |
|--------------|-----------------|--------------|-------|
| Air District | San Joaquin     | 16.8         | 10.8  |
| Air District | San Luis Obispo | 13           | 13    |
| Air District | Santa Barbara   | 8.3          | 8.3   |
| Air District | Shasta County   | 16.8         | 10.8  |
| Air District | Siskiyou County | 16.8         | 10.8  |
| Air District | South Coast     | 19.8         | 14.7  |
| Air District | Tehama County   | 16.8         | 10.8  |
| Air District | Tuolumne        | 16.8         | 10.8  |
| Air District | Ventura County  | 16.8         | 10.8  |
| Air District | Yolo/Solano     | 15           | 10    |
| County       | Alameda         | 10.8         | 10.8  |
| County       | Alpine          | 16.8         | 10.8  |
| County       | Amador          | 16.8         | 10.8  |
| County       | Butte           | 12.54        | 12.54 |
| County       | Calaveras       | 16.8         | 10.8  |
| County       | Colusa          | 16.8         | 10.8  |
| County       | Contra Costa    | 10.8         | 10.8  |
| County       | Del Norte       | 16.8         | 10.8  |
| County       | El Dorado-Lake  | 16.8         | 10.8  |
| County       | El Dorado-      | 16.8         | 10.8  |
| County       | Fresno          | 16.8         | 10.8  |
| County       | Glenn           | 16.8         | 10.8  |
| County       | Humboldt        | 16.8         | 10.8  |
| County       | Imperial        | 10.2         | 7.3   |
| County       | Inyo            | 16.8         | 10.8  |
| County       | Kern-Mojave     | 16.8         | 10.8  |
| County       | Kern-San        | 16.8         | 10.8  |
| County       | Kings           | 16.8         | 10.8  |
| County       | Lake            | 16.8         | 10.8  |
| County       | Lassen          | 16.8         | 10.8  |
| County       | Los Angeles-    | 16.8         | 10.8  |
| County       | Los Angeles-    | 19.8         | 14.7  |
| County       | Madera          | 16.8         | 10.8  |
| County       | Marin           | 10.8         | 10.8  |
| County       | Mariposa        | 16.8         | 10.8  |
| County       | Mendocino-      | 16.8         | 10.8  |
| County       | Mendocino-      | 16.8         | 10.8  |
| County       | Mendocino-      | 16.8         | 10.8  |
| County       | Mendocino-      | 16.8         | 10.8  |
| County       | Merced          | 16.8         | 10.8  |
| County       | Modoc           | 16.8         | 10.8  |
| County       | Mono            | 16.8<br>16.8 | 10.8  |
| County       | Monterey        | 16.8         | 10.8  |
| County       | Napa            | 10.8         | 10.8  |

| County    | Nevada                  | 16.8 | 10.8 |  |
|-----------|-------------------------|------|------|--|
| County    | Orange                  | 19.8 | 14.7 |  |
| County    | Placer-Lake             | 16.8 | 10.8 |  |
| County    | Placer-Mountain         | 16.8 | 10.8 |  |
| County    | Placer-                 | 16.8 | 10.8 |  |
| County    | Plumas                  | 16.8 | 10.8 |  |
| County    | Riverside-              | 16.8 | 10.8 |  |
| County    | Riverside-              | 19.8 | 14.7 |  |
| County    | <b>Riverside-Salton</b> | 14.6 | 11   |  |
| County    | <b>Riverside-South</b>  | 19.8 | 14.7 |  |
| County    | Sacramento              | 15   | 10   |  |
| County    | San Benito              | 16.8 | 10.8 |  |
| County    | San Bernardino-         | 16.8 | 10.8 |  |
| County    | San Bernardino-         | 19.8 | 14.7 |  |
| County    | San Diego               | 16.8 | 10.8 |  |
| County    | San Francisco           | 10.8 | 10.8 |  |
| County    | San Joaquin             | 16.8 | 10.8 |  |
| County    | San Luis Obispo         | 13   | 13   |  |
| County    | San Mateo               | 10.8 | 10.8 |  |
| County    | Santa Barbara-          | 8.3  | 8.3  |  |
| County    | Santa Barbara-          | 8.3  | 8.3  |  |
| County    | Santa Clara             | 10.8 | 10.8 |  |
| County    | Santa Cruz              | 16.8 | 10.8 |  |
| County    | Shasta                  | 16.8 | 10.8 |  |
| County    | Sierra                  | 16.8 | 10.8 |  |
| County    | Siskiyou                | 16.8 | 10.8 |  |
| County    | Solano-                 | 15   | 10   |  |
| County    | Solano-San              | 16.8 | 10.8 |  |
| County    | Sonoma-North            | 16.8 | 10.8 |  |
| County    | Sonoma-San              | 10.8 | 10.8 |  |
| County    | Stanislaus              | 16.8 | 10.8 |  |
| County    | Sutter                  | 16.8 | 10.8 |  |
| County    | Tehama                  | 16.8 | 10.8 |  |
| County    | Trinity                 | 16.8 | 10.8 |  |
| County    | Tulare                  | 16.8 | 10.8 |  |
| County    | Tuolumne                | 16.8 | 10.8 |  |
| County    | Ventura                 | 16.8 | 10.8 |  |
| County    | Yolo                    | 15   | 10.0 |  |
| County    | Yuba                    | 16.8 | 10.8 |  |
| Statewide | Statewide               | 16.8 | 10.8 |  |
| Statewide |                         | 10.0 | 10.0 |  |
|           |                         |      |      |  |

| Worker Trip Length by Air Basin |               |               |  |  |  |  |  |  |  |  |  |
|---------------------------------|---------------|---------------|--|--|--|--|--|--|--|--|--|
| Air Basin                       | Rural (miles) | Urban (miles) |  |  |  |  |  |  |  |  |  |
| Great Basin Valleys             | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| Lake County                     | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| Lake Tahoe                      | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| Mojave Desert                   | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| Mountain Counties               | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| North Central Coast             | 17.1          | 12.3          |  |  |  |  |  |  |  |  |  |
| North Coast                     | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| Northeast Plateau               | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| Sacramento Valley               | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| Salton Sea                      | 14.6          | 11            |  |  |  |  |  |  |  |  |  |
| San Diego                       | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| San Francisco Bay Area          | 10.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| San Joaquin Valley              | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| South Central Coast             | 16.8          | 10.8          |  |  |  |  |  |  |  |  |  |
| South Coast                     | 19.8          | 14.7          |  |  |  |  |  |  |  |  |  |
| Average                         | 16.47         | 11.17         |  |  |  |  |  |  |  |  |  |
| Mininum                         | 10.80         | 10.80         |  |  |  |  |  |  |  |  |  |
| Maximum                         | 19.80         | 14.70         |  |  |  |  |  |  |  |  |  |
| Range                           | 9.00          | 3.90          |  |  |  |  |  |  |  |  |  |

Attachment B

Page 1 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

### **1.0 Project Characteristics**

#### 1.1 Land Usage

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| General Office Building             | 45.00  | 1000sqft      | 1.03        | 45,000.00          | 0          |
| High Turnover (Sit Down Restaurant) | 36.00  | 1000sqft      | 0.83        | 36,000.00          | 0          |
| Hotel                               | 50.00  | Room          | 1.67        | 72,600.00          | 0          |
| Quality Restaurant                  | 8.00   | 1000sqft      | 0.18        | 8,000.00           | 0          |
| Apartments Low Rise                 | 25.00  | Dwelling Unit | 1.56        | 25,000.00          | 72         |
| Apartments Mid Rise                 | 975.00 | Dwelling Unit | 25.66       | 975,000.00         | 2789       |
| Regional Shopping Center            | 56.00  | 1000sqft      | 1.29        | 56,000.00          | 0          |

# **1.2 Other Project Characteristics**

| Urbanization               | Urban                     | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 33    |
|----------------------------|---------------------------|----------------------------|-------|----------------------------|-------|
| Climate Zone               | 9                         |                            |       | <b>Operational Year</b>    | 2028  |
| Utility Company            | Southern California Ediso | n                          |       |                            |       |
| CO2 Intensity<br>(Ib/MWhr) | 702.44                    | CH4 Intensity<br>(Ib/MWhr) | 0.029 | N2O Intensity<br>(Ib/MWhr) | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name      | Column Name       | Default Value | New Value |
|-----------------|-------------------|---------------|-----------|
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | NumberWood        | 1.25          | 0.00      |
| tblFireplaces   | NumberWood        | 48.75         | 0.00      |
| tblVehicleTrips | ST_TR             | 7.16          | 6.17      |
| tblVehicleTrips | ST_TR             | 6.39          | 3.87      |
| tblVehicleTrips | ST_TR             | 2.46          | 1.39      |
| tblVehicleTrips | ST_TR             | 158.37        | 79.82     |
| tblVehicleTrips | ST_TR             | 8.19          | 3.75      |
| tblVehicleTrips | ST_TR             | 94.36         | 63.99     |
| tblVehicleTrips | ST_TR             | 49.97         | 10.74     |
| tblVehicleTrips | SU_TR             | 6.07          | 6.16      |
| tblVehicleTrips | SU_TR             | 5.86          | 4.18      |
| tblVehicleTrips | SU_TR             | 1.05          | 0.69      |
| tblVehicleTrips | SU_TR             | 131.84        | 78.27     |

| tblVehicleTrips | SU_TR              | 5.95   | 3.20  |
|-----------------|--------------------|--------|-------|
| tblVehicleTrips | SU_TR              | 72.16  | 57.65 |
| tblVehicleTrips | SU_TR              | 25.24  | 6.39  |
| tblVehicleTrips | WD_TR              | 6.59   | 5.83  |
| tblVehicleTrips | WD_TR              | 6.65   | 4.13  |
| tblVehicleTrips | WD_TR              | 11.03  | 6.41  |
| tblVehicleTrips | WD_TR              | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR              | 8.17   | 3.84  |
| tblVehicleTrips | WD_TR              | 89.95  | 62.64 |
| tblVehicleTrips | WD_TR              | 42.70  | 9.43  |
| tblWoodstoves   | NumberCatalytic    | 1.25   | 0.00  |
| tblWoodstoves   | NumberCatalytic    | 48.75  | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 1.25   | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 48.75  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
|                 |                    |        |       |

# 2.0 Emissions Summary

# 2.1 Overall Construction

# Unmitigated Construction

|         | ROG    | NOx           | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O    | CO2e           |
|---------|--------|---------------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|--------|----------------|
| Year    |        | tons/yr MT/yr |        |                 |                  |                 |               |                   |                  |                |          |                |                |                 |        |                |
| 2021    | 0.1713 | 1.8242        | 1.1662 | 2.4000e-<br>003 | 0.4169           | 0.0817          | 0.4986        | 0.1795            | 0.0754           | 0.2549         | 0.0000   | 213.1969       | 213.1969       | 0.0601          | 0.0000 | 214.6993       |
| 2022    | 0.6904 | 4.1142        | 6.1625 | 0.0189          | 1.3058           | 0.1201          | 1.4259        | 0.3460            | 0.1128           | 0.4588         | 0.0000   | 1,721.682<br>6 | 1,721.682<br>6 | 0.1294          | 0.0000 | 1,724.918<br>7 |
| 2023    | 0.6148 | 3.3649        | 5.6747 | 0.0178          | 1.1963           | 0.0996          | 1.2959        | 0.3203            | 0.0935           | 0.4138         | 0.0000   | 1,627.529<br>5 | 1,627.529<br>5 | 0.1185          | 0.0000 | 1,630.492<br>5 |
| 2024    | 4.1619 | 0.1335        | 0.2810 | 5.9000e-<br>004 | 0.0325           | 6.4700e-<br>003 | 0.0390        | 8.6300e-<br>003   | 6.0400e-<br>003  | 0.0147         | 0.0000   | 52.9078        | 52.9078        | 8.0200e-<br>003 | 0.0000 | 53.1082        |
| Maximum | 4.1619 | 4.1142        | 6.1625 | 0.0189          | 1.3058           | 0.1201          | 1.4259        | 0.3460            | 0.1128           | 0.4588         | 0.0000   | 1,721.682<br>6 | 1,721.682<br>6 | 0.1294          | 0.0000 | 1,724.918<br>7 |

# 2.1 Overall Construction

# Mitigated Construction

|                      | ROG                                     | NOx      | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2    | NBio- CO2      | Total CO2      | CH4             | N2O    | CO2e           |
|----------------------|---|----------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|-------------|----------------|----------------|-----------------|--------|----------------|
| Year                 |   |          |        |                 | tor              | ns/yr           |               |                   |                  |                |             |                |                |                 |        |                |
| 2021                 | 0.1713                                  | 1.8242   | 1.1662 | 2.4000e-<br>003 | 0.4169           | 0.0817          | 0.4986        | 0.1795            | 0.0754           | 0.2549         | 0.0000      | 213.1967       | 213.1967       | 0.0601          | 0.0000 | 214.6991       |
| 2022                 | 0.6904                                  | 4.1142   | 6.1625 | 0.0189          | 1.3058           | 0.1201          | 1.4259        | 0.3460            | 0.1128           | 0.4588         | 0.0000      | 1,721.682<br>3 | 1,721.682<br>3 | 0.1294          | 0.0000 | 1,724.918<br>3 |
| 2023                 | 0.6148                                  | 3.3648   | 5.6747 | 0.0178          | 1.1963           | 0.0996          | 1.2959        | 0.3203            | 0.0935           | 0.4138         | 0.0000      | 1,627.529<br>1 | 1,627.529<br>1 | 0.1185          | 0.0000 | 1,630.492<br>1 |
| 2024                 | 4.1619                                  | 0.1335   | 0.2810 | 5.9000e-<br>004 | 0.0325           | 6.4700e-<br>003 | 0.0390        | 8.6300e-<br>003   | 6.0400e-<br>003  | 0.0147         | 0.0000      | 52.9077        | 52.9077        | 8.0200e-<br>003 | 0.0000 | 53.1082        |
| Maximum              | 4.1619                                  | 4.1142   | 6.1625 | 0.0189          | 1.3058           | 0.1201          | 1.4259        | 0.3460            | 0.1128           | 0.4588         | 0.0000      | 1,721.682<br>3 | 1,721.682<br>3 | 0.1294          | 0.0000 | 1,724.918<br>3 |
|                      | ROG                                     | NOx      | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2    | NBio-CO2       | Total CO2      | CH4             | N20    | CO2e           |
| Percent<br>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              | Sta                                     | art Date | Enc    | d Date          | Maxim            | um Unmitig      | ated ROG +    | NOX (tons/        | quarter)         | Maxi           | mum Mitigat | ed ROG + N     | OX (tons/qu    | iarter)         |        |                |
| 1                    | 9-                                      | 1-2021   | 11-3   | 0-2021          | 1.4103 1.4103    |                 |               |                   |                  |                |             |                |                |                 |        |                |
| 2                    | 12                                      | -1-2021  | 2-28   | 3-2022          |                  |                 | 1.3613        |                   |                  |                |             | 1.3613         |                |                 |        |                |
| 3                    | <b>3-1-2022 5-31-2022</b> 1.1985 1.1985 |          |        |                 | 1.1985           |                 |               |                   |                  |                |             |                |                |                 |        |                |
| 4                    | 6-                                      | 1-2022   | 8-31   | 1-2022          |                  |                 | 1.1921        |                   |                  |                | 1.1921      |                |                |                 |        |                |
| 5                    | 9-                                      | 1-2022   | 11-3   | 0-2022          |                  |                 | 1.1918        |                   |                  |                | 1.1918      |                |                |                 |        |                |
| 6                    | 12                                      | -1-2022  | 2-28   | 3-2023          |                  |                 | 1.0774        |                   |                  |                | 1.0774      |                |                |                 |        |                |
| 7                    | 3-                                      | 1-2023   | 5-31   | 1-2023          |                  |                 | 1.0320        |                   |                  | 1.0320         |             |                |                |                 |        |                |
| 8                    | 6-                                      | 1-2023   | 8-31   | 1-2023          |                  |                 | 1.0260        |                   |                  | 1.0260         |             |                |                |                 |        |                |

| 9  | 9-1-2023  | 11-30-2023 | 1.0265 | 1.0265 |
|----|-----------|------------|--------|--------|
| 10 | 12-1-2023 | 2-29-2024  | 2.8857 | 2.8857 |
| 11 | 3-1-2024  | 5-31-2024  | 1.6207 | 1.6207 |
|    |           | Highest    | 2.8857 | 2.8857 |

#### 2.2 Overall Operational

# Unmitigated Operational

|          | ROG     | NOx    | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4     | N2O             | CO2e            |  |  |
|----------|---------|--------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|---------|-----------------|-----------------|--|--|
| Category | tons/yr |        |         |                 |                  |                 |               |                   |                  |                |          | MT/yr           |                 |         |                 |                 |  |  |
| Area     | 5.1437  | 0.2950 | 10.3804 | 1.6700e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670        | 220.9670        | 0.0201  | 3.7400e-<br>003 | 222.5835        |  |  |
| Energy   | 0.1398  | 1.2312 | 0.7770  | 7.6200e-<br>003 |                  | 0.0966          | 0.0966        |                   | 0.0966           | 0.0966         | 0.0000   | 3,896.073<br>2  | 3,896.073<br>2  | 0.1303  | 0.0468          | 3,913.283<br>3  |  |  |
| Mobile   | 1.5857  | 7.9962 | 19.1834 | 0.0821          | 7.7979           | 0.0580          | 7.8559        | 2.0895            | 0.0539           | 2.1434         | 0.0000   | 7,620.498<br>6  | 7,620.498<br>6  | 0.3407  | 0.0000          | 7,629.016<br>2  |  |  |
| Waste    | ,       |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 207.8079 | 0.0000          | 207.8079        | 12.2811 | 0.0000          | 514.8354        |  |  |
| Water    | ,       |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 29.1632  | 556.6420        | 585.8052        | 3.0183  | 0.0755          | 683.7567        |  |  |
| Total    | 6.8692  | 9.5223 | 30.3407 | 0.0914          | 7.7979           | 0.2260          | 8.0240        | 2.0895            | 0.2219           | 2.3114         | 236.9712 | 12,294.18<br>07 | 12,531.15<br>19 | 15.7904 | 0.1260          | 12,963.47<br>51 |  |  |

Page 7 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

#### 2.2 Overall Operational

# Mitigated Operational

|                      | ROG    | NOx    | CO    | SC            |            | itive<br>/10 | Exhaust<br>PM10 | PM10<br>Total | Fugiti<br>PM2 |                   | aust<br>12.5 | PM2.5<br>Total | Bio-        | CO2 NE  | Bio- CO2       | Total CO2       | CH4     | N2O             | CO2e            |
|----------------------|--------|--------|-------|---------------|------------|--------------|-----------------|---------------|---------------|-------------------|--------------|----------------|-------------|---------|----------------|-----------------|---------|-----------------|-----------------|
| Category             |        |        |       |               |            | tons         | s/yr            |               |               |                   |              |                |             |         |                | M.              | Г/yr    |                 |                 |
| Area                 | 5.1437 | 0.2950 | 10.38 | 04 1.67<br>00 | 00e-<br>)3 |              | 0.0714          | 0.0714        |               | 0.0               | 714          | 0.0714         | 0.0         | 000 2:  | 20.9670        | 220.9670        | 0.0201  | 3.7400e-<br>003 | 222.5835        |
| Energy               | 0.1398 | 1.2312 | 0.777 | 0 7.62<br>00  |            |              | 0.0966          | 0.0966        |               | 0.0               | 966          | 0.0966         | 0.0         | 000 3,  | 896.073<br>2   | 3,896.073<br>2  | 0.1303  | 0.0468          | 3,913.283<br>3  |
| Mobile               | 1.5857 | 7.9962 | 19.18 | 34 0.0        | 821 7.7    | 979          | 0.0580          | 7.8559        | 2.08          | 95 0.0            | 539          | 2.1434         | 0.0         | 000 7,  | 620.498<br>6   | 7,620.498<br>6  | 0.3407  | 0.0000          | 7,629.016<br>2  |
| Waste                | 6,     |        |       |               |            |              | 0.0000          | 0.0000        |               | 0.0               | 000          | 0.0000         | 207.        | 3079    | 0.0000         | 207.8079        | 12.2811 | 0.0000          | 514.8354        |
| Water                | ,      |        |       |               |            |              | 0.0000          | 0.0000        |               | 0.0               | 000          | 0.0000         | 29.1        | 632 5   | 56.6420        | 585.8052        | 3.0183  | 0.0755          | 683.7567        |
| Total                | 6.8692 | 9.5223 | 30.34 | 07 0.0        | 914 7.7    | 979          | 0.2260          | 8.0240        | 2.08          | 95 0.2            | 219          | 2.3114         | 236.        | 9712 12 | 2,294.18<br>07 | 12,531.15<br>19 | 15.7904 | 0.1260          | 12,963.47<br>51 |
|                      | ROG    |        | NOx   | со            | SO2        | Fugit<br>PM  |                 |               | /10<br>otal   | Fugitive<br>PM2.5 | Exhau<br>PM2 |                | 2.5<br>otal | Bio- CO | 2 NBio-        | CO2 Total       | CO2 C   | H4 N            | 120 CO26        |
| Percent<br>Reduction | 0.00   |        | 0.00  | 0.00          | 0.00       | 0.0          | 0 0.            | .00 0         | .00           | 0.00              | 0.0          | 0 0.           | 00          | 0.00    | 0.0            | 0 0.0           | 0 00    | .00 0           | .00 0.00        |

# 3.0 Construction Detail

**Construction Phase** 

| Phase<br>Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days<br>Week | Num Days | Phase Description |
|-----------------|-----------------------|-----------------------|------------|------------|------------------|----------|-------------------|
| 1               | Demolition            | Demolition            | 9/1/2021   | 10/12/2021 | 5                | 30       |                   |
| 2               | Site Preparation      | Site Preparation      | 10/13/2021 | 11/9/2021  | 5                | 20       |                   |
| 3               | Grading               | Grading               | 11/10/2021 | 1/11/2022  | 5                | 45       |                   |
| 4               | Building Construction | Building Construction | 1/12/2022  | 12/12/2023 | 5                | 500      |                   |
| 5               | Paving                | Paving                | 12/13/2023 | 1/30/2024  | 5                | 35       |                   |
| 6               | Architectural Coating | Architectural Coating | 1/31/2024  | 3/19/2024  | 5                | 35       |                   |

#### Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

| 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        |
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Building Construction | Cranes                    | 1      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Paving                | Pavers                    | 2      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 2      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |

Trips and VMT

| Phase Name            | Offroad Equipment<br>Count | Worker Trip<br>Number | Vendor Trip<br>Number | Hauling Trip<br>Number | Worker Trip<br>Length | Vendor Trip<br>Length | Hauling Trip<br>Length | Worker Vehicle<br>Class | Vendor<br>Vehicle Class | Hauling<br>Vehicle Class |
|-----------------------|----------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Demolition            | 6                          | 15.00                 | 0.00                  | 458.00                 | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Site Preparation      | 7                          | 18.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Grading               | 8                          | 20.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Building Construction | 9                          | 801.00                | 143.00                | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Paving                | 6                          | 15.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Architectural Coating | 1                          | 160.00                | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | МТ        | /yr    |        |         |
| Fugitive Dust |        |        |        |                 | 0.0496           | 0.0000          | 0.0496        | 7.5100e-<br>003   | 0.0000           | 7.5100e-<br>003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0475 | 0.4716 | 0.3235 | 5.8000e-<br>004 |                  | 0.0233          | 0.0233        |                   | 0.0216           | 0.0216          | 0.0000   | 51.0012   | 51.0012   | 0.0144 | 0.0000 | 51.3601 |
| Total         | 0.0475 | 0.4716 | 0.3235 | 5.8000e-<br>004 | 0.0496           | 0.0233          | 0.0729        | 7.5100e-<br>003   | 0.0216           | 0.0291          | 0.0000   | 51.0012   | 51.0012   | 0.0144 | 0.0000 | 51.3601 |

#### 3.2 Demolition - 2021

#### Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |         |
| Hauling  | 1.9300e-<br>003 | 0.0634          | 0.0148          | 1.8000e-<br>004 | 3.9400e-<br>003  | 1.9000e-<br>004 | 4.1300e-<br>003 | 1.0800e-<br>003   | 1.8000e-<br>004  | 1.2600e-<br>003 | 0.0000   | 17.4566   | 17.4566   | 1.2100e-<br>003 | 0.0000 | 17.4869 |
| 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   | 9.7000e-<br>004 | 7.5000e-<br>004 | 8.5100e-<br>003 | 2.0000e-<br>005 | 2.4700e-<br>003  | 2.0000e-<br>005 | 2.4900e-<br>003 | 6.5000e-<br>004   | 2.0000e-<br>005  | 6.7000e-<br>004 | 0.0000   | 2.2251    | 2.2251    | 7.0000e-<br>005 | 0.0000 | 2.2267  |
| Total    | 2.9000e-<br>003 | 0.0641          | 0.0233          | 2.0000e-<br>004 | 6.4100e-<br>003  | 2.1000e-<br>004 | 6.6200e-<br>003 | 1.7300e-<br>003   | 2.0000e-<br>004  | 1.9300e-<br>003 | 0.0000   | 19.6816   | 19.6816   | 1.2800e-<br>003 | 0.0000 | 19.7136 |

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | МТ        | /yr    |        |         |
| Fugitive Dust |        |        |        |                 | 0.0496           | 0.0000          | 0.0496        | 7.5100e-<br>003   | 0.0000           | 7.5100e-<br>003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0475 | 0.4716 | 0.3235 | 5.8000e-<br>004 |                  | 0.0233          | 0.0233        |                   | 0.0216           | 0.0216          | 0.0000   | 51.0011   | 51.0011   | 0.0144 | 0.0000 | 51.3600 |
| Total         | 0.0475 | 0.4716 | 0.3235 | 5.8000e-<br>004 | 0.0496           | 0.0233          | 0.0729        | 7.5100e-<br>003   | 0.0216           | 0.0291          | 0.0000   | 51.0011   | 51.0011   | 0.0144 | 0.0000 | 51.3600 |

#### 3.2 Demolition - 2021

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Hauling  | 1.9300e-<br>003 | 0.0634          | 0.0148          | 1.8000e-<br>004 | 3.9400e-<br>003  | 1.9000e-<br>004 | 4.1300e-<br>003 | 1.0800e-<br>003   | 1.8000e-<br>004  | 1.2600e-<br>003 | 0.0000   | 17.4566   | 17.4566   | 1.2100e-<br>003 | 0.0000 | 17.4869 |
| 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   | 9.7000e-<br>004 | 7.5000e-<br>004 | 8.5100e-<br>003 | 2.0000e-<br>005 | 2.4700e-<br>003  | 2.0000e-<br>005 | 2.4900e-<br>003 | 6.5000e-<br>004   | 2.0000e-<br>005  | 6.7000e-<br>004 | 0.0000   | 2.2251    | 2.2251    | 7.0000e-<br>005 | 0.0000 | 2.2267  |
| Total    | 2.9000e-<br>003 | 0.0641          | 0.0233          | 2.0000e-<br>004 | 6.4100e-<br>003  | 2.1000e-<br>004 | 6.6200e-<br>003 | 1.7300e-<br>003   | 2.0000e-<br>004  | 1.9300e-<br>003 | 0.0000   | 19.6816   | 19.6816   | 1.2800e-<br>003 | 0.0000 | 19.7136 |

3.3 Site Preparation - 2021

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |         |
| Fugitive Dust |        |        |        |                 | 0.1807           | 0.0000          | 0.1807        | 0.0993            | 0.0000           | 0.0993         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0389 | 0.4050 | 0.2115 | 3.8000e-<br>004 |                  | 0.0204          | 0.0204        |                   | 0.0188           | 0.0188         | 0.0000   | 33.4357   | 33.4357   | 0.0108 | 0.0000 | 33.7061 |
| Total         | 0.0389 | 0.4050 | 0.2115 | 3.8000e-<br>004 | 0.1807           | 0.0204          | 0.2011        | 0.0993            | 0.0188           | 0.1181         | 0.0000   | 33.4357   | 33.4357   | 0.0108 | 0.0000 | 33.7061 |

#### 3.3 Site Preparation - 2021

#### Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 7.7000e-<br>004 | 6.0000e-<br>004 | 6.8100e-<br>003 | 2.0000e-<br>005 | 1.9700e-<br>003  | 2.0000e-<br>005 | 1.9900e-<br>003 | 5.2000e-<br>004   | 1.0000e-<br>005  | 5.4000e-<br>004 | 0.0000   | 1.7801    | 1.7801    | 5.0000e-<br>005 | 0.0000 | 1.7814 |
| Total    | 7.7000e-<br>004 | 6.0000e-<br>004 | 6.8100e-<br>003 | 2.0000e-<br>005 | 1.9700e-<br>003  | 2.0000e-<br>005 | 1.9900e-<br>003 | 5.2000e-<br>004   | 1.0000e-<br>005  | 5.4000e-<br>004 | 0.0000   | 1.7801    | 1.7801    | 5.0000e-<br>005 | 0.0000 | 1.7814 |

|               | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | ∵/yr   |        |         |
| Fugitive Dust |        |        |        |                 | 0.1807           | 0.0000          | 0.1807        | 0.0993            | 0.0000           | 0.0993         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0389 | 0.4050 | 0.2115 | 3.8000e-<br>004 |                  | 0.0204          | 0.0204        |                   | 0.0188           | 0.0188         | 0.0000   | 33.4357   | 33.4357   | 0.0108 | 0.0000 | 33.7060 |
| Total         | 0.0389 | 0.4050 | 0.2115 | 3.8000e-<br>004 | 0.1807           | 0.0204          | 0.2011        | 0.0993            | 0.0188           | 0.1181         | 0.0000   | 33.4357   | 33.4357   | 0.0108 | 0.0000 | 33.7060 |

#### 3.3 Site Preparation - 2021

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | со              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | '/yr            |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 7.7000e-<br>004 | 6.0000e-<br>004 | 6.8100e-<br>003 | 2.0000e-<br>005 | 1.9700e-<br>003  | 2.0000e-<br>005 | 1.9900e-<br>003 | 5.2000e-<br>004   | 1.0000e-<br>005  | 5.4000e-<br>004 | 0.0000   | 1.7801    | 1.7801    | 5.0000e-<br>005 | 0.0000 | 1.7814 |
| Total    | 7.7000e-<br>004 | 6.0000e-<br>004 | 6.8100e-<br>003 | 2.0000e-<br>005 | 1.9700e-<br>003  | 2.0000e-<br>005 | 1.9900e-<br>003 | 5.2000e-<br>004   | 1.0000e-<br>005  | 5.4000e-<br>004 | 0.0000   | 1.7801    | 1.7801    | 5.0000e-<br>005 | 0.0000 | 1.7814 |

3.4 Grading - 2021

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |        |          |
| Fugitive Dust |        |        |        |                 | 0.1741           | 0.0000          | 0.1741        | 0.0693            | 0.0000           | 0.0693         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Off-Road      | 0.0796 | 0.8816 | 0.5867 | 1.1800e-<br>003 |                  | 0.0377          | 0.0377        |                   | 0.0347           | 0.0347         | 0.0000   | 103.5405  | 103.5405  | 0.0335 | 0.0000 | 104.3776 |
| Total         | 0.0796 | 0.8816 | 0.5867 | 1.1800e-<br>003 | 0.1741           | 0.0377          | 0.2118        | 0.0693            | 0.0347           | 0.1040         | 0.0000   | 103.5405  | 103.5405  | 0.0335 | 0.0000 | 104.3776 |

# 3.4 Grading - 2021

#### Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 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   | 1.6400e-<br>003 | 1.2700e-<br>003 | 0.0144 | 4.0000e-<br>005 | 4.1600e-<br>003  | 3.0000e-<br>005 | 4.2000e-<br>003 | 1.1100e-<br>003   | 3.0000e-<br>005  | 1.1400e-<br>003 | 0.0000   | 3.7579    | 3.7579    | 1.1000e-<br>004 | 0.0000 | 3.7607 |
| Total    | 1.6400e-<br>003 | 1.2700e-<br>003 | 0.0144 | 4.0000e-<br>005 | 4.1600e-<br>003  | 3.0000e-<br>005 | 4.2000e-<br>003 | 1.1100e-<br>003   | 3.0000e-<br>005  | 1.1400e-<br>003 | 0.0000   | 3.7579    | 3.7579    | 1.1000e-<br>004 | 0.0000 | 3.7607 |

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | ∵/yr   |        |          |
| Fugitive Dust |        |        |        |                 | 0.1741           | 0.0000          | 0.1741        | 0.0693            | 0.0000           | 0.0693         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Off-Road      | 0.0796 | 0.8816 | 0.5867 | 1.1800e-<br>003 |                  | 0.0377          | 0.0377        |                   | 0.0347           | 0.0347         | 0.0000   | 103.5403  | 103.5403  | 0.0335 | 0.0000 | 104.3775 |
| Total         | 0.0796 | 0.8816 | 0.5867 | 1.1800e-<br>003 | 0.1741           | 0.0377          | 0.2118        | 0.0693            | 0.0347           | 0.1040         | 0.0000   | 103.5403  | 103.5403  | 0.0335 | 0.0000 | 104.3775 |

Page 16 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 3.4 Grading - 2021

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 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   | 1.6400e-<br>003 | 1.2700e-<br>003 | 0.0144 | 4.0000e-<br>005 | 4.1600e-<br>003  | 3.0000e-<br>005 | 4.2000e-<br>003 | 1.1100e-<br>003   | 3.0000e-<br>005  | 1.1400e-<br>003 | 0.0000   | 3.7579    | 3.7579    | 1.1000e-<br>004 | 0.0000 | 3.7607 |
| Total    | 1.6400e-<br>003 | 1.2700e-<br>003 | 0.0144 | 4.0000e-<br>005 | 4.1600e-<br>003  | 3.0000e-<br>005 | 4.2000e-<br>003 | 1.1100e-<br>003   | 3.0000e-<br>005  | 1.1400e-<br>003 | 0.0000   | 3.7579    | 3.7579    | 1.1000e-<br>004 | 0.0000 | 3.7607 |

3.4 Grading - 2022

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | ∵/yr            |        |         |
| Fugitive Dust |        |        |        |                 | 0.0807           | 0.0000          | 0.0807          | 0.0180            | 0.0000           | 0.0180          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Off-Road      | 0.0127 | 0.1360 | 0.1017 | 2.2000e-<br>004 |                  | 5.7200e-<br>003 | 5.7200e-<br>003 |                   | 5.2600e-<br>003  | 5.2600e-<br>003 | 0.0000   | 19.0871   | 19.0871   | 6.1700e-<br>003 | 0.0000 | 19.2414 |
| Total         | 0.0127 | 0.1360 | 0.1017 | 2.2000e-<br>004 | 0.0807           | 5.7200e-<br>003 | 0.0865          | 0.0180            | 5.2600e-<br>003  | 0.0233          | 0.0000   | 19.0871   | 19.0871   | 6.1700e-<br>003 | 0.0000 | 19.2414 |

Page 17 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 3.4 Grading - 2022

# Unmitigated Construction Off-Site

|          | ROG             | NOx             | со              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | '/yr            |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 2.8000e-<br>004 | 2.1000e-<br>004 | 2.4400e-<br>003 | 1.0000e-<br>005 | 7.7000e-<br>004  | 1.0000e-<br>005 | 7.7000e-<br>004 | 2.0000e-<br>004   | 1.0000e-<br>005  | 2.1000e-<br>004 | 0.0000   | 0.6679    | 0.6679    | 2.0000e-<br>005 | 0.0000 | 0.6684 |
| Total    | 2.8000e-<br>004 | 2.1000e-<br>004 | 2.4400e-<br>003 | 1.0000e-<br>005 | 7.7000e-<br>004  | 1.0000e-<br>005 | 7.7000e-<br>004 | 2.0000e-<br>004   | 1.0000e-<br>005  | 2.1000e-<br>004 | 0.0000   | 0.6679    | 0.6679    | 2.0000e-<br>005 | 0.0000 | 0.6684 |

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Fugitive Dust |        |        |        |                 | 0.0807           | 0.0000          | 0.0807          | 0.0180            | 0.0000           | 0.0180          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Off-Road      | 0.0127 | 0.1360 | 0.1017 | 2.2000e-<br>004 |                  | 5.7200e-<br>003 | 5.7200e-<br>003 |                   | 5.2600e-<br>003  | 5.2600e-<br>003 | 0.0000   | 19.0871   | 19.0871   | 6.1700e-<br>003 | 0.0000 | 19.2414 |
| Total         | 0.0127 | 0.1360 | 0.1017 | 2.2000e-<br>004 | 0.0807           | 5.7200e-<br>003 | 0.0865          | 0.0180            | 5.2600e-<br>003  | 0.0233          | 0.0000   | 19.0871   | 19.0871   | 6.1700e-<br>003 | 0.0000 | 19.2414 |

Page 18 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 3.4 Grading - 2022

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 | <u>.</u>          |                  |                 |          |           | MT        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 2.8000e-<br>004 | 2.1000e-<br>004 | 2.4400e-<br>003 | 1.0000e-<br>005 | 7.7000e-<br>004  | 1.0000e-<br>005 | 7.7000e-<br>004 | 2.0000e-<br>004   | 1.0000e-<br>005  | 2.1000e-<br>004 | 0.0000   | 0.6679    | 0.6679    | 2.0000e-<br>005 | 0.0000 | 0.6684 |
| Total    | 2.8000e-<br>004 | 2.1000e-<br>004 | 2.4400e-<br>003 | 1.0000e-<br>005 | 7.7000e-<br>004  | 1.0000e-<br>005 | 7.7000e-<br>004 | 2.0000e-<br>004   | 1.0000e-<br>005  | 2.1000e-<br>004 | 0.0000   | 0.6679    | 0.6679    | 2.0000e-<br>005 | 0.0000 | 0.6684 |

3.5 Building Construction - 2022

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | '/yr   |        |          |
|          | 0.2158 | 1.9754 | 2.0700 | 3.4100e-<br>003 |                  | 0.1023          | 0.1023        |                   | 0.0963           | 0.0963         | 0.0000   | 293.1324  | 293.1324  | 0.0702 | 0.0000 | 294.8881 |
| Total    | 0.2158 | 1.9754 | 2.0700 | 3.4100e-<br>003 |                  | 0.1023          | 0.1023        |                   | 0.0963           | 0.0963         | 0.0000   | 293.1324  | 293.1324  | 0.0702 | 0.0000 | 294.8881 |

#### 3.5 Building Construction - 2022

#### Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000         | 0.0000         | 0.0000 | 0.0000 | 0.0000         |
| Vendor   | 0.0527 | 1.6961 | 0.4580 | 4.5500e-<br>003 | 0.1140           | 3.1800e-<br>003 | 0.1171        | 0.0329            | 3.0400e-<br>003  | 0.0359         | 0.0000   | 441.9835       | 441.9835       | 0.0264 | 0.0000 | 442.6435       |
| Worker   | 0.4088 | 0.3066 | 3.5305 | 0.0107          | 1.1103           | 8.8700e-<br>003 | 1.1192        | 0.2949            | 8.1700e-<br>003  | 0.3031         | 0.0000   | 966.8117       | 966.8117       | 0.0266 | 0.0000 | 967.4773       |
| Total    | 0.4616 | 2.0027 | 3.9885 | 0.0152          | 1.2243           | 0.0121          | 1.2363        | 0.3278            | 0.0112           | 0.3390         | 0.0000   | 1,408.795<br>2 | 1,408.795<br>2 | 0.0530 | 0.0000 | 1,410.120<br>8 |

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-<br>003 |                  | 0.1023          | 0.1023        |                   | 0.0963           | 0.0963         | 0.0000   | 293.1321  | 293.1321  | 0.0702 | 0.0000 | 294.8877 |
| Total    | 0.2158 | 1.9754 | 2.0700 | 3.4100e-<br>003 |                  | 0.1023          | 0.1023        |                   | 0.0963           | 0.0963         | 0.0000   | 293.1321  | 293.1321  | 0.0702 | 0.0000 | 294.8877 |

#### 3.5 Building Construction - 2022

# Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000         | 0.0000         | 0.0000 | 0.0000 | 0.0000         |
| Vendor   | 0.0527 | 1.6961 | 0.4580 | 4.5500e-<br>003 | 0.1140           | 3.1800e-<br>003 | 0.1171        | 0.0329            | 3.0400e-<br>003  | 0.0359         | 0.0000   | 441.9835       | 441.9835       | 0.0264 | 0.0000 | 442.6435       |
| Worker   | 0.4088 | 0.3066 | 3.5305 | 0.0107          | 1.1103           | 8.8700e-<br>003 | 1.1192        | 0.2949            | 8.1700e-<br>003  | 0.3031         | 0.0000   | 966.8117       | 966.8117       | 0.0266 | 0.0000 | 967.4773       |
| Total    | 0.4616 | 2.0027 | 3.9885 | 0.0152          | 1.2243           | 0.0121          | 1.2363        | 0.3278            | 0.0112           | 0.3390         | 0.0000   | 1,408.795<br>2 | 1,408.795<br>2 | 0.0530 | 0.0000 | 1,410.120<br>8 |

3.5 Building Construction - 2023

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-<br>003 |                  | 0.0864          | 0.0864        |                   | 0.0813           | 0.0813         | 0.0000   | 286.2789  | 286.2789  | 0.0681 | 0.0000 | 287.9814 |
| Total    | 0.1942 | 1.7765 | 2.0061 | 3.3300e-<br>003 |                  | 0.0864          | 0.0864        |                   | 0.0813           | 0.0813         | 0.0000   | 286.2789  | 286.2789  | 0.0681 | 0.0000 | 287.9814 |

#### 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000         | 0.0000         | 0.0000 | 0.0000 | 0.0000         |
| Vendor   | 0.0382 | 1.2511 | 0.4011 | 4.3000e-<br>003 | 0.1113           | 1.4600e-<br>003 | 0.1127        | 0.0321            | 1.4000e-<br>003  | 0.0335         | 0.0000   | 417.9930       | 417.9930       | 0.0228 | 0.0000 | 418.5624       |
| Worker   | 0.3753 | 0.2708 | 3.1696 | 0.0101          | 1.0840           | 8.4100e-<br>003 | 1.0924        | 0.2879            | 7.7400e-<br>003  | 0.2957         | 0.0000   | 909.3439       | 909.3439       | 0.0234 | 0.0000 | 909.9291       |
| Total    | 0.4135 | 1.5218 | 3.5707 | 0.0144          | 1.1953           | 9.8700e-<br>003 | 1.2051        | 0.3200            | 9.1400e-<br>003  | 0.3292         | 0.0000   | 1,327.336<br>9 | 1,327.336<br>9 | 0.0462 | 0.0000 | 1,328.491<br>6 |

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-<br>003 |                  | 0.0864          | 0.0864        | 1<br>1<br>1       | 0.0813           | 0.0813         | 0.0000   | 286.2785  | 286.2785  | 0.0681 | 0.0000 | 287.9811 |
| Total    | 0.1942 | 1.7765 | 2.0061 | 3.3300e-<br>003 |                  | 0.0864          | 0.0864        |                   | 0.0813           | 0.0813         | 0.0000   | 286.2785  | 286.2785  | 0.0681 | 0.0000 | 287.9811 |

#### 3.5 Building Construction - 2023

### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000         | 0.0000         | 0.0000 | 0.0000 | 0.0000         |
| Vendor   | 0.0382 | 1.2511 | 0.4011 | 4.3000e-<br>003 | 0.1113           | 1.4600e-<br>003 | 0.1127        | 0.0321            | 1.4000e-<br>003  | 0.0335         | 0.0000   | 417.9930       | 417.9930       | 0.0228 | 0.0000 | 418.5624       |
| Worker   | 0.3753 | 0.2708 | 3.1696 | 0.0101          | 1.0840           | 8.4100e-<br>003 | 1.0924        | 0.2879            | 7.7400e-<br>003  | 0.2957         | 0.0000   | 909.3439       | 909.3439       | 0.0234 | 0.0000 | 909.9291       |
| Total    | 0.4135 | 1.5218 | 3.5707 | 0.0144          | 1.1953           | 9.8700e-<br>003 | 1.2051        | 0.3200            | 9.1400e-<br>003  | 0.3292         | 0.0000   | 1,327.336<br>9 | 1,327.336<br>9 | 0.0462 | 0.0000 | 1,328.491<br>6 |

3.6 Paving - 2023

|          | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Off-Road | 6.7100e-<br>003 | 0.0663 | 0.0948 | 1.5000e-<br>004 |                  | 3.3200e-<br>003 | 3.3200e-<br>003 |                   | 3.0500e-<br>003  | 3.0500e-<br>003 | 0.0000   | 13.0175   | 13.0175   | 4.2100e-<br>003 | 0.0000 | 13.1227 |
| Paving   | 0.0000          |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Total    | 6.7100e-<br>003 | 0.0663 | 0.0948 | 1.5000e-<br>004 |                  | 3.3200e-<br>003 | 3.3200e-<br>003 |                   | 3.0500e-<br>003  | 3.0500e-<br>003 | 0.0000   | 13.0175   | 13.0175   | 4.2100e-<br>003 | 0.0000 | 13.1227 |

# 3.6 Paving - 2023

### Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 3.7000e-<br>004 | 2.7000e-<br>004 | 3.1200e-<br>003 | 1.0000e-<br>005 | 1.0700e-<br>003  | 1.0000e-<br>005 | 1.0800e-<br>003 | 2.8000e-<br>004   | 1.0000e-<br>005  | 2.9000e-<br>004 | 0.0000   | 0.8963    | 0.8963    | 2.0000e-<br>005 | 0.0000 | 0.8968 |
| Total    | 3.7000e-<br>004 | 2.7000e-<br>004 | 3.1200e-<br>003 | 1.0000e-<br>005 | 1.0700e-<br>003  | 1.0000e-<br>005 | 1.0800e-<br>003 | 2.8000e-<br>004   | 1.0000e-<br>005  | 2.9000e-<br>004 | 0.0000   | 0.8963    | 0.8963    | 2.0000e-<br>005 | 0.0000 | 0.8968 |

|          | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | 7/yr            |        |         |
| Off-Road | 6.7100e-<br>003 | 0.0663 | 0.0948 | 1.5000e-<br>004 |                  | 3.3200e-<br>003 | 3.3200e-<br>003 |                   | 3.0500e-<br>003  | 3.0500e-<br>003 | 0.0000   | 13.0175   | 13.0175   | 4.2100e-<br>003 | 0.0000 | 13.1227 |
| Paving   | 0.0000          |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Total    | 6.7100e-<br>003 | 0.0663 | 0.0948 | 1.5000e-<br>004 |                  | 3.3200e-<br>003 | 3.3200e-<br>003 |                   | 3.0500e-<br>003  | 3.0500e-<br>003 | 0.0000   | 13.0175   | 13.0175   | 4.2100e-<br>003 | 0.0000 | 13.1227 |

# 3.6 Paving - 2023

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | со              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | '/yr            |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 3.7000e-<br>004 | 2.7000e-<br>004 | 3.1200e-<br>003 | 1.0000e-<br>005 | 1.0700e-<br>003  | 1.0000e-<br>005 | 1.0800e-<br>003 | 2.8000e-<br>004   | 1.0000e-<br>005  | 2.9000e-<br>004 | 0.0000   | 0.8963    | 0.8963    | 2.0000e-<br>005 | 0.0000 | 0.8968 |
| Total    | 3.7000e-<br>004 | 2.7000e-<br>004 | 3.1200e-<br>003 | 1.0000e-<br>005 | 1.0700e-<br>003  | 1.0000e-<br>005 | 1.0800e-<br>003 | 2.8000e-<br>004   | 1.0000e-<br>005  | 2.9000e-<br>004 | 0.0000   | 0.8963    | 0.8963    | 2.0000e-<br>005 | 0.0000 | 0.8968 |

3.6 Paving - 2024

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|--------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |        |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-<br>004 |                  | 5.1500e-<br>003 | 5.1500e-<br>003 |                   | 4.7400e-<br>003  | 4.7400e-<br>003 | 0.0000   | 22.0292   | 22.0292   | 7.1200e-<br>003 | 0.0000 | 22.2073 |
| Paving   | 0.0000 |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Total    | 0.0109 | 0.1048 | 0.1609 | 2.5000e-<br>004 |                  | 5.1500e-<br>003 | 5.1500e-<br>003 |                   | 4.7400e-<br>003  | 4.7400e-<br>003 | 0.0000   | 22.0292   | 22.0292   | 7.1200e-<br>003 | 0.0000 | 22.2073 |

#### 3.6 Paving - 2024

### Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 5.9000e-<br>004 | 4.1000e-<br>004 | 4.9200e-<br>003 | 2.0000e-<br>005 | 1.8100e-<br>003  | 1.0000e-<br>005 | 1.8200e-<br>003 | 4.8000e-<br>004   | 1.0000e-<br>005  | 4.9000e-<br>004 | 0.0000   | 1.4697    | 1.4697    | 4.0000e-<br>005 | 0.0000 | 1.4706 |
| Total    | 5.9000e-<br>004 | 4.1000e-<br>004 | 4.9200e-<br>003 | 2.0000e-<br>005 | 1.8100e-<br>003  | 1.0000e-<br>005 | 1.8200e-<br>003 | 4.8000e-<br>004   | 1.0000e-<br>005  | 4.9000e-<br>004 | 0.0000   | 1.4697    | 1.4697    | 4.0000e-<br>005 | 0.0000 | 1.4706 |

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|--------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |        |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-<br>004 |                  | 5.1500e-<br>003 | 5.1500e-<br>003 |                   | 4.7400e-<br>003  | 4.7400e-<br>003 | 0.0000   | 22.0292   | 22.0292   | 7.1200e-<br>003 | 0.0000 | 22.2073 |
| Paving   | 0.0000 |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Total    | 0.0109 | 0.1048 | 0.1609 | 2.5000e-<br>004 |                  | 5.1500e-<br>003 | 5.1500e-<br>003 |                   | 4.7400e-<br>003  | 4.7400e-<br>003 | 0.0000   | 22.0292   | 22.0292   | 7.1200e-<br>003 | 0.0000 | 22.2073 |

# 3.6 Paving - 2024

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 5.9000e-<br>004 | 4.1000e-<br>004 | 4.9200e-<br>003 | 2.0000e-<br>005 | 1.8100e-<br>003  | 1.0000e-<br>005 | 1.8200e-<br>003 | 4.8000e-<br>004   | 1.0000e-<br>005  | 4.9000e-<br>004 | 0.0000   | 1.4697    | 1.4697    | 4.0000e-<br>005 | 0.0000 | 1.4706 |
| Total    | 5.9000e-<br>004 | 4.1000e-<br>004 | 4.9200e-<br>003 | 2.0000e-<br>005 | 1.8100e-<br>003  | 1.0000e-<br>005 | 1.8200e-<br>003 | 4.8000e-<br>004   | 1.0000e-<br>005  | 4.9000e-<br>004 | 0.0000   | 1.4697    | 1.4697    | 4.0000e-<br>005 | 0.0000 | 1.4706 |

3.7 Architectural Coating - 2024

|                      | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category             |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |        |
| , a crime o counting | 4.1372          |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| 1 .                  | 3.1600e-<br>003 | 0.0213 | 0.0317 | 5.0000e-<br>005 |                  | 1.0700e-<br>003 | 1.0700e-<br>003 |                   | 1.0700e-<br>003  | 1.0700e-<br>003 | 0.0000   | 4.4682    | 4.4682    | 2.5000e-<br>004 | 0.0000 | 4.4745 |
| Total                | 4.1404          | 0.0213 | 0.0317 | 5.0000e-<br>005 |                  | 1.0700e-<br>003 | 1.0700e-<br>003 |                   | 1.0700e-<br>003  | 1.0700e-<br>003 | 0.0000   | 4.4682    | 4.4682    | 2.5000e-<br>004 | 0.0000 | 4.4745 |

#### 3.7 Architectural Coating - 2024

#### Unmitigated Construction Off-Site

|          | ROG    | NOx             | со     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|--------|-----------------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |        |                 |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | MT        | /yr             |        |         |
| Hauling  | 0.0000 | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 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   | 0.0101 | 6.9900e-<br>003 | 0.0835 | 2.8000e-<br>004 | 0.0307           | 2.3000e-<br>004 | 0.0309        | 8.1500e-<br>003   | 2.2000e-<br>004  | 8.3700e-<br>003 | 0.0000   | 24.9407   | 24.9407   | 6.1000e-<br>004 | 0.0000 | 24.9558 |
| Total    | 0.0101 | 6.9900e-<br>003 | 0.0835 | 2.8000e-<br>004 | 0.0307           | 2.3000e-<br>004 | 0.0309        | 8.1500e-<br>003   | 2.2000e-<br>004  | 8.3700e-<br>003 | 0.0000   | 24.9407   | 24.9407   | 6.1000e-<br>004 | 0.0000 | 24.9558 |

|                 | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|-----------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category        |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |        |
| Archit. Coating | 4.1372          |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Off-Road        | 3.1600e-<br>003 | 0.0213 | 0.0317 | 5.0000e-<br>005 |                  | 1.0700e-<br>003 | 1.0700e-<br>003 |                   | 1.0700e-<br>003  | 1.0700e-<br>003 | 0.0000   | 4.4682    | 4.4682    | 2.5000e-<br>004 | 0.0000 | 4.4745 |
| Total           | 4.1404          | 0.0213 | 0.0317 | 5.0000e-<br>005 |                  | 1.0700e-<br>003 | 1.0700e-<br>003 |                   | 1.0700e-<br>003  | 1.0700e-<br>003 | 0.0000   | 4.4682    | 4.4682    | 2.5000e-<br>004 | 0.0000 | 4.4745 |

#### 3.7 Architectural Coating - 2024

#### Mitigated Construction Off-Site

|          | ROG    | NOx             | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|--------|-----------------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |        |                 |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | MT        | /yr             |        |         |
| Hauling  | 0.0000 | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 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   | 0.0101 | 6.9900e-<br>003 | 0.0835 | 2.8000e-<br>004 | 0.0307           | 2.3000e-<br>004 | 0.0309        | 8.1500e-<br>003   | 2.2000e-<br>004  | 8.3700e-<br>003 | 0.0000   | 24.9407   | 24.9407   | 6.1000e-<br>004 | 0.0000 | 24.9558 |
| Total    | 0.0101 | 6.9900e-<br>003 | 0.0835 | 2.8000e-<br>004 | 0.0307           | 2.3000e-<br>004 | 0.0309        | 8.1500e-<br>003   | 2.2000e-<br>004  | 8.3700e-<br>003 | 0.0000   | 24.9407   | 24.9407   | 6.1000e-<br>004 | 0.0000 | 24.9558 |

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

|             | ROG    | NOx    | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|-------------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category    |        |        |         |        | ton              | s/yr            |               |                   |                  |                |          |                | MT             | /yr    |        |                |
| Mitigated   | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979           | 0.0580          | 7.8559        | 2.0895            | 0.0539           | 2.1434         | 0.0000   | 7,620.498<br>6 | 7,620.498<br>6 | 0.3407 | 0.0000 | 7,629.016<br>2 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979           | 0.0580          | 7.8559        | 2.0895            | 0.0539           | 2.1434         | 0.0000   | 7,620.498<br>6 | 7,620.498<br>6 | 0.3407 | 0.0000 | 7,629.016<br>2 |

#### 4.2 Trip Summary Information

|                                     | Ave      | rage Daily Trip Ra | ate      | Unmitigated | Mitigated  |
|-------------------------------------|----------|--------------------|----------|-------------|------------|
| Land Use                            | Weekday  | Saturday           | Sunday   | Annual VMT  | Annual VMT |
| Apartments Low Rise                 | 145.75   | 154.25             | 154.00   | 506,227     | 506,227    |
| Apartments Mid Rise                 | 4,026.75 | 3,773.25           | 4075.50  | 13,660,065  | 13,660,065 |
| General Office Building             | 288.45   | 62.55              | 31.05    | 706,812     | 706,812    |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52           | 2817.72  | 3,413,937   | 3,413,937  |
| Hotel                               | 192.00   | 187.50             | 160.00   | 445,703     | 445,703    |
| Quality Restaurant                  | 501.12   | 511.92             | 461.20   | 707,488     | 707,488    |
| Regional Shopping Center            | 528.08   | 601.44             | 357.84   | 1,112,221   | 1,112,221  |
| Total                               | 8,050.95 | 8,164.43           | 8,057.31 | 20,552,452  | 20,552,452 |

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 Low Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86             | 11       | 3       |  |  |
| Apartments Mid Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86             | 11       | 3       |  |  |
| General Office Building  | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 77             | 19       | 4       |  |  |
| High Turnover (Sit Down  | 16.60      | 8.40       | 6.90        | 8.50       | 72.50      | 19.00       | 37             | 20       | 43      |  |  |
| Hotel                    | 16.60      | 8.40       | 6.90        | 19.40      | 61.60      | 19.00       | 58             | 38       | 4       |  |  |
| Quality Restaurant       | 16.60      | 8.40       | 6.90        | 12.00      | 69.00      | 19.00       | 38             | 18       | 44      |  |  |
| Regional Shopping Center | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54             | 35       | 11      |  |  |

#### 4.4 Fleet Mix

| Land Use                               | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Low Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building                | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down<br>Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel                                  | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant                     | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center               | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

# 5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                            | ROG    | NOx    | со     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------------------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category                   |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Electricity<br>Mitigated   |        |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2,512.646<br>5 | 2,512.646<br>5 | 0.1037 | 0.0215 | 2,521.635<br>6 |
| Electricity<br>Unmitigated |        |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2,512.646<br>5 | 2,512.646<br>5 | 0.1037 | 0.0215 | 2,521.635<br>6 |
| NaturalGas<br>Mitigated    | 0.1398 | 1.2312 | 0.7770 | 7.6200e-<br>003 | ,                | 0.0966          | 0.0966        | ,                 | 0.0966           | 0.0966         | 0.0000   | 1,383.426<br>7 | 1,383.426<br>7 | 0.0265 | 0.0254 | 1,391.647<br>8 |
| NaturalGas<br>Unmitigated  | 0.1398 | 1.2312 | 0.7770 | 7.6200e-<br>003 |                  | 0.0966          | 0.0966        |                   | 0.0966           | 0.0966         | 0.0000   | 1,383.426<br>7 | 1,383.426<br>7 | 0.0265 | 0.0254 | 1,391.647<br>8 |

#### 5.2 Energy by Land Use - NaturalGas

# <u>Unmitigated</u>

|  | NaturalGa<br>s Use | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |                | MT             | 7/yr            |                 |                |
| Apartments Low<br>Rise                 | 408494             | 2.2000e-<br>003 | 0.0188          | 8.0100e-<br>003 | 1.2000e-<br>004 |                  | 1.5200e-<br>003 | 1.5200e-<br>003 |                   | 1.5200e-<br>003  | 1.5200e-<br>003 | 0.0000   | 21.7988        | 21.7988        | 4.2000e-<br>004 | 4.0000e-<br>004 | 21.9284        |
| Apartments Mid<br>Rise                 | 1.30613e<br>+007   | 0.0704          | 0.6018          | 0.2561          | 3.8400e-<br>003 |                  | 0.0487          | 0.0487          |                   | 0.0487           | 0.0487          | 0.0000   | 696.9989       | 696.9989       | 0.0134          | 0.0128          | 701.1408       |
| General Office<br>Building             | 468450             | 2.5300e-<br>003 | 0.0230          | 0.0193          | 1.4000e-<br>004 |                  | 1.7500e-<br>003 | 1.7500e-<br>003 |                   | 1.7500e-<br>003  | 1.7500e-<br>003 | 0.0000   | 24.9983        | 24.9983        | 4.8000e-<br>004 | 4.6000e-<br>004 | 25.1468        |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.0448          | 0.4072          | 0.3421          | 2.4400e-<br>003 |                  | 0.0310          | 0.0310          |                   | 0.0310           | 0.0310          | 0.0000   | 443.3124       | 443.3124       | 8.5000e-<br>003 | 8.1300e-<br>003 | 445.9468       |
| Hotel                                  | 1.74095e<br>+006   | 9.3900e-<br>003 | 0.0853          | 0.0717          | 5.1000e-<br>004 |                  | 6.4900e-<br>003 | 6.4900e-<br>003 |                   | 6.4900e-<br>003  | 6.4900e-<br>003 | 0.0000   | 92.9036        | 92.9036        | 1.7800e-<br>003 | 1.7000e-<br>003 | 93.4557        |
| Quality<br>Restaurant                  | 1.84608e<br>+006   | 9.9500e-<br>003 | 0.0905          | 0.0760          | 5.4000e-<br>004 |                  | 6.8800e-<br>003 | 6.8800e-<br>003 |                   | 6.8800e-<br>003  | 6.8800e-<br>003 | 0.0000   | 98.5139        | 98.5139        | 1.8900e-<br>003 | 1.8100e-<br>003 | 99.0993        |
| Regional<br>Shopping Center            | 31040 i            | 5.0000e-<br>004 | 4.5000e-<br>003 | 3.7800e-<br>003 | 3.0000e-<br>005 |                  | 3.4000e-<br>004 | 3.4000e-<br>004 |                   | 3.4000e-<br>004  | 3.4000e-<br>004 | 0.0000   | 4.9009         | 4.9009         | 9.0000e-<br>005 | 9.0000e-<br>005 | 4.9301         |
| Total                                  |                    | 0.1398          | 1.2312          | 0.7770          | 7.6200e-<br>003 |                  | 0.0966          | 0.0966          |                   | 0.0966           | 0.0966          | 0.0000   | 1,383.426<br>8 | 1,383.426<br>8 | 0.0265          | 0.0254          | 1,391.647<br>8 |

#### 5.2 Energy by Land Use - NaturalGas

# Mitigated

|  | NaturalGa<br>s Use | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          | <u>.</u>       | MT             | /yr             |                 |                |
| Apartments Low<br>Rise                 | 408494             | 2.2000e-<br>003 | 0.0188          | 8.0100e-<br>003 | 1.2000e-<br>004 |                  | 1.5200e-<br>003 | 1.5200e-<br>003 |                   | 1.5200e-<br>003  | 1.5200e-<br>003 | 0.0000   | 21.7988        | 21.7988        | 4.2000e-<br>004 | 4.0000e-<br>004 | 21.9284        |
| Apartments Mid<br>Rise                 | 1.30613e<br>+007   | 0.0704          | 0.6018          | 0.2561          | 3.8400e-<br>003 |                  | 0.0487          | 0.0487          |                   | 0.0487           | 0.0487          | 0.0000   | 696.9989       | 696.9989       | 0.0134          | 0.0128          | 701.1408       |
| General Office<br>Building             | 468450             | 2.5300e-<br>003 | 0.0230          | 0.0193          | 1.4000e-<br>004 |                  | 1.7500e-<br>003 | 1.7500e-<br>003 | ,                 | 1.7500e-<br>003  | 1.7500e-<br>003 | 0.0000   | 24.9983        | 24.9983        | 4.8000e-<br>004 | 4.6000e-<br>004 | 25.1468        |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.0448          | 0.4072          | 0.3421          | 2.4400e-<br>003 |                  | 0.0310          | 0.0310          |                   | 0.0310           | 0.0310          | 0.0000   | 443.3124       | 443.3124       | 8.5000e-<br>003 | 8.1300e-<br>003 | 445.9468       |
| Hotel                                  | 1.74095e<br>+006   | 9.3900e-<br>003 | 0.0853          | 0.0717          | 5.1000e-<br>004 |                  | 6.4900e-<br>003 | 6.4900e-<br>003 | ,                 | 6.4900e-<br>003  | 6.4900e-<br>003 | 0.0000   | 92.9036        | 92.9036        | 1.7800e-<br>003 | 1.7000e-<br>003 | 93.4557        |
| Quality<br>Restaurant                  | 1.84608e<br>+006   | 9.9500e-<br>003 | 0.0905          | 0.0760          | 5.4000e-<br>004 |                  | 6.8800e-<br>003 | 6.8800e-<br>003 | 1                 | 6.8800e-<br>003  | 6.8800e-<br>003 | 0.0000   | 98.5139        | 98.5139        | 1.8900e-<br>003 | 1.8100e-<br>003 | 99.0993        |
| Regional<br>Shopping Center            | 91840              | 5.0000e-<br>004 | 4.5000e-<br>003 | 3.7800e-<br>003 | 3.0000e-<br>005 |                  | 3.4000e-<br>004 | 3.4000e-<br>004 | ,                 | 3.4000e-<br>004  | 3.4000e-<br>004 | 0.0000   | 4.9009         | 4.9009         | 9.0000e-<br>005 | 9.0000e-<br>005 | 4.9301         |
| Total                                  |                    | 0.1398          | 1.2312          | 0.7770          | 7.6200e-<br>003 |                  | 0.0966          | 0.0966          |                   | 0.0966           | 0.0966          | 0.0000   | 1,383.426<br>8 | 1,383.426<br>8 | 0.0265          | 0.0254          | 1,391.647<br>8 |

Page 34 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

### 5.3 Energy by Land Use - Electricity

# <u>Unmitigated</u>

|  | Electricity<br>Use | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kWh/yr             |                | МТ              | 7/yr            |                |
| Apartments Low<br>Rise                 | 106010             | 33.7770        | 1.3900e-<br>003 | 2.9000e-<br>004 | 33.8978        |
| Apartments Mid<br>Rise                 | 3.94697e<br>+006   | 1,257.587<br>9 | 0.0519          | 0.0107          | 1,262.086<br>9 |
| General Office<br>Building             | 584550             | 186.2502       | 7.6900e-<br>003 | 1.5900e-<br>003 | 186.9165       |
| High Turnover (Sit<br>Down Restaurant) |                    | 506.3022       | 0.0209          | 4.3200e-<br>003 | 508.1135       |
| Hotel                                  | 550308             | 175.3399       | 7.2400e-<br>003 | 1.5000e-<br>003 | 175.9672       |
| Quality<br>Restaurant                  | 353120             | 112.5116       | 4.6500e-<br>003 | 9.6000e-<br>004 | 112.9141       |
| Regional<br>Shopping Center            | 756000             | 240.8778       | 9.9400e-<br>003 | 2.0600e-<br>003 | 241.7395       |
| Total                                  |                    | 2,512.646<br>5 | 0.1037          | 0.0215          | 2,521.635<br>6 |

Page 35 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## 5.3 Energy by Land Use - Electricity

## Mitigated

|  | Electricity<br>Use | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kWh/yr             |                | МТ              | /yr             |                |
| Apartments Low<br>Rise                 | 106010             | 33.7770        | 1.3900e-<br>003 | 2.9000e-<br>004 | 33.8978        |
| Apartments Mid<br>Rise                 | 3.94697e<br>+006   | 1,257.587<br>9 | 0.0519          | 0.0107          | 1,262.086<br>9 |
| General Office<br>Building             | 584550             | 186.2502       | 7.6900e-<br>003 | 1.5900e-<br>003 | 186.9165       |
| High Turnover (Sit<br>Down Restaurant) |                    | 506.3022       | 0.0209          | 4.3200e-<br>003 | 508.1135       |
| Hotel                                  | 550308             | 175.3399       | 7.2400e-<br>003 | 1.5000e-<br>003 | 175.9672       |
| Quality<br>Restaurant                  | 353120             | 112.5116       | 4.6500e-<br>003 | 9.6000e-<br>004 | 112.9141       |
| Regional<br>Shopping Center            | 756000             | 240.8778       | 9.9400e-<br>003 | 2.0600e-<br>003 | 241.7395       |
| Total                                  |                    | 2,512.646<br>5 | 0.1037          | 0.0215          | 2,521.635<br>6 |

## 6.0 Area Detail

6.1 Mitigation Measures Area

Page 36 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

|             | ROG    | NOx    | СО      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O             | CO2e     |
|-------------|--------|--------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----------------|----------|
| Category    |        |        |         |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |                 |          |
| Mitigated   | 5.1437 | 0.2950 | 10.3804 | 1.6700e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670  | 220.9670  | 0.0201 | 3.7400e-<br>003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670  | 220.9670  | 0.0201 | 3.7400e-<br>003 | 222.5835 |

## 6.2 Area by SubCategory

#### <u>Unmitigated</u>

|                          | ROG       | NOx    | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O             | CO2e     |
|--------------------------|-----------|--------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----------------|----------|
| SubCategory              | r tons/yr |        |         |                 |                  |                 |               |                   | МТ               | /yr            |          |           |           |                 |                 |          |
| Architectural<br>Coating | 0.4137    |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Consumer<br>Products     | 4.3998    |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Hearth                   | 0.0206    | 0.1763 | 0.0750  | 1.1200e-<br>003 |                  | 0.0143          | 0.0143        |                   | 0.0143           | 0.0143         | 0.0000   | 204.1166  | 204.1166  | 3.9100e-<br>003 | 3.7400e-<br>003 | 205.3295 |
| Landscaping              | 0.3096    | 0.1187 | 10.3054 | 5.4000e-<br>004 |                  | 0.0572          | 0.0572        |                   | 0.0572           | 0.0572         | 0.0000   | 16.8504   | 16.8504   | 0.0161          | 0.0000          | 17.2540  |
| Total                    | 5.1437    | 0.2950 | 10.3804 | 1.6600e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670  | 220.9670  | 0.0201          | 3.7400e-<br>003 | 222.5835 |

## 6.2 Area by SubCategory

## Mitigated

|                          | ROG     | NOx    | CO          | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O             | CO2e     |
|--------------------------|---------|--------|-------------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----------------|----------|
| SubCategory              | tons/yr |        |             |                 |                  |                 |               |                   | МТ               | /yr            |          |           |           |                 |                 |          |
| Architectural<br>Coating | 0.4137  |        | 1<br>1<br>1 |                 | 1<br>1<br>1      | 0.0000          | 0.0000        | 1<br>1<br>1       | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Consumer<br>Products     | 4.3998  |        |             |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Hearth                   | 0.0206  | 0.1763 | 0.0750      | 1.1200e-<br>003 |                  | 0.0143          | 0.0143        |                   | 0.0143           | 0.0143         | 0.0000   | 204.1166  | 204.1166  | 3.9100e-<br>003 | 3.7400e-<br>003 | 205.3295 |
| Landscaping              | 0.3096  | 0.1187 | 10.3054     | 5.4000e-<br>004 |                  | 0.0572          | 0.0572        |                   | 0.0572           | 0.0572         | 0.0000   | 16.8504   | 16.8504   | 0.0161          | 0.0000          | 17.2540  |
| Total                    | 5.1437  | 0.2950 | 10.3804     | 1.6600e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670  | 220.9670  | 0.0201          | 3.7400e-<br>003 | 222.5835 |

## 7.0 Water Detail

7.1 Mitigation Measures Water

Page 38 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

|          | Total CO2 | CH4    | N2O    | CO2e     |
|----------|-----------|--------|--------|----------|
| Category |           | МТ     | /yr    |          |
|          | 585.8052  | 3.0183 | 0.0755 | 683.7567 |
| - Guine  | 585.8052  | 3.0183 | 0.0755 | 683.7567 |

Page 39 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## 7.2 Water by Land Use

## <u>Unmitigated</u>

|  | Indoor/Out<br>door Use | Total CO2 | CH4    | N2O             | CO2e     |  |  |  |
|--|------------------------|-----------|--------|-----------------|----------|--|--|--|
| Land Use                               | Mgal                   |           | MT/yr  |                 |          |  |  |  |
| Apartments Low<br>Rise                 | 1.62885 /<br>1.02688   | 10.9095   | 0.0535 | 1.3400e-<br>003 | 12.6471  |  |  |  |
| Apartments Mid<br>Rise                 | 63.5252 /<br>40.0485   | 425.4719  | 2.0867 | 0.0523          | 493.2363 |  |  |  |
| General Office<br>Building             | 7.99802 /<br>4.90201   | 53.0719   | 0.2627 | 6.5900e-<br>003 | 61.6019  |  |  |  |
| High Turnover (Sit<br>Down Restaurant) |                        |           | 0.3580 | 8.8200e-<br>003 | 62.8482  |  |  |  |
| Hotel                                  | 1.26834 /<br>0.140927  |           | 0.0416 | 1.0300e-<br>003 | 7.5079   |  |  |  |
|  | 2.42827 /<br>0.154996  |           | 0.0796 | 1.9600e-<br>003 | 13.9663  |  |  |  |
| Regional<br>Shopping Center            | 4.14806 /<br>2.54236   | 27.5250   | 0.1363 | 3.4200e-<br>003 | 31.9490  |  |  |  |
| Total                                  |                        | 585.8052  | 3.0183 | 0.0755          | 683.7567 |  |  |  |

Page 40 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## 7.2 Water by Land Use

## Mitigated

|  | Indoor/Out<br>door Use | Total CO2 | CH4    | N2O             | CO2e     |  |  |  |
|--|------------------------|-----------|--------|-----------------|----------|--|--|--|
| Land Use                               | Mgal                   |           | MT/yr  |                 |          |  |  |  |
| Apartments Low<br>Rise                 | 1.62885 /<br>1.02688   | 10.9095   | 0.0535 | 1.3400e-<br>003 | 12.6471  |  |  |  |
| Apartments Mid<br>Rise                 | 63.5252 /<br>40.0485   | 425.4719  | 2.0867 | 0.0523          | 493.2363 |  |  |  |
| General Office<br>Building             | 7.99802 /<br>4.90201   | 53.0719   | 0.2627 | 6.5900e-<br>003 | 61.6019  |  |  |  |
| High Turnover (Sit<br>Down Restaurant) | 10.9272 /<br>0.697482  | 51.2702   | 0.3580 | 8.8200e-<br>003 | 62.8482  |  |  |  |
| Hotel                                  | 1.26834 /<br>0.140927  |           | 0.0416 | 1.0300e-<br>003 | 7.5079   |  |  |  |
|  | 2.42827 /<br>0.154996  |           | 0.0796 | 1.9600e-<br>003 | 13.9663  |  |  |  |
| Regional<br>Shopping Center            | 4.14806 /<br>2.54236   | 27.5250   | 0.1363 | 3.4200e-<br>003 | 31.9490  |  |  |  |
| Total                                  |                        | 585.8052  | 3.0183 | 0.0755          | 683.7567 |  |  |  |

## 8.0 Waste Detail

8.1 Mitigation Measures Waste

Page 41 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## Category/Year

|             | Total CO2 | CH4     | N2O    | CO2e     |  |  |  |
|-------------|-----------|---------|--------|----------|--|--|--|
|             |           | MT/yr   |        |          |  |  |  |
| Initigation | 207.8079  | 12.2811 | 0.0000 | 514.8354 |  |  |  |
| - g         | 207.8079  | 12.2811 | 0.0000 | 514.8354 |  |  |  |

Page 42 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## 8.2 Waste by Land Use

## <u>Unmitigated</u>

|  | Waste<br>Disposed | Total CO2 | CH4     | N2O    | CO2e     |  |  |  |
|--|-------------------|-----------|---------|--------|----------|--|--|--|
| Land Use                               | tons              |           | MT/yr   |        |          |  |  |  |
| Apartments Low<br>Rise                 | 11.5              | 2.3344    | 0.1380  | 0.0000 | 5.7834   |  |  |  |
| Apartments Mid<br>Rise                 | 448.5             | 91.0415   | 5.3804  | 0.0000 | 225.5513 |  |  |  |
| General Office<br>Building             | 41.85             | 8.4952    | 0.5021  | 0.0000 | 21.0464  |  |  |  |
| High Turnover (Sit<br>Down Restaurant) |                   | 86.9613   | 5.1393  | 0.0000 | 215.4430 |  |  |  |
| Hotel                                  | 27.38             | 5.5579    | 0.3285  | 0.0000 | 13.7694  |  |  |  |
| Quality<br>Restaurant                  | 7.3               | 1.4818    | 0.0876  | 0.0000 | 3.6712   |  |  |  |
| Regional<br>Shopping Center            | 58.8              | 11.9359   | 0.7054  | 0.0000 | 29.5706  |  |  |  |
| Total                                  |                   | 207.8079  | 12.2811 | 0.0000 | 514.8354 |  |  |  |

Page 43 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## 8.2 Waste by Land Use

#### Mitigated

|  | Waste<br>Disposed | Total CO2 | CH4     | N2O    | CO2e     |  |  |  |
|--|-------------------|-----------|---------|--------|----------|--|--|--|
| Land Use                               | tons              |           | MT/yr   |        |          |  |  |  |
| Apartments Low<br>Rise                 | 11.5              | 2.3344    | 0.1380  | 0.0000 | 5.7834   |  |  |  |
| Apartments Mid<br>Rise                 | 448.5             | 91.0415   | 5.3804  | 0.0000 | 225.5513 |  |  |  |
| General Office<br>Building             | 41.85             | 8.4952    | 0.5021  | 0.0000 | 21.0464  |  |  |  |
| High Turnover (Sit<br>Down Restaurant) |                   | 86.9613   | 5.1393  | 0.0000 | 215.4430 |  |  |  |
| Hotel                                  | 27.38             | 5.5579    | 0.3285  | 0.0000 | 13.7694  |  |  |  |
| Quality<br>Restaurant                  | 7.3               | 1.4818    | 0.0876  | 0.0000 | 3.6712   |  |  |  |
| Regional<br>Shopping Center            | 58.8              | 11.9359   | 0.7054  | 0.0000 | 29.5706  |  |  |  |
| Total                                  |                   | 207.8079  | 12.2811 | 0.0000 | 514.8354 |  |  |  |

## 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 |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Page 44 of 44

## Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

## **Boilers**

| Equipment Type         | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|------------------------|--------|----------------|-----------------|---------------|-----------|
| User Defined Equipment |        |                |                 |               |           |
| Equipment Type         | Number |                |                 |               |           |
|                        |        |                |                 |               |           |

# 11.0 Vegetation

## Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

## **1.0 Project Characteristics**

## 1.1 Land Usage

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| General Office Building             | 45.00  | 1000sqft      | 1.03        | 45,000.00          | 0          |
| High Turnover (Sit Down Restaurant) | 36.00  | 1000sqft      | 0.83        | 36,000.00          | 0          |
| Hotel                               | 50.00  | Room          | 1.67        | 72,600.00          | 0          |
| Quality Restaurant                  | 8.00   | 1000sqft      | 0.18        | 8,000.00           | 0          |
| Apartments Low Rise                 | 25.00  | Dwelling Unit | 1.56        | 25,000.00          | 72         |
| Apartments Mid Rise                 | 975.00 | Dwelling Unit | 25.66       | 975,000.00         | 2789       |
| Regional Shopping Center            | 56.00  | 1000sqft      | 1.29        | 56,000.00          | 0          |

## **1.2 Other Project Characteristics**

| Urbanization               | Urban                     | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 33    |
|----------------------------|---------------------------|----------------------------|-------|----------------------------|-------|
| Climate Zone               | 9                         |                            |       | <b>Operational Year</b>    | 2028  |
| Utility Company            | Southern California Ediso | n                          |       |                            |       |
| CO2 Intensity<br>(Ib/MWhr) | 702.44                    | CH4 Intensity<br>(Ib/MWhr) | 0.029 | N2O Intensity<br>(Ib/MWhr) | 0.006 |

## 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name      | Column Name       | Default Value | New Value |
|-----------------|-------------------|---------------|-----------|
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | NumberWood        | 1.25          | 0.00      |
| tblFireplaces   | NumberWood        | 48.75         | 0.00      |
| tblVehicleTrips | ST_TR             | 7.16          | 6.17      |
| tblVehicleTrips | ST_TR             | 6.39          | 3.87      |
| tblVehicleTrips | ST_TR             | 2.46          | 1.39      |
| tblVehicleTrips | ST_TR             | 158.37        | 79.82     |
| tblVehicleTrips | ST_TR             | 8.19          | 3.75      |
| tblVehicleTrips | ST_TR             | 94.36         | 63.99     |
| tblVehicleTrips | ST_TR             | 49.97         | 10.74     |
| tblVehicleTrips | SU_TR             | 6.07          | 6.16      |
| tblVehicleTrips | SU_TR             | 5.86          | 4.18      |
| tblVehicleTrips | SU_TR             | 1.05          | 0.69      |
| tblVehicleTrips | SU_TR             | 131.84        | 78.27     |

| tblVehicleTrips | SU_TR              | 5.95   | 3.20  |
|-----------------|--------------------|--------|-------|
| tblVehicleTrips | SU_TR              | 72.16  | 57.65 |
| tblVehicleTrips | SU_TR              | 25.24  | 6.39  |
| tblVehicleTrips | WD_TR              | 6.59   | 5.83  |
| tblVehicleTrips | WD_TR              | 6.65   | 4.13  |
| tblVehicleTrips | WD_TR              | 11.03  | 6.41  |
| tblVehicleTrips | WD_TR              | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR              | 8.17   | 3.84  |
| tblVehicleTrips | WD_TR              | 89.95  | 62.64 |
| tblVehicleTrips | WD_TR              | 42.70  | 9.43  |
| tblWoodstoves   | NumberCatalytic    | 1.25   | 0.00  |
| tblWoodstoves   | NumberCatalytic    | 48.75  | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 1.25   | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 48.75  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
|                 |                    |        |       |

# 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction** 

|         | ROG      | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|---------|----------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year    |          |         |         |        | lb/d             | day             |               |                   |                  |                |          |                 | lb/d            | lay    |        |                 |
| 2021    | 4.2769   | 46.4588 | 31.6840 | 0.0643 | 18.2675          | 2.0461          | 20.3135       | 9.9840            | 1.8824           | 11.8664        | 0.0000   | 6,234.797<br>4  | 6,234.797<br>4  | 1.9495 | 0.0000 | 6,283.535<br>2  |
| 2022    | 5.3304   | 38.8967 | 49.5629 | 0.1517 | 9.8688           | 1.6366          | 10.7727       | 3.6558            | 1.5057           | 5.1615         | 0.0000   | 15,251.56<br>74 | 15,251.56<br>74 | 1.9503 | 0.0000 | 15,278.52<br>88 |
| 2023    | 4.8957   | 26.3317 | 46.7567 | 0.1472 | 9.8688           | 0.7794          | 10.6482       | 2.6381            | 0.7322           | 3.3702         | 0.0000   | 14,807.52<br>69 | 14,807.52<br>69 | 1.0250 | 0.0000 | 14,833.15<br>21 |
| 2024    | 237.1630 | 9.5575  | 15.1043 | 0.0244 | 1.7884           | 0.4698          | 1.8628        | 0.4743            | 0.4322           | 0.5476         | 0.0000   | 2,361.398<br>9  | 2,361.398<br>9  | 0.7177 | 0.0000 | 2,379.342<br>1  |
| Maximum | 237.1630 | 46.4588 | 49.5629 | 0.1517 | 18.2675          | 2.0461          | 20.3135       | 9.9840            | 1.8824           | 11.8664        | 0.0000   | 15,251.56<br>74 | 15,251.56<br>74 | 1.9503 | 0.0000 | 15,278.52<br>88 |

## 2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

|         | ROG      | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|---------|----------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year    |          |         |         |        | lb/              | /day            |               |                   |                  |                |          |                 | lb/d            | day    |        |                 |
| 2021    | 4.2769   | 46.4588 | 31.6840 | 0.0643 | 18.2675          | 2.0461          | 20.3135       | 9.9840            | 1.8824           | 11.8664        | 0.0000   | 6,234.797<br>4  | 6,234.797<br>4  | 1.9495 | 0.0000 | 6,283.535<br>2  |
| 2022    | 5.3304   | 38.8967 | 49.5629 | 0.1517 | 9.8688           | 1.6366          | 10.7727       | 3.6558            | 1.5057           | 5.1615         | 0.0000   | 15,251.56<br>74 | 15,251.56<br>74 | 1.9503 | 0.0000 | 15,278.52<br>88 |
| 2023    | 4.8957   | 26.3317 | 46.7567 | 0.1472 | 9.8688           | 0.7794          | 10.6482       | 2.6381            | 0.7322           | 3.3702         | 0.0000   | 14,807.52<br>69 | 14,807.52<br>69 | 1.0250 | 0.0000 | 14,833.15<br>20 |
| 2024    | 237.1630 | 9.5575  | 15.1043 | 0.0244 | 1.7884           | 0.4698          | 1.8628        | 0.4743            | 0.4322           | 0.5476         | 0.0000   | 2,361.398<br>9  | 2,361.398<br>9  | 0.7177 | 0.0000 | 2,379.342<br>1  |
| Maximum | 237.1630 | 46.4588 | 49.5629 | 0.1517 | 18.2675          | 2.0461          | 20.3135       | 9.9840            | 1.8824           | 11.8664        | 0.0000   | 15,251.56<br>74 | 15,251.56<br>74 | 1.9503 | 0.0000 | 15,278.52<br>88 |
|         | ROG      | NOx     | CO      | SO2    | Fugitive         | Exhaust         | PM10<br>Total | Fugitive          | Exhaust          | PM2.5          | Bio- CO2 | NBio-CO2        | Total CO2       | CH4    | N20    | CO2e            |

|                      | ROG  | NOx  | со   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>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 |

## 2.2 Overall Operational

## Unmitigated Operational

|          | ROG     | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |        | lb/              | day             |               |                   |                  |                |          |                 | lb/d            | lay    |        |                 |
| Area     | 30.5020 | 15.0496 | 88.4430  | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Energy   | 0.7660  | 6.7462  | 4.2573   | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2  | 8,355.983<br>2  | 0.1602 | 0.1532 | 8,405.638<br>7  |
| Mobile   | 9.8489  | 45.4304 | 114.8495 | 0.4917 | 45.9592          | 0.3360          | 46.2951       | 12.2950           | 0.3119           | 12.6070        |          | 50,306.60<br>34 | 50,306.60<br>34 | 2.1807 |        | 50,361.12<br>08 |
| Total    | 41.1168 | 67.2262 | 207.5497 | 0.6278 | 45.9592          | 2.4626          | 48.4217       | 12.2950           | 2.4385           | 14.7336        | 0.0000   | 76,811.18<br>16 | 76,811.18<br>16 | 2.8282 | 0.4832 | 77,025.87<br>86 |

## Mitigated Operational

|          | ROG     | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |        | lb/o             | day             |               |                   |                  |                |          |                 | lb/d            | day    |        |                 |
| Area     | 30.5020 | 15.0496 | 88.4430  | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Energy   | 0.7660  | 6.7462  | 4.2573   | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2  | 8,355.983<br>2  | 0.1602 | 0.1532 | 8,405.638<br>7  |
| Mobile   | 9.8489  | 45.4304 | 114.8495 | 0.4917 | 45.9592          | 0.3360          | 46.2951       | 12.2950           | 0.3119           | 12.6070        |          | 50,306.60<br>34 | 50,306.60<br>34 | 2.1807 |        | 50,361.12<br>08 |
| Total    | 41.1168 | 67.2262 | 207.5497 | 0.6278 | 45.9592          | 2.4626          | 48.4217       | 12.2950           | 2.4385           | 14.7336        | 0.0000   | 76,811.18<br>16 | 76,811.18<br>16 | 2.8282 | 0.4832 | 77,025.87<br>86 |

|                      | ROG  | NOx  | со   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>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<br>Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days<br>Week | Num Days | Phase Description |
|-----------------|-----------------------|-----------------------|------------|------------|------------------|----------|-------------------|
| 1               | Demolition            | Demolition            | 9/1/2021   | 10/12/2021 | 5                | 30       |                   |
| 2               | Site Preparation      | Site Preparation      | 10/13/2021 | 11/9/2021  | 5                | 20       |                   |
| 3               | Grading               | Grading               | 11/10/2021 | 1/11/2022  | 5                | 45       |                   |
| 4               | Building Construction | Building Construction | 1/12/2022  | 12/12/2023 | 5                | 500      |                   |
| 5               | Paving                | Paving                | 12/13/2023 | 1/30/2024  | 5                | 35       |                   |
| 6               | Architectural Coating | Architectural Coating | 1/31/2024  | 3/19/2024  | 5                | 35       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

| 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        |
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Building Construction | Cranes                    | 1      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Paving                | Pavers                    | 2      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 2      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |

Trips and VMT

| Phase Name            | Offroad Equipment<br>Count | Worker Trip<br>Number | Vendor Trip<br>Number | Hauling Trip<br>Number | Worker Trip<br>Length | Vendor Trip<br>Length | Hauling Trip<br>Length | Worker Vehicle<br>Class | Vendor<br>Vehicle Class | Hauling<br>Vehicle Class |
|-----------------------|----------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Demolition            | 6                          | 15.00                 | 0.00                  | 458.00                 | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Site Preparation      | 7                          | 18.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Grading               | 8                          | 20.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Building Construction | 9                          | 801.00                | 143.00                | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Paving                | 6                          | 15.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Architectural Coating | 1                          | 160.00                | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |

## **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 3.3074           | 0.0000          | 3.3074        | 0.5008            | 0.0000           | 0.5008         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.1651 | 31.4407 | 21.5650 | 0.0388 |                  | 1.5513          | 1.5513        |                   | 1.4411           | 1.4411         |          | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |
| Total         | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 3.3074           | 1.5513          | 4.8588        | 0.5008            | 1.4411           | 1.9419         |          | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |

## 3.2 Demolition - 2021

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|-----|----------------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |                | lb/c           | lay             |     |                |
| Hauling  | 0.1273 | 4.0952 | 0.9602 | 0.0119          | 0.2669           | 0.0126          | 0.2795        | 0.0732            | 0.0120           | 0.0852         |          | 1,292.241<br>3 | 1,292.241<br>3 | 0.0877          |     | 1,294.433<br>7 |
| 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         |
| Worker   | 0.0643 | 0.0442 | 0.6042 | 1.7100e-<br>003 | 0.1677           | 1.3500e-<br>003 | 0.1690        | 0.0445            | 1.2500e-<br>003  | 0.0457         |          | 170.8155       | 170.8155       | 5.0300e-<br>003 |     | 170.9413       |
| Total    | 0.1916 | 4.1394 | 1.5644 | 0.0136          | 0.4346           | 0.0139          | 0.4485        | 0.1176            | 0.0133           | 0.1309         |          | 1,463.056<br>8 | 1,463.056<br>8 | 0.0927          |     | 1,465.375<br>0 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 3.3074           | 0.0000          | 3.3074        | 0.5008            | 0.0000           | 0.5008         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.1651 | 31.4407 | 21.5650 | 0.0388 |                  | 1.5513          | 1.5513        |                   | 1.4411           | 1.4411         | 0.0000   | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |
| Total         | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 3.3074           | 1.5513          | 4.8588        | 0.5008            | 1.4411           | 1.9419         | 0.0000   | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |

## 3.2 Demolition - 2021

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|-----|----------------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |                | lb/c           | day             |     |                |
| Hauling  | 0.1273 | 4.0952 | 0.9602 | 0.0119          | 0.2669           | 0.0126          | 0.2795        | 0.0732            | 0.0120           | 0.0852         |          | 1,292.241<br>3 | 1,292.241<br>3 | 0.0877          |     | 1,294.433<br>7 |
| 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         |
| Worker   | 0.0643 | 0.0442 | 0.6042 | 1.7100e-<br>003 | 0.1677           | 1.3500e-<br>003 | 0.1690        | 0.0445            | 1.2500e-<br>003  | 0.0457         |          | 170.8155       | 170.8155       | 5.0300e-<br>003 |     | 170.9413       |
| Total    | 0.1916 | 4.1394 | 1.5644 | 0.0136          | 0.4346           | 0.0139          | 0.4485        | 0.1176            | 0.0133           | 0.1309         |          | 1,463.056<br>8 | 1,463.056<br>8 | 0.0927          |     | 1,465.375<br>0 |

3.3 Site Preparation - 2021

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 18.0663          | 0.0000          | 18.0663       | 9.9307            | 0.0000           | 9.9307         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.8882 | 40.4971 | 21.1543 | 0.0380 |                  | 2.0445          | 2.0445        |                   | 1.8809           | 1.8809         |          | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |
| Total         | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663          | 2.0445          | 20.1107       | 9.9307            | 1.8809           | 11.8116        |          | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |

## 3.3 Site Preparation - 2021

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0772 | 0.0530 | 0.7250 | 2.0600e-<br>003 | 0.2012           | 1.6300e-<br>003 | 0.2028        | 0.0534            | 1.5000e-<br>003  | 0.0549         |          | 204.9786  | 204.9786  | 6.0400e-<br>003 |     | 205.1296 |
| Total    | 0.0772 | 0.0530 | 0.7250 | 2.0600e-<br>003 | 0.2012           | 1.6300e-<br>003 | 0.2028        | 0.0534            | 1.5000e-<br>003  | 0.0549         |          | 204.9786  | 204.9786  | 6.0400e-<br>003 |     | 205.1296 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 18.0663          | 0.0000          | 18.0663       | 9.9307            | 0.0000           | 9.9307         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.8882 | 40.4971 | 21.1543 | 0.0380 |                  | 2.0445          | 2.0445        |                   | 1.8809           | 1.8809         | 0.0000   | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |
| Total         | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663          | 2.0445          | 20.1107       | 9.9307            | 1.8809           | 11.8116        | 0.0000   | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |

## 3.3 Site Preparation - 2021

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0772 | 0.0530 | 0.7250 | 2.0600e-<br>003 | 0.2012           | 1.6300e-<br>003 | 0.2028        | 0.0534            | 1.5000e-<br>003  | 0.0549         |          | 204.9786  | 204.9786  | 6.0400e-<br>003 |     | 205.1296 |
| Total    | 0.0772 | 0.0530 | 0.7250 | 2.0600e-<br>003 | 0.2012           | 1.6300e-<br>003 | 0.2028        | 0.0534            | 1.5000e-<br>003  | 0.0549         |          | 204.9786  | 204.9786  | 6.0400e-<br>003 |     | 205.1296 |

3.4 Grading - 2021

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 4.1912 | 46.3998 | 30.8785 | 0.0620 |                  | 1.9853          | 1.9853        |                   | 1.8265           | 1.8265         |          | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |
| Total         | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 8.6733           | 1.9853          | 10.6587       | 3.5965            | 1.8265           | 5.4230         |          | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |

## 3.4 Grading - 2021

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0857 | 0.0589 | 0.8056 | 2.2900e-<br>003 | 0.2236           | 1.8100e-<br>003 | 0.2254        | 0.0593            | 1.6600e-<br>003  | 0.0610         |          | 227.7540  | 227.7540  | 6.7100e-<br>003 |     | 227.9217 |
| Total    | 0.0857 | 0.0589 | 0.8056 | 2.2900e-<br>003 | 0.2236           | 1.8100e-<br>003 | 0.2254        | 0.0593            | 1.6600e-<br>003  | 0.0610         |          | 227.7540  | 227.7540  | 6.7100e-<br>003 |     | 227.9217 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 4.1912 | 46.3998 | 30.8785 | 0.0620 |                  | 1.9853          | 1.9853        |                   | 1.8265           | 1.8265         | 0.0000   | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |
| Total         | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 8.6733           | 1.9853          | 10.6587       | 3.5965            | 1.8265           | 5.4230         | 0.0000   | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |

## 3.4 Grading - 2021

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0857 | 0.0589 | 0.8056 | 2.2900e-<br>003 | 0.2236           | 1.8100e-<br>003 | 0.2254        | 0.0593            | 1.6600e-<br>003  | 0.0610         |          | 227.7540  | 227.7540  | 6.7100e-<br>003 |     | 227.9217 |
| Total    | 0.0857 | 0.0589 | 0.8056 | 2.2900e-<br>003 | 0.2236           | 1.8100e-<br>003 | 0.2254        | 0.0593            | 1.6600e-<br>003  | 0.0610         |          | 227.7540  | 227.7540  | 6.7100e-<br>003 |     | 227.9217 |

3.4 Grading - 2022

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.6248 | 38.8435 | 29.0415 | 0.0621 |                  | 1.6349          | 1.6349        |                   | 1.5041           | 1.5041         |          | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |
| Total         | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 8.6733           | 1.6349          | 10.3082       | 3.5965            | 1.5041           | 5.1006         |          | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |

## 3.4 Grading - 2022

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0803 | 0.0532 | 0.7432 | 2.2100e-<br>003 | 0.2236           | 1.7500e-<br>003 | 0.2253        | 0.0593            | 1.6100e-<br>003  | 0.0609         |          | 219.7425  | 219.7425  | 6.0600e-<br>003 |     | 219.8941 |
| Total    | 0.0803 | 0.0532 | 0.7432 | 2.2100e-<br>003 | 0.2236           | 1.7500e-<br>003 | 0.2253        | 0.0593            | 1.6100e-<br>003  | 0.0609         |          | 219.7425  | 219.7425  | 6.0600e-<br>003 |     | 219.8941 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.6248 | 38.8435 | 29.0415 | 0.0621 |                  | 1.6349          | 1.6349        |                   | 1.5041           | 1.5041         | 0.0000   | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |
| Total         | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 8.6733           | 1.6349          | 10.3082       | 3.5965            | 1.5041           | 5.1006         | 0.0000   | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |

## 3.4 Grading - 2022

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0803 | 0.0532 | 0.7432 | 2.2100e-<br>003 | 0.2236           | 1.7500e-<br>003 | 0.2253        | 0.0593            | 1.6100e-<br>003  | 0.0609         |          | 219.7425  | 219.7425  | 6.0600e-<br>003 |     | 219.8941 |
| Total    | 0.0803 | 0.0532 | 0.7432 | 2.2100e-<br>003 | 0.2236           | 1.7500e-<br>003 | 0.2253        | 0.0593            | 1.6100e-<br>003  | 0.0609         |          | 219.7425  | 219.7425  | 6.0600e-<br>003 |     | 219.8941 |

3.5 Building Construction - 2022

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         | -        | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |
| Total    | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         |          | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |

## 3.5 Building Construction - 2022

## Unmitigated Construction Off-Site

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/d            | lay    |     |                 |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Vendor   | 0.4079 | 13.2032 | 3.4341  | 0.0364 | 0.9155           | 0.0248          | 0.9404        | 0.2636            | 0.0237           | 0.2873         |          | 3,896.548<br>2  | 3,896.548<br>2  | 0.2236 |     | 3,902.138<br>4  |
| Worker   | 3.2162 | 2.1318  | 29.7654 | 0.0883 | 8.9533           | 0.0701          | 9.0234        | 2.3745            | 0.0646           | 2.4390         |          | 8,800.685<br>7  | 8,800.685<br>7  | 0.2429 |     | 8,806.758<br>2  |
| Total    | 3.6242 | 15.3350 | 33.1995 | 0.1247 | 9.8688           | 0.0949          | 9.9637        | 2.6381            | 0.0883           | 2.7263         |          | 12,697.23<br>39 | 12,697.23<br>39 | 0.4665 |     | 12,708.89<br>66 |

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         | 0.0000   | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |
| Total    | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         | 0.0000   | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |

## 3.5 Building Construction - 2022

## Mitigated Construction Off-Site

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | day    |     |                 |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Vendor   | 0.4079 | 13.2032 | 3.4341  | 0.0364 | 0.9155           | 0.0248          | 0.9404        | 0.2636            | 0.0237           | 0.2873         |          | 3,896.548<br>2  | 3,896.548<br>2  | 0.2236 |     | 3,902.138<br>4  |
| Worker   | 3.2162 | 2.1318  | 29.7654 | 0.0883 | 8.9533           | 0.0701          | 9.0234        | 2.3745            | 0.0646           | 2.4390         |          | 8,800.685<br>7  | 8,800.685<br>7  | 0.2429 |     | 8,806.758<br>2  |
| Total    | 3.6242 | 15.3350 | 33.1995 | 0.1247 | 9.8688           | 0.0949          | 9.9637        | 2.6381            | 0.0883           | 2.7263         |          | 12,697.23<br>39 | 12,697.23<br>39 | 0.4665 |     | 12,708.89<br>66 |

3.5 Building Construction - 2023

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
|          | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        | 1<br>1<br>1       | 0.6584           | 0.6584         |          | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |
| Total    | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        |                   | 0.6584           | 0.6584         |          | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |

## 3.5 Building Construction - 2023

## Unmitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | day    |     |                 |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Vendor   | 0.3027 | 10.0181 | 3.1014  | 0.0352 | 0.9156           | 0.0116          | 0.9271        | 0.2636            | 0.0111           | 0.2747         |          | 3,773.876<br>2  | 3,773.876<br>2  | 0.1982 |     | 3,778.830<br>0  |
| Worker   | 3.0203 | 1.9287  | 27.4113 | 0.0851 | 8.9533           | 0.0681          | 9.0214        | 2.3745            | 0.0627           | 2.4372         |          | 8,478.440<br>8  | 8,478.440<br>8  | 0.2190 |     | 8,483.916<br>0  |
| Total    | 3.3229 | 11.9468 | 30.5127 | 0.1203 | 9.8688           | 0.0797          | 9.9485        | 2.6381            | 0.0738           | 2.7118         |          | 12,252.31<br>70 | 12,252.31<br>70 | 0.4172 |     | 12,262.74<br>60 |

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        | -<br>             | 0.6584           | 0.6584         | 0.0000   | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |
| Total    | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        |                   | 0.6584           | 0.6584         | 0.0000   | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |

## 3.5 Building Construction - 2023

## Mitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |     |                 |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Vendor   | 0.3027 | 10.0181 | 3.1014  | 0.0352 | 0.9156           | 0.0116          | 0.9271        | 0.2636            | 0.0111           | 0.2747         |          | 3,773.876<br>2  | 3,773.876<br>2  | 0.1982 |     | 3,778.830<br>0  |
| Worker   | 3.0203 | 1.9287  | 27.4113 | 0.0851 | 8.9533           | 0.0681          | 9.0214        | 2.3745            | 0.0627           | 2.4372         |          | 8,478.440<br>8  | 8,478.440<br>8  | 0.2190 |     | 8,483.916<br>0  |
| Total    | 3.3229 | 11.9468 | 30.5127 | 0.1203 | 9.8688           | 0.0797          | 9.9485        | 2.6381            | 0.0738           | 2.7118         |          | 12,252.31<br>70 | 12,252.31<br>70 | 0.4172 |     | 12,262.74<br>60 |

3.6 Paving - 2023

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         |          | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |
| Paving   | 0.0000 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         |          | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |

## 3.6 Paving - 2023

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0566 | 0.0361 | 0.5133 | 1.5900e-<br>003 | 0.1677           | 1.2800e-<br>003 | 0.1689        | 0.0445            | 1.1700e-<br>003  | 0.0456         |          | 158.7723  | 158.7723  | 4.1000e-<br>003 |     | 158.8748 |
| Total    | 0.0566 | 0.0361 | 0.5133 | 1.5900e-<br>003 | 0.1677           | 1.2800e-<br>003 | 0.1689        | 0.0445            | 1.1700e-<br>003  | 0.0456         |          | 158.7723  | 158.7723  | 4.1000e-<br>003 |     | 158.8748 |

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/              | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         | 0.0000   | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |
| Paving   | 0.0000 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         | 0.0000   | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |

## 3.6 Paving - 2023

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/d      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0566 | 0.0361 | 0.5133 | 1.5900e-<br>003 | 0.1677           | 1.2800e-<br>003 | 0.1689        | 0.0445            | 1.1700e-<br>003  | 0.0456         |          | 158.7723  | 158.7723  | 4.1000e-<br>003 |     | 158.8748 |
| Total    | 0.0566 | 0.0361 | 0.5133 | 1.5900e-<br>003 | 0.1677           | 1.2800e-<br>003 | 0.1689        | 0.0445            | 1.1700e-<br>003  | 0.0456         |          | 158.7723  | 158.7723  | 4.1000e-<br>003 |     | 158.8748 |

3.6 Paving - 2024

|          | ROG    | NOx    | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         |          | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |
| Paving   | 0.0000 |        |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         |          | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |

## 3.6 Paving - 2024

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | со     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0535 | 0.0329 | 0.4785 | 1.5400e-<br>003 | 0.1677           | 1.2600e-<br>003 | 0.1689        | 0.0445            | 1.1600e-<br>003  | 0.0456         |          | 153.8517  | 153.8517  | 3.7600e-<br>003 |     | 153.9458 |
| Total    | 0.0535 | 0.0329 | 0.4785 | 1.5400e-<br>003 | 0.1677           | 1.2600e-<br>003 | 0.1689        | 0.0445            | 1.1600e-<br>003  | 0.0456         |          | 153.8517  | 153.8517  | 3.7600e-<br>003 |     | 153.9458 |

|          | ROG    | NOx    | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         | 0.0000   | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |
| Paving   | 0.0000 |        |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         | 0.0000   | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |

## 3.6 Paving - 2024

#### Mitigated Construction Off-Site

|          | ROG    | NOx      | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|----------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        | <u>.</u> |        |                 | lb/o             | day             |               | <u>.</u>          |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000   | 0.0000 | 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   |
| Worker   | 0.0535 | 0.0329   | 0.4785 | 1.5400e-<br>003 | 0.1677           | 1.2600e-<br>003 | 0.1689        | 0.0445            | 1.1600e-<br>003  | 0.0456         |          | 153.8517  | 153.8517  | 3.7600e-<br>003 |     | 153.9458 |
| Total    | 0.0535 | 0.0329   | 0.4785 | 1.5400e-<br>003 | 0.1677           | 1.2600e-<br>003 | 0.1689        | 0.0445            | 1.1600e-<br>003  | 0.0456         |          | 153.8517  | 153.8517  | 3.7600e-<br>003 |     | 153.9458 |

3.7 Architectural Coating - 2024

|                 | ROG      | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|-----------------|----------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category        |          |        |        |                 | lb/d             | day             |               |                   |                  |                |          |           | lb/c      | lay    |     |          |
| Archit. Coating | 236.4115 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.1808   | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         |          | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |
| Total           | 236.5923 | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         |          | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |

## 3.7 Architectural Coating - 2024

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |        |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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         |
| Worker   | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884           | 0.0134          | 1.8018        | 0.4743            | 0.0123           | 0.4866         |          | 1,641.085<br>2 | 1,641.085<br>2 | 0.0401 |     | 1,642.088<br>6 |
| Total    | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884           | 0.0134          | 1.8018        | 0.4743            | 0.0123           | 0.4866         |          | 1,641.085<br>2 | 1,641.085<br>2 | 0.0401 |     | 1,642.088<br>6 |

|                 | ROG      | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|-----------------|----------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category        | lb/day   |        |        |                 |                  |                 |               |                   |                  |                | lb/day   |           |           |        |     |          |
| Archit. Coating | 236.4115 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.1808   | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         | 0.0000   | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |
| Total           | 236.5923 | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         | 0.0000   | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |

#### 3.7 Architectural Coating - 2024

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | со     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |        |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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         |
| Worker   | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884           | 0.0134          | 1.8018        | 0.4743            | 0.0123           | 0.4866         |          | 1,641.085<br>2 | 1,641.085<br>2 | 0.0401 |     | 1,642.088<br>6 |
| Total    | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884           | 0.0134          | 1.8018        | 0.4743            | 0.0123           | 0.4866         |          | 1,641.085<br>2 | 1,641.085<br>2 | 0.0401 |     | 1,642.088<br>6 |

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

|             | ROG    | NOx     | со       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O     | CO2e            |
|-------------|--------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|---------|-----------------|
| Category    |        |         |          |        | lb/d             | lay             |               |                   |                  |                |          |                 | lb/c            | lay    |         |                 |
| Mitigated   | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592          | 0.3360          | 46.2951       | 12.2950           | 0.3119           | 12.6070        |          | 50,306.60<br>34 | 50,306.60<br>34 | 2.1807 |         | 50,361.12<br>08 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592          | 0.3360          | 46.2951       | 12.2950           | 0.3119           | 12.6070        |          | 50,306.60<br>34 | 50,306.60<br>34 | 2.1807 | <b></b> | 50,361.12<br>08 |

#### 4.2 Trip Summary Information

|                                     | Ave      | rage Daily Trip Ra | ate      | Unmitigated | Mitigated  |
|-------------------------------------|----------|--------------------|----------|-------------|------------|
| Land Use                            | Weekday  | Saturday           | Sunday   | Annual VMT  | Annual VMT |
| Apartments Low Rise                 | 145.75   | 154.25             | 154.00   | 506,227     | 506,227    |
| Apartments Mid Rise                 | 4,026.75 | 3,773.25           | 4075.50  | 13,660,065  | 13,660,065 |
| General Office Building             | 288.45   | 62.55              | 31.05    | 706,812     | 706,812    |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52           | 2817.72  | 3,413,937   | 3,413,937  |
| Hotel                               | 192.00   | 187.50             | 160.00   | 445,703     | 445,703    |
| Quality Restaurant                  | 501.12   | 511.92             | 461.20   | 707,488     | 707,488    |
| Regional Shopping Center            | 528.08   | 601.44             | 357.84   | 1,112,221   | 1,112,221  |
| Total                               | 8,050.95 | 8,164.43           | 8,057.31 | 20,552,452  | 20,552,452 |

4.3 Trip Type Information

|                          |            | Miles      |             |            | Trip %     |             |         | Trip Purpos | e %     |
|--------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| 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 Low Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| Apartments Mid Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| General Office Building  | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 77      | 19          | 4       |
| High Turnover (Sit Down  | 16.60      | 8.40       | 6.90        | 8.50       | 72.50      | 19.00       | 37      | 20          | 43      |
| Hotel                    | 16.60      | 8.40       | 6.90        | 19.40      | 61.60      | 19.00       | 58      | 38          | 4       |
| Quality Restaurant       | 16.60      | 8.40       | 6.90        | 12.00      | 69.00      | 19.00       | 38      | 18          | 44      |
| Regional Shopping Center | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54      | 35          | 11      |

#### 4.4 Fleet Mix

| Land Use                               | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Low Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building                | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down<br>Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel                                  | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant                     | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center               | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

# 5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                           | ROG    | NOx    | со     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------------------------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category                  |        |        |        |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | lay    |        |                |
| NaturalGas<br>Mitigated   | 0.7660 | 6.7462 | 4.2573 | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602 | 0.1532 | 8,405.638<br>7 |
| NaturalGas<br>Unmitigated |        | 6.7462 | 4.2573 | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602 | 0.1532 | 8,405.638<br>7 |

#### 5.2 Energy by Land Use - NaturalGas

## <u>Unmitigated</u>

|  | NaturalGa<br>s Use | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |        |        |                 | lb/e             | day             |                 |                   |                  |                 |          |                | lb/d           | lay             |                 |                |
| Apartments Low<br>Rise                 | 1119.16            | 0.0121          | 0.1031 | 0.0439 | 6.6000e-<br>004 |                  | 8.3400e-<br>003 | 8.3400e-<br>003 |                   | 8.3400e-<br>003  | 8.3400e-<br>003 |          | 131.6662       | 131.6662       | 2.5200e-<br>003 | 2.4100e-<br>003 | 132.4486       |
| Apartments Mid<br>Rise                 | 35784.3            | 0.3859          | 3.2978 | 1.4033 | 0.0211          |                  | 0.2666          | 0.2666          |                   | 0.2666           | 0.2666          |          | 4,209.916<br>4 | 4,209.916<br>4 | 0.0807          | 0.0772          | 4,234.933<br>9 |
| General Office<br>Building             | 1283.42            | 0.0138          | 0.1258 | 0.1057 | 7.5000e-<br>004 |                  | 9.5600e-<br>003 | 9.5600e-<br>003 |                   | 9.5600e-<br>003  | 9.5600e-<br>003 |          | 150.9911       | 150.9911       | 2.8900e-<br>003 | 2.7700e-<br>003 | 151.8884       |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.2455          | 2.2314 | 1.8743 | 0.0134          |                  | 0.1696          | 0.1696          |                   | 0.1696           | 0.1696          |          | 2,677.634<br>2 | 2,677.634<br>2 | 0.0513          | 0.0491          | 2,693.546<br>0 |
| Hotel                                  | 4769.72            | 0.0514          | 0.4676 | 0.3928 | 2.8100e-<br>003 |                  | 0.0355          | 0.0355          | ,                 | 0.0355           | 0.0355          |          | 561.1436       | 561.1436       | 0.0108          | 0.0103          | 564.4782       |
| Quality<br>Restaurant                  | 5057.75            | 0.0545          | 0.4959 | 0.4165 | 2.9800e-<br>003 |                  | 0.0377          | 0.0377          | 1                 | 0.0377           | 0.0377          |          | 595.0298       | 595.0298       | 0.0114          | 0.0109          | 598.5658       |
| Regional<br>Shopping Center            |                    | 2.7100e-<br>003 | 0.0247 | 0.0207 | 1.5000e-<br>004 |                  | 1.8700e-<br>003 | 1.8700e-<br>003 | 1                 | 1.8700e-<br>003  | 1.8700e-<br>003 |          | 29.6019        | 29.6019        | 5.7000e-<br>004 | 5.4000e-<br>004 | 29.7778        |
| Total                                  |                    | 0.7660          | 6.7463 | 4.2573 | 0.0418          |                  | 0.5292          | 0.5292          |                   | 0.5292           | 0.5292          |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602          | 0.1532          | 8,405.638<br>7 |

#### 5.2 Energy by Land Use - NaturalGas

## Mitigated

|  | NaturalGa<br>s Use | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |        |        |                 | lb/e             | day             |                 |                   |                  |                 |          |                | lb/d           | day             |                 |                |
| Apartments Low<br>Rise                 | 1.11916            | 0.0121          | 0.1031 | 0.0439 | 6.6000e-<br>004 |                  | 8.3400e-<br>003 | 8.3400e-<br>003 |                   | 8.3400e-<br>003  | 8.3400e-<br>003 |          | 131.6662       | 131.6662       | 2.5200e-<br>003 | 2.4100e-<br>003 | 132.4486       |
| Apartments Mid<br>Rise                 | 35.7843            | 0.3859          | 3.2978 | 1.4033 | 0.0211          |                  | 0.2666          | 0.2666          |                   | 0.2666           | 0.2666          |          | 4,209.916<br>4 | 4,209.916<br>4 | 0.0807          | 0.0772          | 4,234.933<br>9 |
| General Office<br>Building             | 1.28342            | 0.0138          | 0.1258 | 0.1057 | 7.5000e-<br>004 |                  | 9.5600e-<br>003 | 9.5600e-<br>003 |                   | 9.5600e-<br>003  | 9.5600e-<br>003 |          | 150.9911       | 150.9911       | 2.8900e-<br>003 | 2.7700e-<br>003 | 151.8884       |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.2455          | 2.2314 | 1.8743 | 0.0134          |                  | 0.1696          | 0.1696          |                   | 0.1696           | 0.1696          |          | 2,677.634<br>2 | 2,677.634<br>2 | 0.0513          | 0.0491          | 2,693.546<br>0 |
| Hotel                                  | 4.76972            | 0.0514          | 0.4676 | 0.3928 | 2.8100e-<br>003 |                  | 0.0355          | 0.0355          |                   | 0.0355           | 0.0355          |          | 561.1436       | 561.1436       | 0.0108          | 0.0103          | 564.4782       |
| Quality<br>Restaurant                  | 5.05775            | 0.0545          | 0.4959 | 0.4165 | 2.9800e-<br>003 |                  | 0.0377          | 0.0377          | ,                 | 0.0377           | 0.0377          |          | 595.0298       | 595.0298       | 0.0114          | 0.0109          | 598.5658       |
| Regional<br>Shopping Center            |                    | 2.7100e-<br>003 | 0.0247 | 0.0207 | 1.5000e-<br>004 |                  | 1.8700e-<br>003 | 1.8700e-<br>003 | ,                 | 1.8700e-<br>003  | 1.8700e-<br>003 |          | 29.6019        | 29.6019        | 5.7000e-<br>004 | 5.4000e-<br>004 | 29.7778        |
| Total                                  |                    | 0.7660          | 6.7463 | 4.2573 | 0.0418          |                  | 0.5292          | 0.5292          |                   | 0.5292           | 0.5292          |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602          | 0.1532          | 8,405.638<br>7 |

# 6.0 Area Detail

6.1 Mitigation Measures Area

|             | ROG     | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|-------------|---------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category    |         |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Mitigated   | 30.5020 | 15.0496 | 88.4430 | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

|                          | ROG     | NOx     | СО      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|--------------------------|---------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| SubCategory              |         |         |         |                 | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Architectural<br>Coating | 2.2670  |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Consumer<br>Products     | 24.1085 |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Hearth                   | 1.6500  | 14.1000 | 6.0000  | 0.0900          |                  | 1.1400          | 1.1400        |                   | 1.1400           | 1.1400         | 0.0000   | 18,000.00<br>00 | 18,000.00<br>00 | 0.3450 | 0.3300 | 18,106.96<br>50 |
| Landscaping              | 2.4766  | 0.9496  | 82.4430 | 4.3600e-<br>003 |                  | 0.4574          | 0.4574        |                   | 0.4574           | 0.4574         |          | 148.5950        | 148.5950        | 0.1424 |        | 152.1542        |
| Total                    | 30.5020 | 15.0496 | 88.4430 | 0.0944          |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

#### 6.2 Area by SubCategory

#### **Mitigated**

|                          | ROG     | NOx     | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|--------------------------|---------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| SubCategory              |         |         |         |                 | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | day    |        |                 |
| Architectural<br>Coating | 2.2670  |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Consumer<br>Products     | 24.1085 |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Hearth                   | 1.6500  | 14.1000 | 6.0000  | 0.0900          |                  | 1.1400          | 1.1400        |                   | 1.1400           | 1.1400         | 0.0000   | 18,000.00<br>00 | 18,000.00<br>00 | 0.3450 | 0.3300 | 18,106.96<br>50 |
| Landscaping              | 2.4766  | 0.9496  | 82.4430 | 4.3600e-<br>003 |                  | 0.4574          | 0.4574        |                   | 0.4574           | 0.4574         |          | 148.5950        | 148.5950        | 0.1424 |        | 152.1542        |
| Total                    | 30.5020 | 15.0496 | 88.4430 | 0.0944          |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

# 7.0 Water Detail

#### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

# **10.0 Stationary Equipment**

#### Fire Pumps and Emergency Generators

| Equipment Type         | Number | Hours/Day      | Hours/Year      | Horse Power   | Load Factor | Fuel Type |
|------------------------|--------|----------------|-----------------|---------------|-------------|-----------|
| <u>Boilers</u>         |        |                |                 |               |             |           |
| Equipment Type         | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type   |           |
| User Defined Equipment |        |                |                 |               |             |           |
| Equipment Type         | Number |                |                 |               |             |           |

# Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

## **1.0 Project Characteristics**

#### 1.1 Land Usage

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| General Office Building             | 45.00  | 1000sqft      | 1.03        | 45,000.00          | 0          |
| High Turnover (Sit Down Restaurant) | 36.00  | 1000sqft      | 0.83        | 36,000.00          | 0          |
| Hotel                               | 50.00  | Room          | 1.67        | 72,600.00          | 0          |
| Quality Restaurant                  | 8.00   | 1000sqft      | 0.18        | 8,000.00           | 0          |
| Apartments Low Rise                 | 25.00  | Dwelling Unit | 1.56        | 25,000.00          | 72         |
| Apartments Mid Rise                 | 975.00 | Dwelling Unit | 25.66       | 975,000.00         | 2789       |
| Regional Shopping Center            | 56.00  | 1000sqft      | 1.29        | 56,000.00          | 0          |

#### **1.2 Other Project Characteristics**

| Urbanization               | Urban                     | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 33    |
|----------------------------|---------------------------|----------------------------|-------|----------------------------|-------|
| Climate Zone               | 9                         |                            |       | <b>Operational Year</b>    | 2028  |
| Utility Company            | Southern California Ediso | n                          |       |                            |       |
| CO2 Intensity<br>(Ib/MWhr) | 702.44                    | CH4 Intensity<br>(Ib/MWhr) | 0.029 | N2O Intensity<br>(Ib/MWhr) | 0.006 |

## 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name      | Column Name       | Default Value | New Value |
|-----------------|-------------------|---------------|-----------|
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | NumberWood        | 1.25          | 0.00      |
| tblFireplaces   | NumberWood        | 48.75         | 0.00      |
| tblVehicleTrips | ST_TR             | 7.16          | 6.17      |
| tblVehicleTrips | ST_TR             | 6.39          | 3.87      |
| tblVehicleTrips | ST_TR             | 2.46          | 1.39      |
| tblVehicleTrips | ST_TR             | 158.37        | 79.82     |
| tblVehicleTrips | ST_TR             | 8.19          | 3.75      |
| tblVehicleTrips | ST_TR             | 94.36         | 63.99     |
| tblVehicleTrips | ST_TR             | 49.97         | 10.74     |
| tblVehicleTrips | SU_TR             | 6.07          | 6.16      |
| tblVehicleTrips | SU_TR             | 5.86          | 4.18      |
| tblVehicleTrips | SU_TR             | 1.05          | 0.69      |
| tblVehicleTrips | SU_TR             | 131.84        | 78.27     |

| tblVehicleTrips | SU_TR              | 5.95   | 3.20  |
|-----------------|--------------------|--------|-------|
| tblVehicleTrips | SU_TR              | 72.16  | 57.65 |
| tblVehicleTrips | SU_TR              | 25.24  | 6.39  |
| tblVehicleTrips | WD_TR              | 6.59   | 5.83  |
| tblVehicleTrips | WD_TR              | 6.65   | 4.13  |
| tblVehicleTrips | WD_TR              | 11.03  | 6.41  |
| tblVehicleTrips | WD_TR              | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR              | 8.17   | 3.84  |
| tblVehicleTrips | WD_TR              | 89.95  | 62.64 |
| tblVehicleTrips | WD_TR              | 42.70  | 9.43  |
| tblWoodstoves   | NumberCatalytic    | 1.25   | 0.00  |
| tblWoodstoves   | NumberCatalytic    | 48.75  | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 1.25   | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 48.75  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
|                 |                    |        |       |

# 2.0 Emissions Summary

#### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction** 

|         | ROG      | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|---------|----------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year    |          |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/d            | lay    |        |                 |
| 2021    | 4.2865   | 46.4651 | 31.6150 | 0.0642 | 18.2675          | 2.0461          | 20.3135       | 9.9840            | 1.8824           | 11.8664        | 0.0000   | 6,221.493<br>7  | 6,221.493<br>7  | 1.9491 | 0.0000 | 6,270.221<br>4  |
| 2022    | 5.7218   | 38.9024 | 47.3319 | 0.1455 | 9.8688           | 1.6366          | 10.7736       | 3.6558            | 1.5057           | 5.1615         | 0.0000   | 14,630.30<br>99 | 14,630.30<br>99 | 1.9499 | 0.0000 | 14,657.26<br>63 |
| 2023    | 5.2705   | 26.4914 | 44.5936 | 0.1413 | 9.8688           | 0.7800          | 10.6488       | 2.6381            | 0.7328           | 3.3708         | 0.0000   | 14,210.34<br>24 | 14,210.34<br>24 | 1.0230 | 0.0000 | 14,235.91<br>60 |
| 2024    | 237.2328 | 9.5610  | 15.0611 | 0.0243 | 1.7884           | 0.4698          | 1.8628        | 0.4743            | 0.4322           | 0.5476         | 0.0000   | 2,352.417<br>8  | 2,352.417<br>8  | 0.7175 | 0.0000 | 2,370.355<br>0  |
| Maximum | 237.2328 | 46.4651 | 47.3319 | 0.1455 | 18.2675          | 2.0461          | 20.3135       | 9.9840            | 1.8824           | 11.8664        | 0.0000   | 14,630.30<br>99 | 14,630.30<br>99 | 1.9499 | 0.0000 | 14,657.26<br>63 |

#### 2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

|         | ROG      | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|---------|----------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year    |          |         |         |        | lb/              | /day            |               |                   |                  |                |          |                 | lb/             | day    |        |                 |
| 2021    | 4.2865   | 46.4651 | 31.6150 | 0.0642 | 18.2675          | 2.0461          | 20.3135       | 9.9840            | 1.8824           | 11.8664        | 0.0000   | 6,221.493<br>7  | 6,221.493<br>7  | 1.9491 | 0.0000 | 6,270.221<br>4  |
| 2022    | 5.7218   | 38.9024 | 47.3319 | 0.1455 | 9.8688           | 1.6366          | 10.7736       | 3.6558            | 1.5057           | 5.1615         | 0.0000   | 14,630.30<br>99 | 14,630.30<br>99 | 1.9499 | 0.0000 | 14,657.26<br>63 |
| 2023    | 5.2705   | 26.4914 | 44.5936 | 0.1413 | 9.8688           | 0.7800          | 10.6488       | 2.6381            | 0.7328           | 3.3708         | 0.0000   | 14,210.34<br>24 | 14,210.34<br>24 | 1.0230 | 0.0000 | 14,235.91<br>60 |
| 2024    | 237.2328 | 9.5610  | 15.0611 | 0.0243 | 1.7884           | 0.4698          | 1.8628        | 0.4743            | 0.4322           | 0.5476         | 0.0000   | 2,352.417<br>8  | 2,352.417<br>8  | 0.7175 | 0.0000 | 2,370.355<br>0  |
| Maximum | 237.2328 | 46.4651 | 47.3319 | 0.1455 | 18.2675          | 2.0461          | 20.3135       | 9.9840            | 1.8824           | 11.8664        | 0.0000   | 14,630.30<br>99 | 14,630.30<br>99 | 1.9499 | 0.0000 | 14,657.26<br>63 |
|         | ROG      | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2 5 | Exhaust<br>PM2 5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2        | Total CO2       | CH4    | N20    | CO2e            |

|                      | ROG  | NOx  | со   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>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 |

# 2.2 Overall Operational

## Unmitigated Operational

|          | ROG     | NOx     | CO       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |        | lb/              | day             |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Area     | 30.5020 | 15.0496 | 88.4430  | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Energy   | 0.7660  | 6.7462  | 4.2573   | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2  | 8,355.983<br>2  | 0.1602 | 0.1532 | 8,405.638<br>7  |
| Mobile   | 9.5233  | 45.9914 | 110.0422 | 0.4681 | 45.9592          | 0.3373          | 46.2965       | 12.2950           | 0.3132           | 12.6083        |          | 47,917.80<br>05 | 47,917.80<br>05 | 2.1953 |        | 47,972.68<br>39 |
| Total    | 40.7912 | 67.7872 | 202.7424 | 0.6043 | 45.9592          | 2.4640          | 48.4231       | 12.2950           | 2.4399           | 14.7349        | 0.0000   | 74,422.37<br>87 | 74,422.37<br>87 | 2.8429 | 0.4832 | 74,637.44<br>17 |

#### Mitigated Operational

|          | ROG     | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |        | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Area     | 30.5020 | 15.0496 | 88.4430  | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Energy   | 0.7660  | 6.7462  | 4.2573   | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2  | 8,355.983<br>2  | 0.1602 | 0.1532 | 8,405.638<br>7  |
| Mobile   | 9.5233  | 45.9914 | 110.0422 | 0.4681 | 45.9592          | 0.3373          | 46.2965       | 12.2950           | 0.3132           | 12.6083        |          | 47,917.80<br>05 | 47,917.80<br>05 | 2.1953 |        | 47,972.68<br>39 |
| Total    | 40.7912 | 67.7872 | 202.7424 | 0.6043 | 45.9592          | 2.4640          | 48.4231       | 12.2950           | 2.4399           | 14.7349        | 0.0000   | 74,422.37<br>87 | 74,422.37<br>87 | 2.8429 | 0.4832 | 74,637.44<br>17 |

|                      | ROG  | NOx  | со   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>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<br>Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days<br>Week | Num Days | Phase Description |
|-----------------|-----------------------|-----------------------|------------|------------|------------------|----------|-------------------|
| 1               | Demolition            | Demolition            | 9/1/2021   | 10/12/2021 | 5                | 30       |                   |
| 2               | Site Preparation      | Site Preparation      | 10/13/2021 | 11/9/2021  | 5                | 20       |                   |
| 3               | Grading               | Grading               | 11/10/2021 | 1/11/2022  | 5                | 45       |                   |
| 4               | Building Construction | Building Construction | 1/12/2022  | 12/12/2023 | 5                | 500      |                   |
| 5               | Paving                | Paving                | 12/13/2023 | 1/30/2024  | 5                | 35       |                   |
| 6               | Architectural Coating | Architectural Coating | 1/31/2024  | 3/19/2024  | 5                | 35       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

| 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        |
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Building Construction | Cranes                    | 1      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Paving                | Pavers                    | 2      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 2      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Architectural Coating | Air Compressors           | 1<br>1 | 6.00        | 78          | 0.48        |

Trips and VMT

| Phase Name            | Offroad Equipment<br>Count | Worker Trip<br>Number | Vendor Trip<br>Number | Hauling Trip<br>Number | Worker Trip<br>Length | Vendor Trip<br>Length | Hauling Trip<br>Length | Worker Vehicle<br>Class | Vendor<br>Vehicle Class | Hauling<br>Vehicle Class |
|-----------------------|----------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Demolition            | 6                          | 15.00                 | 0.00                  | 458.00                 | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Site Preparation      | 7                          | 18.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Grading               | 8                          | 20.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Building Construction | 9                          | 801.00                | 143.00                | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Paving                | 6                          | 15.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Architectural Coating | 1                          | 160.00                | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 3.3074           | 0.0000          | 3.3074        | 0.5008            | 0.0000           | 0.5008         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.1651 | 31.4407 | 21.5650 | 0.0388 |                  | 1.5513          | 1.5513        |                   | 1.4411           | 1.4411         |          | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |
| Total         | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 3.3074           | 1.5513          | 4.8588        | 0.5008            | 1.4411           | 1.9419         |          | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |

#### 3.2 Demolition - 2021

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|-----|----------------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |                | lb/c           | lay             |     |                |
| Hauling  | 0.1304 | 4.1454 | 1.0182 | 0.0117          | 0.2669           | 0.0128          | 0.2797        | 0.0732            | 0.0122           | 0.0854         |          | 1,269.855<br>5 | 1,269.855<br>5 | 0.0908          |     | 1,272.125<br>2 |
| 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         |
| Worker   | 0.0715 | 0.0489 | 0.5524 | 1.6100e-<br>003 | 0.1677           | 1.3500e-<br>003 | 0.1690        | 0.0445            | 1.2500e-<br>003  | 0.0457         |          | 160.8377       | 160.8377       | 4.7300e-<br>003 |     | 160.9560       |
| Total    | 0.2019 | 4.1943 | 1.5706 | 0.0133          | 0.4346           | 0.0141          | 0.4487        | 0.1176            | 0.0135           | 0.1311         |          | 1,430.693<br>2 | 1,430.693<br>2 | 0.0955          |     | 1,433.081<br>2 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 3.3074           | 0.0000          | 3.3074        | 0.5008            | 0.0000           | 0.5008         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.1651 | 31.4407 | 21.5650 | 0.0388 |                  | 1.5513          | 1.5513        |                   | 1.4411           | 1.4411         | 0.0000   | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |
| Total         | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 3.3074           | 1.5513          | 4.8588        | 0.5008            | 1.4411           | 1.9419         | 0.0000   | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |

#### 3.2 Demolition - 2021

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|-----|----------------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |                | lb/d           | day             |     |                |
| Hauling  | 0.1304 | 4.1454 | 1.0182 | 0.0117          | 0.2669           | 0.0128          | 0.2797        | 0.0732            | 0.0122           | 0.0854         |          | 1,269.855<br>5 | 1,269.855<br>5 | 0.0908          |     | 1,272.125<br>2 |
| 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         |
| Worker   | 0.0715 | 0.0489 | 0.5524 | 1.6100e-<br>003 | 0.1677           | 1.3500e-<br>003 | 0.1690        | 0.0445            | 1.2500e-<br>003  | 0.0457         |          | 160.8377       | 160.8377       | 4.7300e-<br>003 |     | 160.9560       |
| Total    | 0.2019 | 4.1943 | 1.5706 | 0.0133          | 0.4346           | 0.0141          | 0.4487        | 0.1176            | 0.0135           | 0.1311         |          | 1,430.693<br>2 | 1,430.693<br>2 | 0.0955          |     | 1,433.081<br>2 |

3.3 Site Preparation - 2021

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 18.0663          | 0.0000          | 18.0663       | 9.9307            | 0.0000           | 9.9307         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.8882 | 40.4971 | 21.1543 | 0.0380 |                  | 2.0445          | 2.0445        |                   | 1.8809           | 1.8809         |          | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |
| Total         | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663          | 2.0445          | 20.1107       | 9.9307            | 1.8809           | 11.8116        |          | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |

#### 3.3 Site Preparation - 2021

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | со     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0858 | 0.0587 | 0.6629 | 1.9400e-<br>003 | 0.2012           | 1.6300e-<br>003 | 0.2028        | 0.0534            | 1.5000e-<br>003  | 0.0549         |          | 193.0052  | 193.0052  | 5.6800e-<br>003 |     | 193.1472 |
| Total    | 0.0858 | 0.0587 | 0.6629 | 1.9400e-<br>003 | 0.2012           | 1.6300e-<br>003 | 0.2028        | 0.0534            | 1.5000e-<br>003  | 0.0549         |          | 193.0052  | 193.0052  | 5.6800e-<br>003 |     | 193.1472 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 18.0663          | 0.0000          | 18.0663       | 9.9307            | 0.0000           | 9.9307         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.8882 | 40.4971 | 21.1543 | 0.0380 |                  | 2.0445          | 2.0445        |                   | 1.8809           | 1.8809         | 0.0000   | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |
| Total         | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663          | 2.0445          | 20.1107       | 9.9307            | 1.8809           | 11.8116        | 0.0000   | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |

#### 3.3 Site Preparation - 2021

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0858 | 0.0587 | 0.6629 | 1.9400e-<br>003 | 0.2012           | 1.6300e-<br>003 | 0.2028        | 0.0534            | 1.5000e-<br>003  | 0.0549         |          | 193.0052  | 193.0052  | 5.6800e-<br>003 |     | 193.1472 |
| Total    | 0.0858 | 0.0587 | 0.6629 | 1.9400e-<br>003 | 0.2012           | 1.6300e-<br>003 | 0.2028        | 0.0534            | 1.5000e-<br>003  | 0.0549         |          | 193.0052  | 193.0052  | 5.6800e-<br>003 |     | 193.1472 |

3.4 Grading - 2021

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 4.1912 | 46.3998 | 30.8785 | 0.0620 |                  | 1.9853          | 1.9853        |                   | 1.8265           | 1.8265         |          | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |
| Total         | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 8.6733           | 1.9853          | 10.6587       | 3.5965            | 1.8265           | 5.4230         |          | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |

# 3.4 Grading - 2021

# Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0954 | 0.0652 | 0.7365 | 2.1500e-<br>003 | 0.2236           | 1.8100e-<br>003 | 0.2254        | 0.0593            | 1.6600e-<br>003  | 0.0610         |          | 214.4502  | 214.4502  | 6.3100e-<br>003 |     | 214.6080 |
| Total    | 0.0954 | 0.0652 | 0.7365 | 2.1500e-<br>003 | 0.2236           | 1.8100e-<br>003 | 0.2254        | 0.0593            | 1.6600e-<br>003  | 0.0610         |          | 214.4502  | 214.4502  | 6.3100e-<br>003 |     | 214.6080 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 4.1912 | 46.3998 | 30.8785 | 0.0620 |                  | 1.9853          | 1.9853        |                   | 1.8265           | 1.8265         | 0.0000   | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |
| Total         | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 8.6733           | 1.9853          | 10.6587       | 3.5965            | 1.8265           | 5.4230         | 0.0000   | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |

# 3.4 Grading - 2021

# Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0954 | 0.0652 | 0.7365 | 2.1500e-<br>003 | 0.2236           | 1.8100e-<br>003 | 0.2254        | 0.0593            | 1.6600e-<br>003  | 0.0610         |          | 214.4502  | 214.4502  | 6.3100e-<br>003 |     | 214.6080 |
| Total    | 0.0954 | 0.0652 | 0.7365 | 2.1500e-<br>003 | 0.2236           | 1.8100e-<br>003 | 0.2254        | 0.0593            | 1.6600e-<br>003  | 0.0610         |          | 214.4502  | 214.4502  | 6.3100e-<br>003 |     | 214.6080 |

3.4 Grading - 2022

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.6248 | 38.8435 | 29.0415 | 0.0621 |                  | 1.6349          | 1.6349        |                   | 1.5041           | 1.5041         |          | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |
| Total         | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 8.6733           | 1.6349          | 10.3082       | 3.5965            | 1.5041           | 5.1006         |          | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |

# 3.4 Grading - 2022

# Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0896 | 0.0589 | 0.6784 | 2.0800e-<br>003 | 0.2236           | 1.7500e-<br>003 | 0.2253        | 0.0593            | 1.6100e-<br>003  | 0.0609         |          | 206.9139  | 206.9139  | 5.7000e-<br>003 |     | 207.0563 |
| Total    | 0.0896 | 0.0589 | 0.6784 | 2.0800e-<br>003 | 0.2236           | 1.7500e-<br>003 | 0.2253        | 0.0593            | 1.6100e-<br>003  | 0.0609         |          | 206.9139  | 206.9139  | 5.7000e-<br>003 |     | 207.0563 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.6248 | 38.8435 | 29.0415 | 0.0621 |                  | 1.6349          | 1.6349        |                   | 1.5041           | 1.5041         | 0.0000   | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |
| Total         | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 8.6733           | 1.6349          | 10.3082       | 3.5965            | 1.5041           | 5.1006         | 0.0000   | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |

Page 17 of 35

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.4 Grading - 2022

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0896 | 0.0589 | 0.6784 | 2.0800e-<br>003 | 0.2236           | 1.7500e-<br>003 | 0.2253        | 0.0593            | 1.6100e-<br>003  | 0.0609         |          | 206.9139  | 206.9139  | 5.7000e-<br>003 |     | 207.0563 |
| Total    | 0.0896 | 0.0589 | 0.6784 | 2.0800e-<br>003 | 0.2236           | 1.7500e-<br>003 | 0.2253        | 0.0593            | 1.6100e-<br>003  | 0.0609         |          | 206.9139  | 206.9139  | 5.7000e-<br>003 |     | 207.0563 |

3.5 Building Construction - 2022

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        | 1<br>1<br>1       | 0.7612           | 0.7612         |          | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |
| Total    | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         |          | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |

#### 3.5 Building Construction - 2022

#### Unmitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |        | lb/o             | day             |               |                   |                  |                |          |                 | lb/d            | lay    |     |                 |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Vendor   | 0.4284 | 13.1673 | 3.8005  | 0.0354 | 0.9155           | 0.0256          | 0.9412        | 0.2636            | 0.0245           | 0.2881         |          | 3,789.075<br>0  | 3,789.075<br>0  | 0.2381 |     | 3,795.028<br>3  |
| Worker   | 3.5872 | 2.3593  | 27.1680 | 0.0832 | 8.9533           | 0.0701          | 9.0234        | 2.3745            | 0.0646           | 2.4390         |          | 8,286.901<br>3  | 8,286.901<br>3  | 0.2282 |     | 8,292.605<br>8  |
| Total    | 4.0156 | 15.5266 | 30.9685 | 0.1186 | 9.8688           | 0.0957          | 9.9645        | 2.6381            | 0.0891           | 2.7271         |          | 12,075.97<br>63 | 12,075.97<br>63 | 0.4663 |     | 12,087.63<br>41 |

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        | 1<br>1<br>1       | 0.7612           | 0.7612         | 0.0000   | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |
| Total    | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         | 0.0000   | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |

#### 3.5 Building Construction - 2022

## Mitigated Construction Off-Site

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | day    |     |                 |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Vendor   | 0.4284 | 13.1673 | 3.8005  | 0.0354 | 0.9155           | 0.0256          | 0.9412        | 0.2636            | 0.0245           | 0.2881         |          | 3,789.075<br>0  | 3,789.075<br>0  | 0.2381 |     | 3,795.028<br>3  |
| Worker   | 3.5872 | 2.3593  | 27.1680 | 0.0832 | 8.9533           | 0.0701          | 9.0234        | 2.3745            | 0.0646           | 2.4390         |          | 8,286.901<br>3  | 8,286.901<br>3  | 0.2282 |     | 8,292.605<br>8  |
| Total    | 4.0156 | 15.5266 | 30.9685 | 0.1186 | 9.8688           | 0.0957          | 9.9645        | 2.6381            | 0.0891           | 2.7271         |          | 12,075.97<br>63 | 12,075.97<br>63 | 0.4663 |     | 12,087.63<br>41 |

3.5 Building Construction - 2023

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
|          | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        | 1<br>1<br>1       | 0.6584           | 0.6584         |          | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |
| Total    | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        |                   | 0.6584           | 0.6584         |          | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |

#### 3.5 Building Construction - 2023

## Unmitigated Construction Off-Site

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |        | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |     |                 |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Vendor   | 0.3183 | 9.9726  | 3.3771  | 0.0343 | 0.9156           | 0.0122          | 0.9277        | 0.2636            | 0.0116           | 0.2752         |          | 3,671.400<br>7  | 3,671.400<br>7  | 0.2096 |     | 3,676.641<br>7  |
| Worker   | 3.3795 | 2.1338  | 24.9725 | 0.0801 | 8.9533           | 0.0681          | 9.0214        | 2.3745            | 0.0627           | 2.4372         |          | 7,983.731<br>8  | 7,983.731<br>8  | 0.2055 |     | 7,988.868<br>3  |
| Total    | 3.6978 | 12.1065 | 28.3496 | 0.1144 | 9.8688           | 0.0803          | 9.9491        | 2.6381            | 0.0743           | 2.7124         |          | 11,655.13<br>25 | 11,655.13<br>25 | 0.4151 |     | 11,665.50<br>99 |

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        | 1<br>1<br>1       | 0.6584           | 0.6584         | 0.0000   | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |
| Total    | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        |                   | 0.6584           | 0.6584         | 0.0000   | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |

#### 3.5 Building Construction - 2023

## Mitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | day    |     |                 |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Vendor   | 0.3183 | 9.9726  | 3.3771  | 0.0343 | 0.9156           | 0.0122          | 0.9277        | 0.2636            | 0.0116           | 0.2752         |          | 3,671.400<br>7  | 3,671.400<br>7  | 0.2096 |     | 3,676.641<br>7  |
| Worker   | 3.3795 | 2.1338  | 24.9725 | 0.0801 | 8.9533           | 0.0681          | 9.0214        | 2.3745            | 0.0627           | 2.4372         |          | 7,983.731<br>8  | 7,983.731<br>8  | 0.2055 |     | 7,988.868<br>3  |
| Total    | 3.6978 | 12.1065 | 28.3496 | 0.1144 | 9.8688           | 0.0803          | 9.9491        | 2.6381            | 0.0743           | 2.7124         |          | 11,655.13<br>25 | 11,655.13<br>25 | 0.4151 |     | 11,665.50<br>99 |

3.6 Paving - 2023

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         |          | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |
| Paving   | 0.0000 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         |          | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |

# 3.6 Paving - 2023

#### Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0633 | 0.0400 | 0.4677 | 1.5000e-<br>003 | 0.1677           | 1.2800e-<br>003 | 0.1689        | 0.0445            | 1.1700e-<br>003  | 0.0456         |          | 149.5081  | 149.5081  | 3.8500e-<br>003 |     | 149.6043 |
| Total    | 0.0633 | 0.0400 | 0.4677 | 1.5000e-<br>003 | 0.1677           | 1.2800e-<br>003 | 0.1689        | 0.0445            | 1.1700e-<br>003  | 0.0456         |          | 149.5081  | 149.5081  | 3.8500e-<br>003 |     | 149.6043 |

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         | 0.0000   | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |
| Paving   | 0.0000 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         | 0.0000   | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |

# 3.6 Paving - 2023

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/o             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0633 | 0.0400 | 0.4677 | 1.5000e-<br>003 | 0.1677           | 1.2800e-<br>003 | 0.1689        | 0.0445            | 1.1700e-<br>003  | 0.0456         |          | 149.5081  | 149.5081  | 3.8500e-<br>003 |     | 149.6043 |
| Total    | 0.0633 | 0.0400 | 0.4677 | 1.5000e-<br>003 | 0.1677           | 1.2800e-<br>003 | 0.1689        | 0.0445            | 1.1700e-<br>003  | 0.0456         |          | 149.5081  | 149.5081  | 3.8500e-<br>003 |     | 149.6043 |

3.6 Paving - 2024

|          | ROG    | NOx    | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         |          | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |
| Paving   | 0.0000 |        |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          | ,              | 0.0000         |        |     | 0.0000         |
| Total    | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         |          | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |

# 3.6 Paving - 2024

#### Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0601 | 0.0364 | 0.4354 | 1.4500e-<br>003 | 0.1677           | 1.2600e-<br>003 | 0.1689        | 0.0445            | 1.1600e-<br>003  | 0.0456         |          | 144.8706  | 144.8706  | 3.5300e-<br>003 |     | 144.9587 |
| Total    | 0.0601 | 0.0364 | 0.4354 | 1.4500e-<br>003 | 0.1677           | 1.2600e-<br>003 | 0.1689        | 0.0445            | 1.1600e-<br>003  | 0.0456         |          | 144.8706  | 144.8706  | 3.5300e-<br>003 |     | 144.9587 |

|          | ROG    | NOx    | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |         |        | lb/              | day             |               |                   |                  |                |          |                | lb/d           | day    |     |                |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         | 0.0000   | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |
| Paving   | 0.0000 |        |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         | 0.0000   | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |

# 3.6 Paving - 2024

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0601 | 0.0364 | 0.4354 | 1.4500e-<br>003 | 0.1677           | 1.2600e-<br>003 | 0.1689        | 0.0445            | 1.1600e-<br>003  | 0.0456         |          | 144.8706  | 144.8706  | 3.5300e-<br>003 |     | 144.9587 |
| Total    | 0.0601 | 0.0364 | 0.4354 | 1.4500e-<br>003 | 0.1677           | 1.2600e-<br>003 | 0.1689        | 0.0445            | 1.1600e-<br>003  | 0.0456         |          | 144.8706  | 144.8706  | 3.5300e-<br>003 |     | 144.9587 |

3.7 Architectural Coating - 2024

|                 | ROG      | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|-----------------|----------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category        |          |        |        |                 | lb/d             | day             |               |                   |                  |                |          |           | lb/c      | lay    |     |          |
| Archit. Coating | 236.4115 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.1808   | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         |          | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |
| Total           | 236.5923 | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         |          | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |

#### 3.7 Architectural Coating - 2024

#### Unmitigated Construction Off-Site

|          | ROG    | NOx    | со     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |        |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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         |
| Worker   | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884           | 0.0134          | 1.8018        | 0.4743            | 0.0123           | 0.4866         |          | 1,545.286<br>0 | 1,545.286<br>0 | 0.0376 |     | 1,546.226<br>2 |
| Total    | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884           | 0.0134          | 1.8018        | 0.4743            | 0.0123           | 0.4866         |          | 1,545.286<br>0 | 1,545.286<br>0 | 0.0376 |     | 1,546.226<br>2 |

|                 | ROG      | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |  |
|-----------------|----------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|--|
| Category        | lb/day   |        |        |                 |                  |                 |               |                   |                  |                | lb/day   |           |           |        |     |          |  |
| Archit. Coating | 236.4115 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |           | 0.0000    |        |     | 0.0000   |  |
| Off-Road        | 0.1808   | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         | 0.0000   | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |  |
| Total           | 236.5923 | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         | 0.0000   | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |  |

#### 3.7 Architectural Coating - 2024

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | со     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |  |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|--|
| Category | lb/day |        |        |        |                  |                 |               |                   |                  |                | lb/day   |                |                |        |     |                |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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         |  |
| Worker   | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884           | 0.0134          | 1.8018        | 0.4743            | 0.0123           | 0.4866         |          | 1,545.286<br>0 | 1,545.286<br>0 | 0.0376 |     | 1,546.226<br>2 |  |
| Total    | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884           | 0.0134          | 1.8018        | 0.4743            | 0.0123           | 0.4866         |          | 1,545.286<br>0 | 1,545.286<br>0 | 0.0376 |     | 1,546.226<br>2 |  |

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

|             | ROG    | NOx     | CO       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|-------------|--------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category    |        |         |          |        | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |     |                 |
| Mitigated   | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592          | 0.3373          | 46.2965       | 12.2950           | 0.3132           | 12.6083        |          | 47,917.80<br>05 | 47,917.80<br>05 | 2.1953 |     | 47,972.68<br>39 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592          | 0.3373          | 46.2965       | 12.2950           | 0.3132           | 12.6083        |          | 47,917.80<br>05 | 47,917.80<br>05 | 2.1953 |     | 47,972.68<br>39 |

# 4.2 Trip Summary Information

|                                     | Ave      | rage Daily Trip Ra | ate      | Unmitigated | Mitigated  |
|-------------------------------------|----------|--------------------|----------|-------------|------------|
| Land Use                            | Weekday  | Saturday           | Sunday   | Annual VMT  | Annual VMT |
| Apartments Low Rise                 | 145.75   | 154.25             | 154.00   | 506,227     | 506,227    |
| Apartments Mid Rise                 | 4,026.75 | 3,773.25           | 4075.50  | 13,660,065  | 13,660,065 |
| General Office Building             | 288.45   | 62.55              | 31.05    | 706,812     | 706,812    |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52           | 2817.72  | 3,413,937   | 3,413,937  |
| Hotel                               | 192.00   | 187.50             | 160.00   | 445,703     | 445,703    |
| Quality Restaurant                  | 501.12   | 511.92             | 461.20   | 707,488     | 707,488    |
| Regional Shopping Center            | 528.08   | 601.44             | 357.84   | 1,112,221   | 1,112,221  |
| Total                               | 8,050.95 | 8,164.43           | 8,057.31 | 20,552,452  | 20,552,452 |

4.3 Trip Type Information

|                          |            | Miles      |             |            | Trip %     |             |         | Trip Purpos | e %     |
|--------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| 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 Low Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| Apartments Mid Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| General Office Building  | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 77      | 19          | 4       |
| High Turnover (Sit Down  | 16.60      | 8.40       | 6.90        | 8.50       | 72.50      | 19.00       | 37      | 20          | 43      |
| Hotel                    | 16.60      | 8.40       | 6.90        | 19.40      | 61.60      | 19.00       | 58      | 38          | 4       |
| Quality Restaurant       | 16.60      | 8.40       | 6.90        | 12.00      | 69.00      | 19.00       | 38      | 18          | 44      |
| Regional Shopping Center | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54      | 35          | 11      |

#### 4.4 Fleet Mix

| Land Use                               | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Low Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building                | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down<br>Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel                                  | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant                     | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center               | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

# 5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                           | ROG    | NOx    | со     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------------------------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category                  |        |        |        |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | lay    |        |                |
| NaturalGas<br>Mitigated   | 0.7660 | 6.7462 | 4.2573 | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602 | 0.1532 | 8,405.638<br>7 |
| NaturalGas<br>Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602 | 0.1532 | 8,405.638<br>7 |

# 5.2 Energy by Land Use - NaturalGas

# <u>Unmitigated</u>

|  | NaturalGa<br>s Use | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |        |        |                 | lb/e             | day             |                 |                   |                  |                 |          |                | lb/d           | lay             |                 |                |
| Apartments Low<br>Rise                 | 1119.16            | 0.0121          | 0.1031 | 0.0439 | 6.6000e-<br>004 |                  | 8.3400e-<br>003 | 8.3400e-<br>003 |                   | 8.3400e-<br>003  | 8.3400e-<br>003 |          | 131.6662       | 131.6662       | 2.5200e-<br>003 | 2.4100e-<br>003 | 132.4486       |
| Apartments Mid<br>Rise                 | 35784.3            | 0.3859          | 3.2978 | 1.4033 | 0.0211          |                  | 0.2666          | 0.2666          |                   | 0.2666           | 0.2666          |          | 4,209.916<br>4 | 4,209.916<br>4 | 0.0807          | 0.0772          | 4,234.933<br>9 |
| General Office<br>Building             | 1283.42            | 0.0138          | 0.1258 | 0.1057 | 7.5000e-<br>004 |                  | 9.5600e-<br>003 | 9.5600e-<br>003 |                   | 9.5600e-<br>003  | 9.5600e-<br>003 |          | 150.9911       | 150.9911       | 2.8900e-<br>003 | 2.7700e-<br>003 | 151.8884       |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.2455          | 2.2314 | 1.8743 | 0.0134          |                  | 0.1696          | 0.1696          |                   | 0.1696           | 0.1696          |          | 2,677.634<br>2 | 2,677.634<br>2 | 0.0513          | 0.0491          | 2,693.546<br>0 |
| Hotel                                  | 4769.72            | 0.0514          | 0.4676 | 0.3928 | 2.8100e-<br>003 |                  | 0.0355          | 0.0355          | ,                 | 0.0355           | 0.0355          |          | 561.1436       | 561.1436       | 0.0108          | 0.0103          | 564.4782       |
| Quality<br>Restaurant                  | 5057.75            | 0.0545          | 0.4959 | 0.4165 | 2.9800e-<br>003 |                  | 0.0377          | 0.0377          | 1                 | 0.0377           | 0.0377          |          | 595.0298       | 595.0298       | 0.0114          | 0.0109          | 598.5658       |
| Regional<br>Shopping Center            |                    | 2.7100e-<br>003 | 0.0247 | 0.0207 | 1.5000e-<br>004 |                  | 1.8700e-<br>003 | 1.8700e-<br>003 | 1                 | 1.8700e-<br>003  | 1.8700e-<br>003 |          | 29.6019        | 29.6019        | 5.7000e-<br>004 | 5.4000e-<br>004 | 29.7778        |
| Total                                  |                    | 0.7660          | 6.7463 | 4.2573 | 0.0418          |                  | 0.5292          | 0.5292          |                   | 0.5292           | 0.5292          |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602          | 0.1532          | 8,405.638<br>7 |

# 5.2 Energy by Land Use - NaturalGas

# Mitigated

|  | NaturalGa<br>s Use | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |        |        |                 | lb/e             | day             |                 |                   |                  |                 |          |                | lb/d           | day             |                 |                |
| Apartments Low<br>Rise                 | 1.11916            | 0.0121          | 0.1031 | 0.0439 | 6.6000e-<br>004 |                  | 8.3400e-<br>003 | 8.3400e-<br>003 |                   | 8.3400e-<br>003  | 8.3400e-<br>003 |          | 131.6662       | 131.6662       | 2.5200e-<br>003 | 2.4100e-<br>003 | 132.4486       |
| Apartments Mid<br>Rise                 | 35.7843            | 0.3859          | 3.2978 | 1.4033 | 0.0211          |                  | 0.2666          | 0.2666          |                   | 0.2666           | 0.2666          |          | 4,209.916<br>4 | 4,209.916<br>4 | 0.0807          | 0.0772          | 4,234.933<br>9 |
| General Office<br>Building             | 1.28342            | 0.0138          | 0.1258 | 0.1057 | 7.5000e-<br>004 |                  | 9.5600e-<br>003 | 9.5600e-<br>003 |                   | 9.5600e-<br>003  | 9.5600e-<br>003 |          | 150.9911       | 150.9911       | 2.8900e-<br>003 | 2.7700e-<br>003 | 151.8884       |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.2455          | 2.2314 | 1.8743 | 0.0134          |                  | 0.1696          | 0.1696          |                   | 0.1696           | 0.1696          |          | 2,677.634<br>2 | 2,677.634<br>2 | 0.0513          | 0.0491          | 2,693.546<br>0 |
| Hotel                                  | 4.76972            | 0.0514          | 0.4676 | 0.3928 | 2.8100e-<br>003 |                  | 0.0355          | 0.0355          |                   | 0.0355           | 0.0355          |          | 561.1436       | 561.1436       | 0.0108          | 0.0103          | 564.4782       |
| Quality<br>Restaurant                  | 5.05775            | 0.0545          | 0.4959 | 0.4165 | 2.9800e-<br>003 |                  | 0.0377          | 0.0377          | ,                 | 0.0377           | 0.0377          |          | 595.0298       | 595.0298       | 0.0114          | 0.0109          | 598.5658       |
| Regional<br>Shopping Center            |                    | 2.7100e-<br>003 | 0.0247 | 0.0207 | 1.5000e-<br>004 |                  | 1.8700e-<br>003 | 1.8700e-<br>003 | ,                 | 1.8700e-<br>003  | 1.8700e-<br>003 |          | 29.6019        | 29.6019        | 5.7000e-<br>004 | 5.4000e-<br>004 | 29.7778        |
| Total                                  |                    | 0.7660          | 6.7463 | 4.2573 | 0.0418          |                  | 0.5292          | 0.5292          |                   | 0.5292           | 0.5292          |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602          | 0.1532          | 8,405.638<br>7 |

# 6.0 Area Detail

6.1 Mitigation Measures Area

Page 33 of 35

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

|             | ROG     | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|-------------|---------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category    |         |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Mitigated   | 30.5020 | 15.0496 | 88.4430 | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

# 6.2 Area by SubCategory

# <u>Unmitigated</u>

|                          | ROG     | NOx     | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|--------------------------|---------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| SubCategory              |         |         |         |                 | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Architectural<br>Coating | 2.2670  |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Consumer<br>Products     | 24.1085 |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Hearth                   | 1.6500  | 14.1000 | 6.0000  | 0.0900          |                  | 1.1400          | 1.1400        |                   | 1.1400           | 1.1400         | 0.0000   | 18,000.00<br>00 | 18,000.00<br>00 | 0.3450 | 0.3300 | 18,106.96<br>50 |
| Landscaping              | 2.4766  | 0.9496  | 82.4430 | 4.3600e-<br>003 |                  | 0.4574          | 0.4574        |                   | 0.4574           | 0.4574         |          | 148.5950        | 148.5950        | 0.1424 |        | 152.1542        |
| Total                    | 30.5020 | 15.0496 | 88.4430 | 0.0944          |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

# 6.2 Area by SubCategory

#### **Mitigated**

|                          | ROG     | NOx     | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|--------------------------|---------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| SubCategory              |         |         |         |                 | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | day    |        |                 |
| Architectural<br>Coating | 2.2670  |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Consumer<br>Products     | 24.1085 |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Hearth                   | 1.6500  | 14.1000 | 6.0000  | 0.0900          |                  | 1.1400          | 1.1400        |                   | 1.1400           | 1.1400         | 0.0000   | 18,000.00<br>00 | 18,000.00<br>00 | 0.3450 | 0.3300 | 18,106.96<br>50 |
| Landscaping              | 2.4766  | 0.9496  | 82.4430 | 4.3600e-<br>003 |                  | 0.4574          | 0.4574        |                   | 0.4574           | 0.4574         |          | 148.5950        | 148.5950        | 0.1424 |        | 152.1542        |
| Total                    | 30.5020 | 15.0496 | 88.4430 | 0.0944          |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

# 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

# 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

| <b>D</b>               |        |                |                 |               |           |  |
|------------------------|--------|----------------|-----------------|---------------|-----------|--|
| <u>Boilers</u>         |        |                |                 |               |           |  |
| Equipment Type         | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |  |
| User Defined Equipment |        |                |                 |               |           |  |
| Equipment Type         | Number |                |                 |               |           |  |

# Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

# **1.0 Project Characteristics**

#### 1.1 Land Usage

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| General Office Building             | 45.00  | 1000sqft      | 1.03        | 45,000.00          | 0          |
| High Turnover (Sit Down Restaurant) | 36.00  | 1000sqft      | 0.83        | 36,000.00          | 0          |
| Hotel                               | 50.00  | Room          | 1.67        | 72,600.00          | 0          |
| Quality Restaurant                  | 8.00   | 1000sqft      | 0.18        | 8,000.00           | 0          |
| Apartments Low Rise                 | 25.00  | Dwelling Unit | 1.56        | 25,000.00          | 72         |
| Apartments Mid Rise                 | 975.00 | Dwelling Unit | 25.66       | 975,000.00         | 2789       |
| Regional Shopping Center            | 56.00  | 1000sqft      | 1.29        | 56,000.00          | 0          |

# **1.2 Other Project Characteristics**

| Urbanization               | Urban                     | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 33    |
|----------------------------|---------------------------|----------------------------|-------|----------------------------|-------|
| Climate Zone               | 9                         |                            |       | <b>Operational Year</b>    | 2028  |
| Utility Company            | Southern California Ediso | n                          |       |                            |       |
| CO2 Intensity<br>(Ib/MWhr) | 702.44                    | CH4 Intensity<br>(Ib/MWhr) | 0.029 | N2O Intensity<br>(Ib/MWhr) | 0.006 |

# **1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name      | Column Name       | Default Value | New Value |
|-----------------|-------------------|---------------|-----------|
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | NumberWood        | 1.25          | 0.00      |
| tblFireplaces   | NumberWood        | 48.75         | 0.00      |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblVehicleTrips | ST_TR             | 7.16          | 6.17      |
| tblVehicleTrips | ST_TR             | 6.39          | 3.87      |
| tblVehicleTrips | ST_TR             | 2.46          | 1.39      |
| tblVehicleTrips | ST_TR             | 158.37        | 79.82     |

| Village South Specific Plan | (Proposed) | ) - Los Angeles-South | Coast County, Annual |
|-----------------------------|------------|-----------------------|----------------------|
|                             |            |                       |                      |

| tblVehicleTrips | ST_TR              | 8.19   | 3.75  |
|-----------------|--------------------|--------|-------|
| tblVehicleTrips | ST_TR              | 94.36  | 63.99 |
| tblVehicleTrips | ST_TR              | 49.97  | 10.74 |
| tblVehicleTrips | SU_TR              | 6.07   | 6.16  |
| tblVehicleTrips | SU_TR              | 5.86   | 4.18  |
| tblVehicleTrips | SU_TR              | 1.05   | 0.69  |
| tblVehicleTrips | SU_TR              | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR              | 5.95   | 3.20  |
| tblVehicleTrips | SU_TR              | 72.16  | 57.65 |
| tblVehicleTrips | SU_TR              | 25.24  | 6.39  |
| tblVehicleTrips | WD_TR              | 6.59   | 5.83  |
| tblVehicleTrips | WD_TR              | 6.65   | 4.13  |
| tblVehicleTrips | WD_TR              | 11.03  | 6.41  |
| tblVehicleTrips | WD_TR              | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR              | 8.17   | 3.84  |
| tblVehicleTrips | WD_TR              | 89.95  | 62.64 |
| tblVehicleTrips | WD_TR              | 42.70  | 9.43  |
| tblWoodstoves   | NumberCatalytic    | 1.25   | 0.00  |
| tblWoodstoves   | NumberCatalytic    | 48.75  | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 1.25   | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 48.75  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
|                 |                    |        |       |

# 2.0 Emissions Summary

# 2.1 Overall Construction

# **Unmitigated Construction**

|         | ROG     | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O    | CO2e           |
|---------|---------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|--------|----------------|
| Year    | tons/yr |        |        |                 |                  |                 |               |                   |                  | MT/yr          |          |                |                |                 |        |                |
| 2021    | 0.1704  | 1.8234 | 1.1577 | 2.3800e-<br>003 | 0.4141           | 0.0817          | 0.4958        | 0.1788            | 0.0754           | 0.2542         | 0.0000   | 210.7654       | 210.7654       | 0.0600          | 0.0000 | 212.2661       |
| 2022    | 0.5865  | 4.0240 | 5.1546 | 0.0155          | 0.9509           | 0.1175          | 1.0683        | 0.2518            | 0.1103           | 0.3621         | 0.0000   | 1,418.655<br>4 | 1,418.655<br>4 | 0.1215          | 0.0000 | 1,421.692<br>5 |
| 2023    | 0.5190  | 3.2850 | 4.7678 | 0.0147          | 0.8497           | 0.0971          | 0.9468        | 0.2283            | 0.0912           | 0.3195         | 0.0000   | 1,342.441<br>2 | 1,342.441<br>2 | 0.1115          | 0.0000 | 1,345.229<br>1 |
| 2024    | 4.1592  | 0.1313 | 0.2557 | 5.0000e-<br>004 | 0.0221           | 6.3900e-<br>003 | 0.0285        | 5.8700e-<br>003   | 5.9700e-<br>003  | 0.0118         | 0.0000   | 44.6355        | 44.6355        | 7.8300e-<br>003 | 0.0000 | 44.8311        |
| Maximum | 4.1592  | 4.0240 | 5.1546 | 0.0155          | 0.9509           | 0.1175          | 1.0683        | 0.2518            | 0.1103           | 0.3621         | 0.0000   | 1,418.655<br>4 | 1,418.655<br>4 | 0.1215          | 0.0000 | 1,421.692<br>5 |

# 2.1 Overall Construction

# Mitigated Construction

|                      | ROG    | NOx      | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2   | NBio- CO2      | Total CO2      | CH4             | N2O    | CO2e           |
|----------------------|--------|----------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|------------|----------------|----------------|-----------------|--------|----------------|
| Year                 |        |          |        |                 | tor              | ns/yr           |               |                   |                  |                |            |                | M              | T/yr            |        |                |
| 2021                 | 0.1704 | 1.8234   | 1.1577 | 2.3800e-<br>003 | 0.4141           | 0.0817          | 0.4958        | 0.1788            | 0.0754           | 0.2542         | 0.0000     | 210.7651       | 210.7651       | 0.0600          | 0.0000 | 212.2658       |
| 2022                 | 0.5865 | 4.0240   | 5.1546 | 0.0155          | 0.9509           | 0.1175          | 1.0683        | 0.2518            | 0.1103           | 0.3621         | 0.0000     | 1,418.655<br>0 | 1,418.655<br>0 | 0.1215          | 0.0000 | 1,421.692<br>1 |
| 2023                 | 0.5190 | 3.2850   | 4.7678 | 0.0147          | 0.8497           | 0.0971          | 0.9468        | 0.2283            | 0.0912           | 0.3195         | 0.0000     | 1,342.440<br>9 | 1,342.440<br>9 | 0.1115          | 0.0000 | 1,345.228<br>7 |
| 2024                 | 4.1592 | 0.1313   | 0.2557 | 5.0000e-<br>004 | 0.0221           | 6.3900e-<br>003 | 0.0285        | 5.8700e-<br>003   | 5.9700e-<br>003  | 0.0118         | 0.0000     | 44.6354        | 44.6354        | 7.8300e-<br>003 | 0.0000 | 44.8311        |
| Maximum              | 4.1592 | 4.0240   | 5.1546 | 0.0155          | 0.9509           | 0.1175          | 1.0683        | 0.2518            | 0.1103           | 0.3621         | 0.0000     | 1,418.655<br>0 | 1,418.655<br>0 | 0.1215          | 0.0000 | 1,421.692<br>1 |
|                      | ROG    | NOx      | со     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2   | NBio-CO2       | Total CO2      | CH4             | N20    | CO2e           |
| Percent<br>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              | Sta    | art Date | End    | d Date          | Maxim            | um Unmitiga     | ated ROG +    | NOX (tons/        | quarter)         | Maxi           | mum Mitiga | ted ROG + N    | IOX (tons/qu   | iarter)         |        |                |
| 1                    | 9-     | 1-2021   | 11-3   | 0-2021          |                  |                 | 1.4091        |                   |                  |                |            | 1.4091         |                |                 |        |                |
| 2                    | 12     | -1-2021  | 2-28   | 3-2022          |                  |                 | 1.3329        |                   |                  |                |            | 1.3329         |                |                 |        |                |
| 3                    | 3-     | 1-2022   | 5-31   | 1-2022          |                  |                 | 1.1499        |                   |                  |                |            | 1.1499         |                |                 |        |                |
| 4                    | 6-     | 1-2022   | 8-31   | 1-2022          |                  |                 | 1.1457        |                   |                  |                |            | 1.1457         |                |                 |        |                |
| 5                    | 9-     | 1-2022   | 11-3   | 0-2022          |                  |                 | 1.1415        |                   |                  | 1.1415         |            |                |                |                 |        |                |
| 6                    | 12     | -1-2022  | 2-28   | 3-2023          |                  |                 | 1.0278        |                   |                  |                |            | 1.0278         |                |                 |        |                |
| 7                    | 3-     | 1-2023   | 5-31   | 1-2023          | 0.9868           |                 |               |                   |                  | 0.9868         |            |                |                |                 |        |                |
| 8                    | _      | 1-2023   | 0.24   | -2023           | 0.9831 0.9831    |                 |               |                   |                  |                |            |                |                |                 |        |                |

| 9  | 9-1-2023  | 11-30-2023 | 0.9798 | 0.9798 |
|----|-----------|------------|--------|--------|
| 10 | 12-1-2023 | 2-29-2024  | 2.8757 | 2.8757 |
| 11 | 3-1-2024  | 5-31-2024  | 1.6188 | 1.6188 |
|    |           | Highest    | 2.8757 | 2.8757 |

# 2.2 Overall Operational

# Unmitigated Operational

|          | ROG     | NOx    | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4     | N2O             | CO2e            |
|----------|---------|--------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|---------|-----------------|-----------------|
| Category | tons/yr |        |         |                 |                  |                 |               |                   |                  |                | MT/yr    |                 |                 |         |                 |                 |
| Area     | 5.1437  | 0.2950 | 10.3804 | 1.6700e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670        | 220.9670        | 0.0201  | 3.7400e-<br>003 | 222.5835        |
| Energy   | 0.1398  | 1.2312 | 0.7770  | 7.6200e-<br>003 |                  | 0.0966          | 0.0966        |                   | 0.0966           | 0.0966         | 0.0000   | 3,896.073<br>2  | 3,896.073<br>2  | 0.1303  | 0.0468          | 3,913.283<br>3  |
| Mobile   | 1.5857  | 7.9962 | 19.1834 | 0.0821          | 7.7979           | 0.0580          | 7.8559        | 2.0895            | 0.0539           | 2.1434         | 0.0000   | 7,620.498<br>6  | 7,620.498<br>6  | 0.3407  | 0.0000          | 7,629.016<br>2  |
| Waste    | ,       |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 207.8079 | 0.0000          | 207.8079        | 12.2811 | 0.0000          | 514.8354        |
| Water    | ,       |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 29.1632  | 556.6420        | 585.8052        | 3.0183  | 0.0755          | 683.7567        |
| Total    | 6.8692  | 9.5223 | 30.3407 | 0.0914          | 7.7979           | 0.2260          | 8.0240        | 2.0895            | 0.2219           | 2.3114         | 236.9712 | 12,294.18<br>07 | 12,531.15<br>19 | 15.7904 | 0.1260          | 12,963.47<br>51 |

Page 7 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 2.2 Overall Operational

# Mitigated Operational

|                      | ROG    | NOx    | CO    | S             |            | igitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugiti<br>PM2 |                   | aust<br>12.5 | PM2.5<br>Total | Bio-         | CO2 NB   | io- CO2       | Total CO2       | CH4     | N2O            | CO2e            |
|----------------------|--------|--------|-------|---------------|------------|-----------------|-----------------|---------------|---------------|-------------------|--------------|----------------|--------------|----------|---------------|-----------------|---------|----------------|-----------------|
| Category             |        |        |       |               |            | ton             | s/yr            |               |               |                   |              |                |              |          |               | М               | T/yr    |                |                 |
| Area                 | 5.1437 | 0.2950 | 10.38 | 04 1.67<br>00 | 00e-<br>)3 |                 | 0.0714          | 0.0714        |               | 0.0               | 714          | 0.0714         | 0.00         | 00 22    | 0.9670        | 220.9670        | 0.0201  | 3.7400e<br>003 | - 222.5835      |
| Energy               | 0.1398 | 1.2312 | 0.777 | 7.62<br>00    |            |                 | 0.0966          | 0.0966        |               | 0.0               | 966          | 0.0966         | 0.00         | 00 3,8   | 896.073<br>2  | 3,896.073<br>2  | 0.1303  | 0.0468         | 3,913.283<br>3  |
| Mobile               | 1.5857 | 7.9962 | 19.18 | 34 0.0        | 821 7      | .7979           | 0.0580          | 7.8559        | 2.08          | 95 0.0            | 539          | 2.1434         | 0.00         | 00 7,6   | 6<br>6        | 7,620.498<br>6  | 0.3407  | 0.0000         | 7,629.016<br>2  |
| Waste                | F)     |        |       |               |            |                 | 0.0000          | 0.0000        |               | 0.0               | 000          | 0.0000         | 207.8        | 079 O    | .0000         | 207.8079        | 12.2811 | 0.0000         | 514.8354        |
| Water                | F)     |        |       |               |            |                 | 0.0000          | 0.0000        |               | 0.0               | 000          | 0.0000         | 29.1         | 632 55   | 6.6420        | 585.8052        | 3.0183  | 0.0755         | 683.7567        |
| Total                | 6.8692 | 9.5223 | 30.34 | 07 0.0        | 914 7      | .7979           | 0.2260          | 8.0240        | 2.08          | 95 0.2            | 219          | 2.3114         | 236.9        | 712 12   | ,294.18<br>07 | 12,531.15<br>19 | 15.7904 | 0.1260         | 12,963.47<br>51 |
|                      | ROG    |        | NOx   | со            | SO2        | Fugi<br>PN      |                 |               | VI10<br>otal  | Fugitive<br>PM2.5 | Exhau<br>PM2 |                | l2.5<br>otal | Bio- CO2 | NBio-         | CO2 Tota        | CO2     | CH4            | N20 CO2         |
| Percent<br>Reduction | 0.00   |        | 0.00  | 0.00          | 0.00       | 0.              | 00 0.           | .00 0         | .00           | 0.00              | 0.0          | 0 0.           | .00          | 0.00     | 0.0           | 0 0.            | 00      | 0.00           | 0.00 0.0        |

# 3.0 Construction Detail

**Construction Phase** 

| Phase<br>Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days<br>Week | Num Days | Phase Description |
|-----------------|-----------------------|-----------------------|------------|------------|------------------|----------|-------------------|
| 1               | Demolition            | Demolition            | 9/1/2021   | 10/12/2021 | 5                | 30       |                   |
| 2               | Site Preparation      | Site Preparation      | 10/13/2021 | 11/9/2021  | 5                | 20       |                   |
| 3               | Grading               | Grading               | 11/10/2021 | 1/11/2022  | 5                | 45       |                   |
| 4               | Building Construction | Building Construction | 1/12/2022  | 12/12/2023 | 5                | 500      |                   |
| 5               | Paving                | Paving                | 12/13/2023 | 1/30/2024  | 5                | 35       |                   |
| 6               | Architectural Coating | Architectural Coating | 1/31/2024  | 3/19/2024  | 5                | 35       |                   |

#### Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

| 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        |
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Building Construction | Cranes                    | 1      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Paving                | Pavers                    | 2      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 2      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |

Trips and VMT

| Phase Name            | Offroad Equipment<br>Count | Worker Trip<br>Number | Vendor Trip<br>Number | Hauling Trip<br>Number | Worker Trip<br>Length | Vendor Trip<br>Length | Hauling Trip<br>Length | Worker Vehicle<br>Class | Vendor<br>Vehicle Class | Hauling<br>Vehicle Class |
|-----------------------|----------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Demolition            | 6                          | 15.00                 | 0.00                  | 458.00                 | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Site Preparation      | 7                          | 18.00                 | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Grading               | 8                          | 20.00                 | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Building Construction | 9                          | 801.00                | 143.00                | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Paving                | 6                          | 15.00                 | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Architectural Coating | 1                          | 160.00                | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |

# **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | МТ        | /yr    |        |         |
| Fugitive Dust |        |        |        |                 | 0.0496           | 0.0000          | 0.0496        | 7.5100e-<br>003   | 0.0000           | 7.5100e-<br>003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0475 | 0.4716 | 0.3235 | 5.8000e-<br>004 |                  | 0.0233          | 0.0233        |                   | 0.0216           | 0.0216          | 0.0000   | 51.0012   | 51.0012   | 0.0144 | 0.0000 | 51.3601 |
| Total         | 0.0475 | 0.4716 | 0.3235 | 5.8000e-<br>004 | 0.0496           | 0.0233          | 0.0729        | 7.5100e-<br>003   | 0.0216           | 0.0291          | 0.0000   | 51.0012   | 51.0012   | 0.0144 | 0.0000 | 51.3601 |

# 3.2 Demolition - 2021

# Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |         |
| Hauling  | 1.9300e-<br>003 | 0.0634          | 0.0148          | 1.8000e-<br>004 | 3.9400e-<br>003  | 1.9000e-<br>004 | 4.1300e-<br>003 | 1.0800e-<br>003   | 1.8000e-<br>004  | 1.2600e-<br>003 | 0.0000   | 17.4566   | 17.4566   | 1.2100e-<br>003 | 0.0000 | 17.4869 |
| 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   | 7.2000e-<br>004 | 5.3000e-<br>004 | 6.0900e-<br>003 | 2.0000e-<br>005 | 1.6800e-<br>003  | 1.0000e-<br>005 | 1.6900e-<br>003 | 4.5000e-<br>004   | 1.0000e-<br>005  | 4.6000e-<br>004 | 0.0000   | 1.5281    | 1.5281    | 5.0000e-<br>005 | 0.0000 | 1.5293  |
| Total    | 2.6500e-<br>003 | 0.0639          | 0.0209          | 2.0000e-<br>004 | 5.6200e-<br>003  | 2.0000e-<br>004 | 5.8200e-<br>003 | 1.5300e-<br>003   | 1.9000e-<br>004  | 1.7200e-<br>003 | 0.0000   | 18.9847   | 18.9847   | 1.2600e-<br>003 | 0.0000 | 19.0161 |

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | МТ        | '/yr   |        |         |
| Fugitive Dust |        |        |        |                 | 0.0496           | 0.0000          | 0.0496        | 7.5100e-<br>003   | 0.0000           | 7.5100e-<br>003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0475 | 0.4716 | 0.3235 | 5.8000e-<br>004 |                  | 0.0233          | 0.0233        |                   | 0.0216           | 0.0216          | 0.0000   | 51.0011   | 51.0011   | 0.0144 | 0.0000 | 51.3600 |
| Total         | 0.0475 | 0.4716 | 0.3235 | 5.8000e-<br>004 | 0.0496           | 0.0233          | 0.0729        | 7.5100e-<br>003   | 0.0216           | 0.0291          | 0.0000   | 51.0011   | 51.0011   | 0.0144 | 0.0000 | 51.3600 |

# 3.2 Demolition - 2021

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Hauling  | 1.9300e-<br>003 | 0.0634          | 0.0148          | 1.8000e-<br>004 | 3.9400e-<br>003  | 1.9000e-<br>004 | 4.1300e-<br>003 | 1.0800e-<br>003   | 1.8000e-<br>004  | 1.2600e-<br>003 | 0.0000   | 17.4566   | 17.4566   | 1.2100e-<br>003 | 0.0000 | 17.4869 |
| 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   | 7.2000e-<br>004 | 5.3000e-<br>004 | 6.0900e-<br>003 | 2.0000e-<br>005 | 1.6800e-<br>003  | 1.0000e-<br>005 | 1.6900e-<br>003 | 4.5000e-<br>004   | 1.0000e-<br>005  | 4.6000e-<br>004 | 0.0000   | 1.5281    | 1.5281    | 5.0000e-<br>005 | 0.0000 | 1.5293  |
| Total    | 2.6500e-<br>003 | 0.0639          | 0.0209          | 2.0000e-<br>004 | 5.6200e-<br>003  | 2.0000e-<br>004 | 5.8200e-<br>003 | 1.5300e-<br>003   | 1.9000e-<br>004  | 1.7200e-<br>003 | 0.0000   | 18.9847   | 18.9847   | 1.2600e-<br>003 | 0.0000 | 19.0161 |

3.3 Site Preparation - 2021

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |        |         |
| Fugitive Dust |        |        |        |                 | 0.1807           | 0.0000          | 0.1807        | 0.0993            | 0.0000           | 0.0993         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0389 | 0.4050 | 0.2115 | 3.8000e-<br>004 |                  | 0.0204          | 0.0204        |                   | 0.0188           | 0.0188         | 0.0000   | 33.4357   | 33.4357   | 0.0108 | 0.0000 | 33.7061 |
| Total         | 0.0389 | 0.4050 | 0.2115 | 3.8000e-<br>004 | 0.1807           | 0.0204          | 0.2011        | 0.0993            | 0.0188           | 0.1181         | 0.0000   | 33.4357   | 33.4357   | 0.0108 | 0.0000 | 33.7061 |

# 3.3 Site Preparation - 2021

# Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 5.8000e-<br>004 | 4.3000e-<br>004 | 4.8700e-<br>003 | 1.0000e-<br>005 | 1.3400e-<br>003  | 1.0000e-<br>005 | 1.3500e-<br>003 | 3.6000e-<br>004   | 1.0000e-<br>005  | 3.7000e-<br>004 | 0.0000   | 1.2225    | 1.2225    | 4.0000e-<br>005 | 0.0000 | 1.2234 |
| Total    | 5.8000e-<br>004 | 4.3000e-<br>004 | 4.8700e-<br>003 | 1.0000e-<br>005 | 1.3400e-<br>003  | 1.0000e-<br>005 | 1.3500e-<br>003 | 3.6000e-<br>004   | 1.0000e-<br>005  | 3.7000e-<br>004 | 0.0000   | 1.2225    | 1.2225    | 4.0000e-<br>005 | 0.0000 | 1.2234 |

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |         |
| Fugitive Dust |        |        |        |                 | 0.1807           | 0.0000          | 0.1807        | 0.0993            | 0.0000           | 0.0993         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0389 | 0.4050 | 0.2115 | 3.8000e-<br>004 |                  | 0.0204          | 0.0204        |                   | 0.0188           | 0.0188         | 0.0000   | 33.4357   | 33.4357   | 0.0108 | 0.0000 | 33.7060 |
| Total         | 0.0389 | 0.4050 | 0.2115 | 3.8000e-<br>004 | 0.1807           | 0.0204          | 0.2011        | 0.0993            | 0.0188           | 0.1181         | 0.0000   | 33.4357   | 33.4357   | 0.0108 | 0.0000 | 33.7060 |

# 3.3 Site Preparation - 2021

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | '/yr            |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 5.8000e-<br>004 | 4.3000e-<br>004 | 4.8700e-<br>003 | 1.0000e-<br>005 | 1.3400e-<br>003  | 1.0000e-<br>005 | 1.3500e-<br>003 | 3.6000e-<br>004   | 1.0000e-<br>005  | 3.7000e-<br>004 | 0.0000   | 1.2225    | 1.2225    | 4.0000e-<br>005 | 0.0000 | 1.2234 |
| Total    | 5.8000e-<br>004 | 4.3000e-<br>004 | 4.8700e-<br>003 | 1.0000e-<br>005 | 1.3400e-<br>003  | 1.0000e-<br>005 | 1.3500e-<br>003 | 3.6000e-<br>004   | 1.0000e-<br>005  | 3.7000e-<br>004 | 0.0000   | 1.2225    | 1.2225    | 4.0000e-<br>005 | 0.0000 | 1.2234 |

3.4 Grading - 2021

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |        |          |
| Fugitive Dust |        |        |        |                 | 0.1741           | 0.0000          | 0.1741        | 0.0693            | 0.0000           | 0.0693         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Off-Road      | 0.0796 | 0.8816 | 0.5867 | 1.1800e-<br>003 |                  | 0.0377          | 0.0377        |                   | 0.0347           | 0.0347         | 0.0000   | 103.5405  | 103.5405  | 0.0335 | 0.0000 | 104.3776 |
| Total         | 0.0796 | 0.8816 | 0.5867 | 1.1800e-<br>003 | 0.1741           | 0.0377          | 0.2118        | 0.0693            | 0.0347           | 0.1040         | 0.0000   | 103.5405  | 103.5405  | 0.0335 | 0.0000 | 104.3776 |

# 3.4 Grading - 2021

# Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 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   | 1.2200e-<br>003 | 9.0000e-<br>004 | 0.0103 | 3.0000e-<br>005 | 2.8300e-<br>003  | 2.0000e-<br>005 | 2.8600e-<br>003 | 7.5000e-<br>004   | 2.0000e-<br>005  | 7.8000e-<br>004 | 0.0000   | 2.5808    | 2.5808    | 8.0000e-<br>005 | 0.0000 | 2.5828 |
| Total    | 1.2200e-<br>003 | 9.0000e-<br>004 | 0.0103 | 3.0000e-<br>005 | 2.8300e-<br>003  | 2.0000e-<br>005 | 2.8600e-<br>003 | 7.5000e-<br>004   | 2.0000e-<br>005  | 7.8000e-<br>004 | 0.0000   | 2.5808    | 2.5808    | 8.0000e-<br>005 | 0.0000 | 2.5828 |

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
| Fugitive Dust |        |        |        |                 | 0.1741           | 0.0000          | 0.1741        | 0.0693            | 0.0000           | 0.0693         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Off-Road      | 0.0796 | 0.8816 | 0.5867 | 1.1800e-<br>003 |                  | 0.0377          | 0.0377        |                   | 0.0347           | 0.0347         | 0.0000   | 103.5403  | 103.5403  | 0.0335 | 0.0000 | 104.3775 |
| Total         | 0.0796 | 0.8816 | 0.5867 | 1.1800e-<br>003 | 0.1741           | 0.0377          | 0.2118        | 0.0693            | 0.0347           | 0.1040         | 0.0000   | 103.5403  | 103.5403  | 0.0335 | 0.0000 | 104.3775 |

Page 16 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 3.4 Grading - 2021

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | '/yr            |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 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   | 1.2200e-<br>003 | 9.0000e-<br>004 | 0.0103 | 3.0000e-<br>005 | 2.8300e-<br>003  | 2.0000e-<br>005 | 2.8600e-<br>003 | 7.5000e-<br>004   | 2.0000e-<br>005  | 7.8000e-<br>004 | 0.0000   | 2.5808    | 2.5808    | 8.0000e-<br>005 | 0.0000 | 2.5828 |
| Total    | 1.2200e-<br>003 | 9.0000e-<br>004 | 0.0103 | 3.0000e-<br>005 | 2.8300e-<br>003  | 2.0000e-<br>005 | 2.8600e-<br>003 | 7.5000e-<br>004   | 2.0000e-<br>005  | 7.8000e-<br>004 | 0.0000   | 2.5808    | 2.5808    | 8.0000e-<br>005 | 0.0000 | 2.5828 |

3.4 Grading - 2022

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |         |
| Fugitive Dust |        |        |        |                 | 0.0807           | 0.0000          | 0.0807          | 0.0180            | 0.0000           | 0.0180          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Off-Road      | 0.0127 | 0.1360 | 0.1017 | 2.2000e-<br>004 |                  | 5.7200e-<br>003 | 5.7200e-<br>003 |                   | 5.2600e-<br>003  | 5.2600e-<br>003 | 0.0000   | 19.0871   | 19.0871   | 6.1700e-<br>003 | 0.0000 | 19.2414 |
| Total         | 0.0127 | 0.1360 | 0.1017 | 2.2000e-<br>004 | 0.0807           | 5.7200e-<br>003 | 0.0865          | 0.0180            | 5.2600e-<br>003  | 0.0233          | 0.0000   | 19.0871   | 19.0871   | 6.1700e-<br>003 | 0.0000 | 19.2414 |

Page 17 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 3.4 Grading - 2022

# Unmitigated Construction Off-Site

|          | ROG             | NOx             | со              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 2.1000e-<br>004 | 1.5000e-<br>004 | 1.7400e-<br>003 | 1.0000e-<br>005 | 5.2000e-<br>004  | 0.0000          | 5.3000e-<br>004 | 1.4000e-<br>004   | 0.0000           | 1.4000e-<br>004 | 0.0000   | 0.4587    | 0.4587    | 1.0000e-<br>005 | 0.0000 | 0.4590 |
| Total    | 2.1000e-<br>004 | 1.5000e-<br>004 | 1.7400e-<br>003 | 1.0000e-<br>005 | 5.2000e-<br>004  | 0.0000          | 5.3000e-<br>004 | 1.4000e-<br>004   | 0.0000           | 1.4000e-<br>004 | 0.0000   | 0.4587    | 0.4587    | 1.0000e-<br>005 | 0.0000 | 0.4590 |

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Fugitive Dust |        |        |        |                 | 0.0807           | 0.0000          | 0.0807          | 0.0180            | 0.0000           | 0.0180          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Off-Road      | 0.0127 | 0.1360 | 0.1017 | 2.2000e-<br>004 |                  | 5.7200e-<br>003 | 5.7200e-<br>003 |                   | 5.2600e-<br>003  | 5.2600e-<br>003 | 0.0000   | 19.0871   | 19.0871   | 6.1700e-<br>003 | 0.0000 | 19.2414 |
| Total         | 0.0127 | 0.1360 | 0.1017 | 2.2000e-<br>004 | 0.0807           | 5.7200e-<br>003 | 0.0865          | 0.0180            | 5.2600e-<br>003  | 0.0233          | 0.0000   | 19.0871   | 19.0871   | 6.1700e-<br>003 | 0.0000 | 19.2414 |

Page 18 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# 3.4 Grading - 2022

# Mitigated Construction Off-Site

|          | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | '/yr            |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 2.1000e-<br>004 | 1.5000e-<br>004 | 1.7400e-<br>003 | 1.0000e-<br>005 | 5.2000e-<br>004  | 0.0000          | 5.3000e-<br>004 | 1.4000e-<br>004   | 0.0000           | 1.4000e-<br>004 | 0.0000   | 0.4587    | 0.4587    | 1.0000e-<br>005 | 0.0000 | 0.4590 |
| Total    | 2.1000e-<br>004 | 1.5000e-<br>004 | 1.7400e-<br>003 | 1.0000e-<br>005 | 5.2000e-<br>004  | 0.0000          | 5.3000e-<br>004 | 1.4000e-<br>004   | 0.0000           | 1.4000e-<br>004 | 0.0000   | 0.4587    | 0.4587    | 1.0000e-<br>005 | 0.0000 | 0.4590 |

3.5 Building Construction - 2022

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
|          | 0.2158 | 1.9754 | 2.0700 | 3.4100e-<br>003 |                  | 0.1023          | 0.1023        | 1<br>1<br>1       | 0.0963           | 0.0963         | 0.0000   | 293.1324  | 293.1324  | 0.0702 | 0.0000 | 294.8881 |
| Total    | 0.2158 | 1.9754 | 2.0700 | 3.4100e-<br>003 |                  | 0.1023          | 0.1023        |                   | 0.0963           | 0.0963         | 0.0000   | 293.1324  | 293.1324  | 0.0702 | 0.0000 | 294.8881 |

# 3.5 Building Construction - 2022

# Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000         | 0.0000         | 0.0000 | 0.0000 | 0.0000         |
| Vendor   | 0.0527 | 1.6961 | 0.4580 | 4.5500e-<br>003 | 0.1140           | 3.1800e-<br>003 | 0.1171        | 0.0329            | 3.0400e-<br>003  | 0.0359         | 0.0000   | 441.9835       | 441.9835       | 0.0264 | 0.0000 | 442.6435       |
| Worker   | 0.3051 | 0.2164 | 2.5233 | 7.3500e-<br>003 | 0.7557           | 6.2300e-<br>003 | 0.7619        | 0.2007            | 5.7400e-<br>003  | 0.2065         | 0.0000   | 663.9936       | 663.9936       | 0.0187 | 0.0000 | 664.4604       |
| Total    | 0.3578 | 1.9125 | 2.9812 | 0.0119          | 0.8696           | 9.4100e-<br>003 | 0.8790        | 0.2336            | 8.7800e-<br>003  | 0.2424         | 0.0000   | 1,105.977<br>1 | 1,105.977<br>1 | 0.0451 | 0.0000 | 1,107.103<br>9 |

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-<br>003 |                  | 0.1023          | 0.1023        | 1<br>1<br>1       | 0.0963           | 0.0963         | 0.0000   | 293.1321  | 293.1321  | 0.0702 | 0.0000 | 294.8877 |
| Total    | 0.2158 | 1.9754 | 2.0700 | 3.4100e-<br>003 |                  | 0.1023          | 0.1023        |                   | 0.0963           | 0.0963         | 0.0000   | 293.1321  | 293.1321  | 0.0702 | 0.0000 | 294.8877 |

# 3.5 Building Construction - 2022

# Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000         | 0.0000         | 0.0000 | 0.0000 | 0.0000         |
| Vendor   | 0.0527 | 1.6961 | 0.4580 | 4.5500e-<br>003 | 0.1140           | 3.1800e-<br>003 | 0.1171        | 0.0329            | 3.0400e-<br>003  | 0.0359         | 0.0000   | 441.9835       | 441.9835       | 0.0264 | 0.0000 | 442.6435       |
| Worker   | 0.3051 | 0.2164 | 2.5233 | 7.3500e-<br>003 | 0.7557           | 6.2300e-<br>003 | 0.7619        | 0.2007            | 5.7400e-<br>003  | 0.2065         | 0.0000   | 663.9936       | 663.9936       | 0.0187 | 0.0000 | 664.4604       |
| Total    | 0.3578 | 1.9125 | 2.9812 | 0.0119          | 0.8696           | 9.4100e-<br>003 | 0.8790        | 0.2336            | 8.7800e-<br>003  | 0.2424         | 0.0000   | 1,105.977<br>1 | 1,105.977<br>1 | 0.0451 | 0.0000 | 1,107.103<br>9 |

3.5 Building Construction - 2023

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-<br>003 |                  | 0.0864          | 0.0864        |                   | 0.0813           | 0.0813         | 0.0000   | 286.2789  | 286.2789  | 0.0681 | 0.0000 | 287.9814 |
| Total    | 0.1942 | 1.7765 | 2.0061 | 3.3300e-<br>003 |                  | 0.0864          | 0.0864        |                   | 0.0813           | 0.0813         | 0.0000   | 286.2789  | 286.2789  | 0.0681 | 0.0000 | 287.9814 |

# 3.5 Building Construction - 2023

# Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000         | 0.0000         | 0.0000 | 0.0000 | 0.0000         |
| Vendor   | 0.0382 | 1.2511 | 0.4011 | 4.3000e-<br>003 | 0.1113           | 1.4600e-<br>003 | 0.1127        | 0.0321            | 1.4000e-<br>003  | 0.0335         | 0.0000   | 417.9930       | 417.9930       | 0.0228 | 0.0000 | 418.5624       |
| Worker   | 0.2795 | 0.1910 | 2.2635 | 6.9100e-<br>003 | 0.7377           | 5.9100e-<br>003 | 0.7436        | 0.1960            | 5.4500e-<br>003  | 0.2014         | 0.0000   | 624.5363       | 624.5363       | 0.0164 | 0.0000 | 624.9466       |
| Total    | 0.3177 | 1.4420 | 2.6646 | 0.0112          | 0.8490           | 7.3700e-<br>003 | 0.8564        | 0.2281            | 6.8500e-<br>003  | 0.2349         | 0.0000   | 1,042.529<br>4 | 1,042.529<br>4 | 0.0392 | 0.0000 | 1,043.509<br>0 |

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | '/yr   |        |          |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-<br>003 |                  | 0.0864          | 0.0864        | 1<br>1<br>1       | 0.0813           | 0.0813         | 0.0000   | 286.2785  | 286.2785  | 0.0681 | 0.0000 | 287.9811 |
| Total    | 0.1942 | 1.7765 | 2.0061 | 3.3300e-<br>003 |                  | 0.0864          | 0.0864        |                   | 0.0813           | 0.0813         | 0.0000   | 286.2785  | 286.2785  | 0.0681 | 0.0000 | 287.9811 |

# 3.5 Building Construction - 2023

# Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000         | 0.0000         | 0.0000 | 0.0000 | 0.0000         |
| Vendor   | 0.0382 | 1.2511 | 0.4011 | 4.3000e-<br>003 | 0.1113           | 1.4600e-<br>003 | 0.1127        | 0.0321            | 1.4000e-<br>003  | 0.0335         | 0.0000   | 417.9930       | 417.9930       | 0.0228 | 0.0000 | 418.5624       |
| Worker   | 0.2795 | 0.1910 | 2.2635 | 6.9100e-<br>003 | 0.7377           | 5.9100e-<br>003 | 0.7436        | 0.1960            | 5.4500e-<br>003  | 0.2014         | 0.0000   | 624.5363       | 624.5363       | 0.0164 | 0.0000 | 624.9466       |
| Total    | 0.3177 | 1.4420 | 2.6646 | 0.0112          | 0.8490           | 7.3700e-<br>003 | 0.8564        | 0.2281            | 6.8500e-<br>003  | 0.2349         | 0.0000   | 1,042.529<br>4 | 1,042.529<br>4 | 0.0392 | 0.0000 | 1,043.509<br>0 |

3.6 Paving - 2023

|          | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Off-Road | 6.7100e-<br>003 | 0.0663 | 0.0948 | 1.5000e-<br>004 |                  | 3.3200e-<br>003 | 3.3200e-<br>003 |                   | 3.0500e-<br>003  | 3.0500e-<br>003 | 0.0000   | 13.0175   | 13.0175   | 4.2100e-<br>003 | 0.0000 | 13.1227 |
| Paving   | 0.0000          |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Total    | 6.7100e-<br>003 | 0.0663 | 0.0948 | 1.5000e-<br>004 |                  | 3.3200e-<br>003 | 3.3200e-<br>003 |                   | 3.0500e-<br>003  | 3.0500e-<br>003 | 0.0000   | 13.0175   | 13.0175   | 4.2100e-<br>003 | 0.0000 | 13.1227 |

# 3.6 Paving - 2023

# Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 2.8000e-<br>004 | 1.9000e-<br>004 | 2.2300e-<br>003 | 1.0000e-<br>005 | 7.3000e-<br>004  | 1.0000e-<br>005 | 7.3000e-<br>004 | 1.9000e-<br>004   | 1.0000e-<br>005  | 2.0000e-<br>004 | 0.0000   | 0.6156    | 0.6156    | 2.0000e-<br>005 | 0.0000 | 0.6160 |
| Total    | 2.8000e-<br>004 | 1.9000e-<br>004 | 2.2300e-<br>003 | 1.0000e-<br>005 | 7.3000e-<br>004  | 1.0000e-<br>005 | 7.3000e-<br>004 | 1.9000e-<br>004   | 1.0000e-<br>005  | 2.0000e-<br>004 | 0.0000   | 0.6156    | 0.6156    | 2.0000e-<br>005 | 0.0000 | 0.6160 |

|          | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | ∏/yr            |        |         |
| Off-Road | 6.7100e-<br>003 | 0.0663 | 0.0948 | 1.5000e-<br>004 |                  | 3.3200e-<br>003 | 3.3200e-<br>003 |                   | 3.0500e-<br>003  | 3.0500e-<br>003 | 0.0000   | 13.0175   | 13.0175   | 4.2100e-<br>003 | 0.0000 | 13.1227 |
| Paving   | 0.0000          |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Total    | 6.7100e-<br>003 | 0.0663 | 0.0948 | 1.5000e-<br>004 |                  | 3.3200e-<br>003 | 3.3200e-<br>003 |                   | 3.0500e-<br>003  | 3.0500e-<br>003 | 0.0000   | 13.0175   | 13.0175   | 4.2100e-<br>003 | 0.0000 | 13.1227 |

# 3.6 Paving - 2023

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | '/yr            |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 2.8000e-<br>004 | 1.9000e-<br>004 | 2.2300e-<br>003 | 1.0000e-<br>005 | 7.3000e-<br>004  | 1.0000e-<br>005 | 7.3000e-<br>004 | 1.9000e-<br>004   | 1.0000e-<br>005  | 2.0000e-<br>004 | 0.0000   | 0.6156    | 0.6156    | 2.0000e-<br>005 | 0.0000 | 0.6160 |
| Total    | 2.8000e-<br>004 | 1.9000e-<br>004 | 2.2300e-<br>003 | 1.0000e-<br>005 | 7.3000e-<br>004  | 1.0000e-<br>005 | 7.3000e-<br>004 | 1.9000e-<br>004   | 1.0000e-<br>005  | 2.0000e-<br>004 | 0.0000   | 0.6156    | 0.6156    | 2.0000e-<br>005 | 0.0000 | 0.6160 |

3.6 Paving - 2024

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|--------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |        |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-<br>004 |                  | 5.1500e-<br>003 | 5.1500e-<br>003 |                   | 4.7400e-<br>003  | 4.7400e-<br>003 | 0.0000   | 22.0292   | 22.0292   | 7.1200e-<br>003 | 0.0000 | 22.2073 |
| Paving   | 0.0000 |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Total    | 0.0109 | 0.1048 | 0.1609 | 2.5000e-<br>004 |                  | 5.1500e-<br>003 | 5.1500e-<br>003 |                   | 4.7400e-<br>003  | 4.7400e-<br>003 | 0.0000   | 22.0292   | 22.0292   | 7.1200e-<br>003 | 0.0000 | 22.2073 |

# 3.6 Paving - 2024

# Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 4.4000e-<br>004 | 2.9000e-<br>004 | 3.5100e-<br>003 | 1.0000e-<br>005 | 1.2300e-<br>003  | 1.0000e-<br>005 | 1.2400e-<br>003 | 3.3000e-<br>004   | 1.0000e-<br>005  | 3.4000e-<br>004 | 0.0000   | 1.0094    | 1.0094    | 3.0000e-<br>005 | 0.0000 | 1.0100 |
| Total    | 4.4000e-<br>004 | 2.9000e-<br>004 | 3.5100e-<br>003 | 1.0000e-<br>005 | 1.2300e-<br>003  | 1.0000e-<br>005 | 1.2400e-<br>003 | 3.3000e-<br>004   | 1.0000e-<br>005  | 3.4000e-<br>004 | 0.0000   | 1.0094    | 1.0094    | 3.0000e-<br>005 | 0.0000 | 1.0100 |

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|--------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |        |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | ∵/yr            |        |         |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-<br>004 |                  | 5.1500e-<br>003 | 5.1500e-<br>003 |                   | 4.7400e-<br>003  | 4.7400e-<br>003 | 0.0000   | 22.0292   | 22.0292   | 7.1200e-<br>003 | 0.0000 | 22.2073 |
| Paving   | 0.0000 |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Total    | 0.0109 | 0.1048 | 0.1609 | 2.5000e-<br>004 |                  | 5.1500e-<br>003 | 5.1500e-<br>003 |                   | 4.7400e-<br>003  | 4.7400e-<br>003 | 0.0000   | 22.0292   | 22.0292   | 7.1200e-<br>003 | 0.0000 | 22.2073 |

# 3.6 Paving - 2024

#### Mitigated Construction Off-Site

|          | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |                 |                 | ton              | s/yr            |                 | <u>.</u>          |                  |                 |          |           | МТ        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | 0.0000           | 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   | 4.4000e-<br>004 | 2.9000e-<br>004 | 3.5100e-<br>003 | 1.0000e-<br>005 | 1.2300e-<br>003  | 1.0000e-<br>005 | 1.2400e-<br>003 | 3.3000e-<br>004   | 1.0000e-<br>005  | 3.4000e-<br>004 | 0.0000   | 1.0094    | 1.0094    | 3.0000e-<br>005 | 0.0000 | 1.0100 |
| Total    | 4.4000e-<br>004 | 2.9000e-<br>004 | 3.5100e-<br>003 | 1.0000e-<br>005 | 1.2300e-<br>003  | 1.0000e-<br>005 | 1.2400e-<br>003 | 3.3000e-<br>004   | 1.0000e-<br>005  | 3.4000e-<br>004 | 0.0000   | 1.0094    | 1.0094    | 3.0000e-<br>005 | 0.0000 | 1.0100 |

3.7 Architectural Coating - 2024

|                 | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|-----------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category        |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |        |
| , and a country | 4.1372          |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
|                 | 3.1600e-<br>003 | 0.0213 | 0.0317 | 5.0000e-<br>005 |                  | 1.0700e-<br>003 | 1.0700e-<br>003 |                   | 1.0700e-<br>003  | 1.0700e-<br>003 | 0.0000   | 4.4682    | 4.4682    | 2.5000e-<br>004 | 0.0000 | 4.4745 |
| Total           | 4.1404          | 0.0213 | 0.0317 | 5.0000e-<br>005 |                  | 1.0700e-<br>003 | 1.0700e-<br>003 |                   | 1.0700e-<br>003  | 1.0700e-<br>003 | 0.0000   | 4.4682    | 4.4682    | 2.5000e-<br>004 | 0.0000 | 4.4745 |

# 3.7 Architectural Coating - 2024

# Unmitigated Construction Off-Site

|          | ROG             | NOx             | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |                 |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | МТ        | /yr             |        |         |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 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   | 7.4800e-<br>003 | 4.9300e-<br>003 | 0.0596 | 1.9000e-<br>004 | 0.0209           | 1.6000e-<br>004 | 0.0211        | 5.5500e-<br>003   | 1.5000e-<br>004  | 5.7000e-<br>003 | 0.0000   | 17.1287   | 17.1287   | 4.3000e-<br>004 | 0.0000 | 17.1394 |
| Total    | 7.4800e-<br>003 | 4.9300e-<br>003 | 0.0596 | 1.9000e-<br>004 | 0.0209           | 1.6000e-<br>004 | 0.0211        | 5.5500e-<br>003   | 1.5000e-<br>004  | 5.7000e-<br>003 | 0.0000   | 17.1287   | 17.1287   | 4.3000e-<br>004 | 0.0000 | 17.1394 |

|                 | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|-----------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category        |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | 7/yr            |        |        |
| Archit. Coating | 4.1372          |        |        |                 |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Off-Road        | 3.1600e-<br>003 | 0.0213 | 0.0317 | 5.0000e-<br>005 |                  | 1.0700e-<br>003 | 1.0700e-<br>003 |                   | 1.0700e-<br>003  | 1.0700e-<br>003 | 0.0000   | 4.4682    | 4.4682    | 2.5000e-<br>004 | 0.0000 | 4.4745 |
| Total           | 4.1404          | 0.0213 | 0.0317 | 5.0000e-<br>005 |                  | 1.0700e-<br>003 | 1.0700e-<br>003 |                   | 1.0700e-<br>003  | 1.0700e-<br>003 | 0.0000   | 4.4682    | 4.4682    | 2.5000e-<br>004 | 0.0000 | 4.4745 |

# 3.7 Architectural Coating - 2024

# Mitigated Construction Off-Site

|          | ROG             | NOx             | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category | tons/yr         |                 |        |                 |                  |                 |               |                   |                  | MT/yr           |          |           |           |                 |        |         |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 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   | 7.4800e-<br>003 | 4.9300e-<br>003 | 0.0596 | 1.9000e-<br>004 | 0.0209           | 1.6000e-<br>004 | 0.0211        | 5.5500e-<br>003   | 1.5000e-<br>004  | 5.7000e-<br>003 | 0.0000   | 17.1287   | 17.1287   | 4.3000e-<br>004 | 0.0000 | 17.1394 |
| Total    | 7.4800e-<br>003 | 4.9300e-<br>003 | 0.0596 | 1.9000e-<br>004 | 0.0209           | 1.6000e-<br>004 | 0.0211        | 5.5500e-<br>003   | 1.5000e-<br>004  | 5.7000e-<br>003 | 0.0000   | 17.1287   | 17.1287   | 4.3000e-<br>004 | 0.0000 | 17.1394 |

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

|             | ROG    | NOx    | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|-------------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category    |        |        |         |        | ton              | s/yr            |               |                   |                  |                |          |                | MT             | /yr    |        |                |
| Mitigated   | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979           | 0.0580          | 7.8559        | 2.0895            | 0.0539           | 2.1434         | 0.0000   | 7,620.498<br>6 | 7,620.498<br>6 | 0.3407 | 0.0000 | 7,629.016<br>2 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979           | 0.0580          | 7.8559        | 2.0895            | 0.0539           | 2.1434         | 0.0000   | 7,620.498<br>6 | 7,620.498<br>6 | 0.3407 | 0.0000 | 7,629.016<br>2 |

### 4.2 Trip Summary Information

|                                     | Ave      | rage Daily Trip Ra | ate      | Unmitigated | Mitigated  |
|-------------------------------------|----------|--------------------|----------|-------------|------------|
| Land Use                            | Weekday  | Saturday           | Sunday   | Annual VMT  | Annual VMT |
| Apartments Low Rise                 | 145.75   | 154.25             | 154.00   | 506,227     | 506,227    |
| Apartments Mid Rise                 | 4,026.75 | 3,773.25           | 4075.50  | 13,660,065  | 13,660,065 |
| General Office Building             | 288.45   | 62.55              | 31.05    | 706,812     | 706,812    |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52           | 2817.72  | 3,413,937   | 3,413,937  |
| Hotel                               | 192.00   | 187.50             | 160.00   | 445,703     | 445,703    |
| Quality Restaurant                  | 501.12   | 511.92             | 461.20   | 707,488     | 707,488    |
| Regional Shopping Center            | 528.08   | 601.44             | 357.84   | 1,112,221   | 1,112,221  |
| Total                               | 8,050.95 | 8,164.43           | 8,057.31 | 20,552,452  | 20,552,452 |

4.3 Trip Type Information

|                          |            | Miles      |             |            | Trip %     |             |         | Trip Purpos | e %     |
|--------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| 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 Low Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| Apartments Mid Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| General Office Building  | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 77      | 19          | 4       |
| High Turnover (Sit Down  | 16.60      | 8.40       | 6.90        | 8.50       | 72.50      | 19.00       | 37      | 20          | 43      |
| Hotel                    | 16.60      | 8.40       | 6.90        | 19.40      | 61.60      | 19.00       | 58      | 38          | 4       |
| Quality Restaurant       | 16.60      | 8.40       | 6.90        | 12.00      | 69.00      | 19.00       | 38      | 18          | 44      |
| Regional Shopping Center | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54      | 35          | 11      |

#### 4.4 Fleet Mix

| Land Use                               | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Low Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building                | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down<br>Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel                                  | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant                     | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center               | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

# 5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                            | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------------------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category                   |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | МТ             | /yr    |        |                |
| Electricity<br>Mitigated   |        |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2,512.646<br>5 | 2,512.646<br>5 | 0.1037 | 0.0215 | 2,521.635<br>6 |
| Electricity<br>Unmitigated | n      |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2,512.646<br>5 | 2,512.646<br>5 | 0.1037 | 0.0215 | 2,521.635<br>6 |
| NaturalGas<br>Mitigated    | 0.1398 | 1.2312 | 0.7770 | 7.6200e-<br>003 |                  | 0.0966          | 0.0966        |                   | 0.0966           | 0.0966         | 0.0000   | 1,383.426<br>7 | 1,383.426<br>7 | 0.0265 | 0.0254 | 1,391.647<br>8 |
| NaturalGas<br>Unmitigated  | 0.1398 | 1.2312 | 0.7770 | 7.6200e-<br>003 |                  | 0.0966          | 0.0966        |                   | 0.0966           | 0.0966         | 0.0000   | 1,383.426<br>7 | 1,383.426<br>7 | 0.0265 | 0.0254 | 1,391.647<br>8 |

### 5.2 Energy by Land Use - NaturalGas

# <u>Unmitigated</u>

|  | NaturalGa<br>s Use | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |                | MT             | 7/yr            |                 |                |
| Apartments Low<br>Rise                 | 408494             | 2.2000e-<br>003 | 0.0188          | 8.0100e-<br>003 | 1.2000e-<br>004 |                  | 1.5200e-<br>003 | 1.5200e-<br>003 |                   | 1.5200e-<br>003  | 1.5200e-<br>003 | 0.0000   | 21.7988        | 21.7988        | 4.2000e-<br>004 | 4.0000e-<br>004 | 21.9284        |
| Apartments Mid<br>Rise                 | 1.30613e<br>+007   | 0.0704          | 0.6018          | 0.2561          | 3.8400e-<br>003 |                  | 0.0487          | 0.0487          |                   | 0.0487           | 0.0487          | 0.0000   | 696.9989       | 696.9989       | 0.0134          | 0.0128          | 701.1408       |
| General Office<br>Building             | 468450             | 2.5300e-<br>003 | 0.0230          | 0.0193          | 1.4000e-<br>004 |                  | 1.7500e-<br>003 | 1.7500e-<br>003 |                   | 1.7500e-<br>003  | 1.7500e-<br>003 | 0.0000   | 24.9983        | 24.9983        | 4.8000e-<br>004 | 4.6000e-<br>004 | 25.1468        |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.0448          | 0.4072          | 0.3421          | 2.4400e-<br>003 |                  | 0.0310          | 0.0310          |                   | 0.0310           | 0.0310          | 0.0000   | 443.3124       | 443.3124       | 8.5000e-<br>003 | 8.1300e-<br>003 | 445.9468       |
| Hotel                                  | 1.74095e<br>+006   | 9.3900e-<br>003 | 0.0853          | 0.0717          | 5.1000e-<br>004 |                  | 6.4900e-<br>003 | 6.4900e-<br>003 |                   | 6.4900e-<br>003  | 6.4900e-<br>003 | 0.0000   | 92.9036        | 92.9036        | 1.7800e-<br>003 | 1.7000e-<br>003 | 93.4557        |
| Quality<br>Restaurant                  | 1.84608e<br>+006   | 9.9500e-<br>003 | 0.0905          | 0.0760          | 5.4000e-<br>004 |                  | 6.8800e-<br>003 | 6.8800e-<br>003 |                   | 6.8800e-<br>003  | 6.8800e-<br>003 | 0.0000   | 98.5139        | 98.5139        | 1.8900e-<br>003 | 1.8100e-<br>003 | 99.0993        |
| Regional<br>Shopping Center            |                    | 5.0000e-<br>004 | 4.5000e-<br>003 | 3.7800e-<br>003 | 3.0000e-<br>005 |                  | 3.4000e-<br>004 | 3.4000e-<br>004 |                   | 3.4000e-<br>004  | 3.4000e-<br>004 | 0.0000   | 4.9009         | 4.9009         | 9.0000e-<br>005 | 9.0000e-<br>005 | 4.9301         |
| Total                                  |                    | 0.1398          | 1.2312          | 0.7770          | 7.6200e-<br>003 |                  | 0.0966          | 0.0966          |                   | 0.0966           | 0.0966          | 0.0000   | 1,383.426<br>8 | 1,383.426<br>8 | 0.0265          | 0.0254          | 1,391.647<br>8 |

### 5.2 Energy by Land Use - NaturalGas

### Mitigated

|  | NaturalGa<br>s Use | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |                | MT             | /yr             |                 |                |
| Apartments Low<br>Rise                 | 408494             | 2.2000e-<br>003 | 0.0188          | 8.0100e-<br>003 | 1.2000e-<br>004 |                  | 1.5200e-<br>003 | 1.5200e-<br>003 | 1<br>1<br>1       | 1.5200e-<br>003  | 1.5200e-<br>003 | 0.0000   | 21.7988        | 21.7988        | 4.2000e-<br>004 | 4.0000e-<br>004 | 21.9284        |
| Apartments Mid<br>Rise                 | 1.30613e<br>+007   | 0.0704          | 0.6018          | 0.2561          | 3.8400e-<br>003 |                  | 0.0487          | 0.0487          |                   | 0.0487           | 0.0487          | 0.0000   | 696.9989       | 696.9989       | 0.0134          | 0.0128          | 701.1408       |
| General Office<br>Building             | 468450             | 2.5300e-<br>003 | 0.0230          | 0.0193          | 1.4000e-<br>004 |                  | 1.7500e-<br>003 | 1.7500e-<br>003 |                   | 1.7500e-<br>003  | 1.7500e-<br>003 | 0.0000   | 24.9983        | 24.9983        | 4.8000e-<br>004 | 4.6000e-<br>004 | 25.1468        |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.0448          | 0.4072          | 0.3421          | 2.4400e-<br>003 |                  | 0.0310          | 0.0310          |                   | 0.0310           | 0.0310          | 0.0000   | 443.3124       | 443.3124       | 8.5000e-<br>003 | 8.1300e-<br>003 | 445.9468       |
| Hotel                                  | 1.74095e<br>+006   | 9.3900e-<br>003 | 0.0853          | 0.0717          | 5.1000e-<br>004 | ,,,,,,,          | 6.4900e-<br>003 | 6.4900e-<br>003 |                   | 6.4900e-<br>003  | 6.4900e-<br>003 | 0.0000   | 92.9036        | 92.9036        | 1.7800e-<br>003 | 1.7000e-<br>003 | 93.4557        |
| Quality<br>Restaurant                  | 1.84608e<br>+006   | 9.9500e-<br>003 | 0.0905          | 0.0760          | 5.4000e-<br>004 |                  | 6.8800e-<br>003 | 6.8800e-<br>003 |                   | 6.8800e-<br>003  | 6.8800e-<br>003 | 0.0000   | 98.5139        | 98.5139        | 1.8900e-<br>003 | 1.8100e-<br>003 | 99.0993        |
| Regional<br>Shopping Center            |                    | 5.0000e-<br>004 | 4.5000e-<br>003 | 3.7800e-<br>003 | 3.0000e-<br>005 |                  | 3.4000e-<br>004 | 3.4000e-<br>004 |                   | 3.4000e-<br>004  | 3.4000e-<br>004 | 0.0000   | 4.9009         | 4.9009         | 9.0000e-<br>005 | 9.0000e-<br>005 | 4.9301         |
| Total                                  |                    | 0.1398          | 1.2312          | 0.7770          | 7.6200e-<br>003 |                  | 0.0966          | 0.0966          |                   | 0.0966           | 0.0966          | 0.0000   | 1,383.426<br>8 | 1,383.426<br>8 | 0.0265          | 0.0254          | 1,391.647<br>8 |

Page 34 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

### 5.3 Energy by Land Use - Electricity

# <u>Unmitigated</u>

|  | Electricity<br>Use | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kWh/yr             |                | МТ              | 7/yr            |                |
| Apartments Low<br>Rise                 | 106010             | 33.7770        | 1.3900e-<br>003 | 2.9000e-<br>004 | 33.8978        |
| Apartments Mid<br>Rise                 | 3.94697e<br>+006   | 1,257.587<br>9 | 0.0519          | 0.0107          | 1,262.086<br>9 |
| General Office<br>Building             | 584550             | 186.2502       | 7.6900e-<br>003 | 1.5900e-<br>003 | 186.9165       |
| High Turnover (Sit<br>Down Restaurant) |                    | 506.3022       | 0.0209          | 4.3200e-<br>003 | 508.1135       |
| Hotel                                  | 550308             | 175.3399       | 7.2400e-<br>003 | 1.5000e-<br>003 | 175.9672       |
| Quality<br>Restaurant                  | 353120             | 112.5116       | 4.6500e-<br>003 | 9.6000e-<br>004 | 112.9141       |
| Regional<br>Shopping Center            | 756000             | 240.8778       | 9.9400e-<br>003 | 2.0600e-<br>003 | 241.7395       |
| Total                                  |                    | 2,512.646<br>5 | 0.1037          | 0.0215          | 2,521.635<br>6 |

Page 35 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

### 5.3 Energy by Land Use - Electricity

# Mitigated

|  | Electricity<br>Use | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kWh/yr             |                | МТ              | /yr             |                |
| Apartments Low<br>Rise                 | 106010             | 33.7770        | 1.3900e-<br>003 | 2.9000e-<br>004 | 33.8978        |
| Apartments Mid<br>Rise                 | 3.94697e<br>+006   | 1,257.587<br>9 | 0.0519          | 0.0107          | 1,262.086<br>9 |
| General Office<br>Building             | 584550             | 186.2502       | 7.6900e-<br>003 | 1.5900e-<br>003 | 186.9165       |
| High Turnover (Sit<br>Down Restaurant) |                    | 506.3022       | 0.0209          | 4.3200e-<br>003 | 508.1135       |
| Hotel                                  | 550308             | 175.3399       | 7.2400e-<br>003 | 1.5000e-<br>003 | 175.9672       |
| Quality<br>Restaurant                  | 353120             | 112.5116       | 4.6500e-<br>003 | 9.6000e-<br>004 | 112.9141       |
| Regional<br>Shopping Center            | 756000             | 240.8778       | 9.9400e-<br>003 | 2.0600e-<br>003 | 241.7395       |
| Total                                  |                    | 2,512.646<br>5 | 0.1037          | 0.0215          | 2,521.635<br>6 |

# 6.0 Area Detail

6.1 Mitigation Measures Area

Page 36 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

|             | ROG    | NOx    | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O             | CO2e     |
|-------------|--------|--------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----------------|----------|
| Category    |        |        |         |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |                 |          |
| Mitigated   | 5.1437 | 0.2950 | 10.3804 | 1.6700e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670  | 220.9670  | 0.0201 | 3.7400e-<br>003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670  | 220.9670  | 0.0201 | 3.7400e-<br>003 | 222.5835 |

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

|                          | ROG    | NOx    | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O             | CO2e     |
|--------------------------|--------|--------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----------------|----------|
| SubCategory              |        |        |         |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr             |                 |          |
| Architectural<br>Coating | 0.4137 |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Consumer<br>Products     | 4.3998 |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Hearth                   | 0.0206 | 0.1763 | 0.0750  | 1.1200e-<br>003 |                  | 0.0143          | 0.0143        |                   | 0.0143           | 0.0143         | 0.0000   | 204.1166  | 204.1166  | 3.9100e-<br>003 | 3.7400e-<br>003 | 205.3295 |
| Landscaping              | 0.3096 | 0.1187 | 10.3054 | 5.4000e-<br>004 |                  | 0.0572          | 0.0572        |                   | 0.0572           | 0.0572         | 0.0000   | 16.8504   | 16.8504   | 0.0161          | 0.0000          | 17.2540  |
| Total                    | 5.1437 | 0.2950 | 10.3804 | 1.6600e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670  | 220.9670  | 0.0201          | 3.7400e-<br>003 | 222.5835 |

### 6.2 Area by SubCategory

#### Mitigated

|                          | ROG    | NOx    | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O             | CO2e     |
|--------------------------|--------|--------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----------------|----------|
| SubCategory              |        |        |         |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr             |                 |          |
| Architectural<br>Coating | 0.4137 |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Consumer<br>Products     | 4.3998 |        |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Hearth                   | 0.0206 | 0.1763 | 0.0750  | 1.1200e-<br>003 |                  | 0.0143          | 0.0143        |                   | 0.0143           | 0.0143         | 0.0000   | 204.1166  | 204.1166  | 3.9100e-<br>003 | 3.7400e-<br>003 | 205.3295 |
| Landscaping              | 0.3096 | 0.1187 | 10.3054 | 5.4000e-<br>004 |                  | 0.0572          | 0.0572        |                   | 0.0572           | 0.0572         | 0.0000   | 16.8504   | 16.8504   | 0.0161          | 0.0000          | 17.2540  |
| Total                    | 5.1437 | 0.2950 | 10.3804 | 1.6600e-<br>003 |                  | 0.0714          | 0.0714        |                   | 0.0714           | 0.0714         | 0.0000   | 220.9670  | 220.9670  | 0.0201          | 3.7400e-<br>003 | 222.5835 |

# 7.0 Water Detail

7.1 Mitigation Measures Water

Page 38 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

|          | Total CO2 | CH4    | N2O    | CO2e     |  |  |
|----------|-----------|--------|--------|----------|--|--|
| Category | MT/yr     |        |        |          |  |  |
|          | 585.8052  | 3.0183 | 0.0755 | 683.7567 |  |  |
| - Guine  | 585.8052  | 3.0183 | 0.0755 | 683.7567 |  |  |

Page 39 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

### 7.2 Water by Land Use

# <u>Unmitigated</u>

|  | Indoor/Out<br>door Use | Total CO2 | CH4    | N2O             | CO2e     |
|--|------------------------|-----------|--------|-----------------|----------|
| Land Use                               | Mgal                   |           | MT     | /yr             |          |
| Apartments Low<br>Rise                 | 1.62885 /<br>1.02688   | 10.9095   | 0.0535 | 1.3400e-<br>003 | 12.6471  |
| Apartments Mid<br>Rise                 | 63.5252 /<br>40.0485   | 425.4719  | 2.0867 | 0.0523          | 493.2363 |
| General Office<br>Building             | 7.99802 /<br>4.90201   | 53.0719   | 0.2627 | 6.5900e-<br>003 | 61.6019  |
| High Turnover (Sit<br>Down Restaurant) |                        |           | 0.3580 | 8.8200e-<br>003 | 62.8482  |
| Hotel                                  | 1.26834 /<br>0.140927  |           | 0.0416 | 1.0300e-<br>003 | 7.5079   |
|  | 2.42827 /<br>0.154996  |           | 0.0796 | 1.9600e-<br>003 | 13.9663  |
| Regional<br>Shopping Center            | 4.14806 /<br>2.54236   | 27.5250   | 0.1363 | 3.4200e-<br>003 | 31.9490  |
| Total                                  |                        | 585.8052  | 3.0183 | 0.0755          | 683.7567 |

Page 40 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

### 7.2 Water by Land Use

### Mitigated

|  | Indoor/Out<br>door Use | Total CO2 | CH4    | N2O             | CO2e     |
|--|------------------------|-----------|--------|-----------------|----------|
| Land Use                               | Mgal                   |           | МТ     | /yr             |          |
| Apartments Low<br>Rise                 | 1.62885 /<br>1.02688   | 10.9095   | 0.0535 | 1.3400e-<br>003 | 12.6471  |
| Apartments Mid<br>Rise                 | 63.5252 /<br>40.0485   | 425.4719  | 2.0867 | 0.0523          | 493.2363 |
| General Office<br>Building             | 7.99802 /<br>4.90201   | 53.0719   | 0.2627 | 6.5900e-<br>003 | 61.6019  |
| High Turnover (Sit<br>Down Restaurant) | 10.9272 /<br>0.697482  | 51.2702   | 0.3580 | 8.8200e-<br>003 | 62.8482  |
| Hotel                                  | 1.26834 /<br>0.140927  |           | 0.0416 | 1.0300e-<br>003 | 7.5079   |
|  | 2.42827 /<br>0.154996  |           | 0.0796 | 1.9600e-<br>003 | 13.9663  |
| Regional<br>Shopping Center            | 4.14806 /<br>2.54236   | 27.5250   | 0.1363 | 3.4200e-<br>003 | 31.9490  |
| Total                                  |                        | 585.8052  | 3.0183 | 0.0755          | 683.7567 |

# 8.0 Waste Detail

8.1 Mitigation Measures Waste

Page 41 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

# Category/Year

|  | Total CO2 | CH4     | N2O    | CO2e     |  |  |
|--|-----------|---------|--------|----------|--|--|
|  | MT/yr     |         |        |          |  |  |
| Mitigated                                | 207.8079  | 12.2811 | 0.0000 | 514.8354 |  |  |
| J. J | 207.8079  | 12.2811 | 0.0000 | 514.8354 |  |  |

Page 42 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

### 8.2 Waste by Land Use

### <u>Unmitigated</u>

|  | Waste<br>Disposed | Total CO2 | CH4     | N2O    | CO2e     |
|--|-------------------|-----------|---------|--------|----------|
| Land Use                               | tons              |           | МТ      | /yr    |          |
| Apartments Low<br>Rise                 | 11.5              | 2.3344    | 0.1380  | 0.0000 | 5.7834   |
| Apartments Mid<br>Rise                 | 448.5             | 91.0415   | 5.3804  | 0.0000 | 225.5513 |
| General Office<br>Building             | 41.85             | 8.4952    | 0.5021  | 0.0000 | 21.0464  |
| High Turnover (Sit<br>Down Restaurant) |                   | 86.9613   | 5.1393  | 0.0000 | 215.4430 |
| Hotel                                  | 27.38             | 5.5579    | 0.3285  | 0.0000 | 13.7694  |
| Quality<br>Restaurant                  | 7.3               | 1.4818    | 0.0876  | 0.0000 | 3.6712   |
| Regional<br>Shopping Center            | 58.8              | 11.9359   | 0.7054  | 0.0000 | 29.5706  |
| Total                                  |                   | 207.8079  | 12.2811 | 0.0000 | 514.8354 |

Page 43 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

### 8.2 Waste by Land Use

#### Mitigated

|  | Waste<br>Disposed | Total CO2 | CH4     | N2O    | CO2e     |
|--|-------------------|-----------|---------|--------|----------|
| Land Use                               | tons              |           | МТ      | /yr    |          |
| Apartments Low<br>Rise                 | 11.5              | 2.3344    | 0.1380  | 0.0000 | 5.7834   |
| Apartments Mid<br>Rise                 | 448.5             | 91.0415   | 5.3804  | 0.0000 | 225.5513 |
| General Office<br>Building             | 41.85             | 8.4952    | 0.5021  | 0.0000 | 21.0464  |
| High Turnover (Sit<br>Down Restaurant) |                   | 86.9613   | 5.1393  | 0.0000 | 215.4430 |
| Hotel                                  | 27.38             | 5.5579    | 0.3285  | 0.0000 | 13.7694  |
| Quality<br>Restaurant                  | 7.3               | 1.4818    | 0.0876  | 0.0000 | 3.6712   |
| Regional<br>Shopping Center            | 58.8              | 11.9359   | 0.7054  | 0.0000 | 29.5706  |
| Total                                  |                   | 207.8079  | 12.2811 | 0.0000 | 514.8354 |

# 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 |
|----------------|------------------|------------|-------------|-------------|-----------|
|----------------|------------------|------------|-------------|-------------|-----------|

Page 44 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

### **Boilers**

| Equipment Type         | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|------------------------|--------|----------------|-----------------|---------------|-----------|
| User Defined Equipment |        |                |                 |               |           |
| Equipment Type         | Number |                |                 |               |           |
|                        |        |                |                 |               |           |

# 11.0 Vegetation

# Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

### **1.0 Project Characteristics**

### 1.1 Land Usage

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| General Office Building             | 45.00  | 1000sqft      | 1.03        | 45,000.00          | 0          |
| High Turnover (Sit Down Restaurant) | 36.00  | 1000sqft      | 0.83        | 36,000.00          | 0          |
| Hotel                               | 50.00  | Room          | 1.67        | 72,600.00          | 0          |
| Quality Restaurant                  | 8.00   | 1000sqft      | 0.18        | 8,000.00           | 0          |
| Apartments Low Rise                 | 25.00  | Dwelling Unit | 1.56        | 25,000.00          | 72         |
| Apartments Mid Rise                 | 975.00 | Dwelling Unit | 25.66       | 975,000.00         | 2789       |
| Regional Shopping Center            | 56.00  | 1000sqft      | 1.29        | 56,000.00          | 0          |

### **1.2 Other Project Characteristics**

| Urbanization               | Urban                     | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 33    |
|----------------------------|---------------------------|----------------------------|-------|----------------------------|-------|
| Climate Zone               | 9                         |                            |       | <b>Operational Year</b>    | 2028  |
| Utility Company            | Southern California Ediso | n                          |       |                            |       |
| CO2 Intensity<br>(Ib/MWhr) | 702.44                    | CH4 Intensity<br>(Ib/MWhr) | 0.029 | N2O Intensity<br>(Ib/MWhr) | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name      | Column Name       | Default Value | New Value |
|-----------------|-------------------|---------------|-----------|
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | NumberWood        | 1.25          | 0.00      |
| tblFireplaces   | NumberWood        | 48.75         | 0.00      |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblVehicleTrips | ST_TR             | 7.16          | 6.17      |
| tblVehicleTrips | ST_TR             | 6.39          | 3.87      |
| tblVehicleTrips | ST_TR             | 2.46          | 1.39      |
| tblVehicleTrips | ST_TR             | 158.37        | 79.82     |

| tblVehicleTrips | ST_TR              | 8.19   | 3.75  |
|-----------------|--------------------|--------|-------|
| tblVehicleTrips | ST_TR              | 94.36  | 63.99 |
| tblVehicleTrips | ST_TR              | 49.97  | 10.74 |
| tblVehicleTrips | SU_TR              | 6.07   | 6.16  |
| tblVehicleTrips | SU_TR              | 5.86   | 4.18  |
| tblVehicleTrips | SU_TR              | 1.05   | 0.69  |
| tblVehicleTrips | SU_TR              | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR              | 5.95   | 3.20  |
| tblVehicleTrips | SU_TR              | 72.16  | 57.65 |
| tblVehicleTrips | SU_TR              | 25.24  | 6.39  |
| tblVehicleTrips | WD_TR              | 6.59   | 5.83  |
| tblVehicleTrips | WD_TR              | 6.65   | 4.13  |
| tblVehicleTrips | WD_TR              | 11.03  | 6.41  |
| tblVehicleTrips | WD_TR              | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR              | 8.17   | 3.84  |
| tblVehicleTrips | WD_TR              | 89.95  | 62.64 |
| tblVehicleTrips | WD_TR              | 42.70  | 9.43  |
| tblWoodstoves   | NumberCatalytic    | 1.25   | 0.00  |
| tblWoodstoves   | NumberCatalytic    | 48.75  | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 1.25   | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 48.75  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
|                 |                    |        |       |

# 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction** 

|         | ROG      | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|---------|----------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year    |          |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/d            | day    |        |                 |
| 2021    | 4.2561   | 46.4415 | 31.4494 | 0.0636 | 18.2032          | 2.0456          | 20.2488       | 9.9670            | 1.8820           | 11.8490        | 0.0000   | 6,163.416<br>6  | 6,163.416<br>6  | 1.9475 | 0.0000 | 6,212.103<br>9  |
| 2022    | 4.5441   | 38.8811 | 40.8776 | 0.1240 | 8.8255           | 1.6361          | 10.4616       | 3.6369            | 1.5052           | 5.1421         | 0.0000   | 12,493.44<br>03 | 12,493.44<br>03 | 1.9485 | 0.0000 | 12,518.57<br>07 |
| 2023    | 4.1534   | 25.7658 | 38.7457 | 0.1206 | 7.0088           | 0.7592          | 7.7679        | 1.8799            | 0.7136           | 2.5935         | 0.0000   | 12,150.48<br>90 | 12,150.48<br>90 | 0.9589 | 0.0000 | 12,174.46<br>15 |
| 2024    | 237.0219 | 9.5478  | 14.9642 | 0.0239 | 1.2171           | 0.4694          | 1.2875        | 0.3229            | 0.4319           | 0.4621         | 0.0000   | 2,313.180<br>8  | 2,313.180<br>8  | 0.7166 | 0.0000 | 2,331.095<br>6  |
| Maximum | 237.0219 | 46.4415 | 40.8776 | 0.1240 | 18.2032          | 2.0456          | 20.2488       | 9.9670            | 1.8820           | 11.8490        | 0.0000   | 12,493.44<br>03 | 12,493.44<br>03 | 1.9485 | 0.0000 | 12,518.57<br>07 |

### 2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

|         | ROG      | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|---------|----------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year    |          |         |         |        | lb/              | /day            |               |                   |                  |                |          |                 | lb/d            | Jay    |        |                 |
| 2021    | 4.2561   | 46.4415 | 31.4494 | 0.0636 | 18.2032          | 2.0456          | 20.2488       | 9.9670            | 1.8820           | 11.8490        | 0.0000   | 6,163.416<br>6  | 6,163.416<br>6  | 1.9475 | 0.0000 | 6,212.103<br>9  |
| 2022    | 4.5441   | 38.8811 | 40.8776 | 0.1240 | 8.8255           | 1.6361          | 10.4616       | 3.6369            | 1.5052           | 5.1421         | 0.0000   | 12,493.44<br>03 | 12,493.44<br>03 | 1.9485 | 0.0000 | 12,518.57<br>07 |
| 2023    | 4.1534   | 25.7658 | 38.7457 | 0.1206 | 7.0088           | 0.7592          | 7.7679        | 1.8799            | 0.7136           | 2.5935         | 0.0000   | 12,150.48<br>90 | 12,150.48<br>90 | 0.9589 | 0.0000 | 12,174.46<br>15 |
| 2024    | 237.0219 | 9.5478  | 14.9642 | 0.0239 | 1.2171           | 0.4694          | 1.2875        | 0.3229            | 0.4319           | 0.4621         | 0.0000   | 2,313.180<br>8  | 2,313.180<br>8  | 0.7166 | 0.0000 | 2,331.095<br>5  |
| Maximum | 237.0219 | 46.4415 | 40.8776 | 0.1240 | 18.2032          | 2.0456          | 20.2488       | 9.9670            | 1.8820           | 11.8490        | 0.0000   | 12,493.44<br>03 | 12,493.44<br>03 | 1.9485 | 0.0000 | 12,518.57<br>07 |
|         | ROG      | NOx     | CO      | SO2    | Fugitive         | Exhaust         | PM10          | Fugitive          | Exhaust          | PM2.5          | Bio- CO2 | NBio-CO2        | Total CO2       | CH4    | N20    | CO2e            |

|                      | ROG  | NOx  | со   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>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 |

### 2.2 Overall Operational

### Unmitigated Operational

|          | ROG     | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/d            | day    |        |                 |
| Area     | 30.5020 | 15.0496 | 88.4430  | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Energy   | 0.7660  | 6.7462  | 4.2573   | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2  | 8,355.983<br>2  | 0.1602 | 0.1532 | 8,405.638<br>7  |
| Mobile   | 9.8489  | 45.4304 | 114.8495 | 0.4917 | 45.9592          | 0.3360          | 46.2951       | 12.2950           | 0.3119           | 12.6070        |          | 50,306.60<br>34 | 50,306.60<br>34 | 2.1807 |        | 50,361.12<br>08 |
| Total    | 41.1168 | 67.2262 | 207.5497 | 0.6278 | 45.9592          | 2.4626          | 48.4217       | 12.2950           | 2.4385           | 14.7336        | 0.0000   | 76,811.18<br>16 | 76,811.18<br>16 | 2.8282 | 0.4832 | 77,025.87<br>86 |

#### Mitigated Operational

|          | ROG     | NOx     | CO       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |        | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | day    |        |                 |
| Area     | 30.5020 | 15.0496 | 88.4430  | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Energy   | 0.7660  | 6.7462  | 4.2573   | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2  | 8,355.983<br>2  | 0.1602 | 0.1532 | 8,405.638<br>7  |
| Mobile   | 9.8489  | 45.4304 | 114.8495 | 0.4917 | 45.9592          | 0.3360          | 46.2951       | 12.2950           | 0.3119           | 12.6070        |          | 50,306.60<br>34 | 50,306.60<br>34 | 2.1807 |        | 50,361.12<br>08 |
| Total    | 41.1168 | 67.2262 | 207.5497 | 0.6278 | 45.9592          | 2.4626          | 48.4217       | 12.2950           | 2.4385           | 14.7336        | 0.0000   | 76,811.18<br>16 | 76,811.18<br>16 | 2.8282 | 0.4832 | 77,025.87<br>86 |

|                      | ROG  | NOx  | со   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>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<br>Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days<br>Week | Num Days | Phase Description |
|-----------------|-----------------------|-----------------------|------------|------------|------------------|----------|-------------------|
| 1               | Demolition            | Demolition            | 9/1/2021   | 10/12/2021 | 5                | 30       |                   |
| 2               | Site Preparation      | Site Preparation      | 10/13/2021 | 11/9/2021  | 5                | 20       |                   |
| 3               | Grading               | Grading               | 11/10/2021 | 1/11/2022  | 5                | 45       |                   |
| 4               | Building Construction | Building Construction | 1/12/2022  | 12/12/2023 | 5                | 500      |                   |
| 5               | Paving                | Paving                | 12/13/2023 | 1/30/2024  | 5                | 35       |                   |
| 6               | Architectural Coating | Architectural Coating | 1/31/2024  | 3/19/2024  | 5                | 35       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

| 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        |
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Building Construction | Cranes                    | 1      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Paving                | Pavers                    | 2      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 2      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |

Trips and VMT

| Phase Name            | Offroad Equipment<br>Count | Worker Trip<br>Number | Vendor Trip<br>Number | Hauling Trip<br>Number | Worker Trip<br>Length | Vendor Trip<br>Length | Hauling Trip<br>Length | Worker Vehicle<br>Class | Vendor<br>Vehicle Class | Hauling<br>Vehicle Class |
|-----------------------|----------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Demolition            | 6                          | 15.00                 | 0.00                  | 458.00                 | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Site Preparation      | 7                          | 18.00                 | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Grading               | 8                          | 20.00                 | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Building Construction | 9                          | 801.00                | 143.00                | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Paving                | 6                          | 15.00                 | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Architectural Coating | 1                          | 160.00                | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |

### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

#### Unmitigated Construction On-Site

|               | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 3.3074           | 0.0000          | 3.3074        | 0.5008            | 0.0000           | 0.5008         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.1651 | 31.4407 | 21.5650 | 0.0388 |                  | 1.5513          | 1.5513        |                   | 1.4411           | 1.4411         |          | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |
| Total         | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 3.3074           | 1.5513          | 4.8588        | 0.5008            | 1.4411           | 1.9419         |          | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |

### 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|-----|----------------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |                | lb/c           | lay             |     |                |
| Hauling  | 0.1273 | 4.0952 | 0.9602 | 0.0119          | 0.2669           | 0.0126          | 0.2795        | 0.0732            | 0.0120           | 0.0852         |          | 1,292.241<br>3 | 1,292.241<br>3 | 0.0877          |     | 1,294.433<br>7 |
| 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         |
| Worker   | 0.0487 | 0.0313 | 0.4282 | 1.1800e-<br>003 | 0.1141           | 9.5000e-<br>004 | 0.1151        | 0.0303            | 8.8000e-<br>004  | 0.0311         |          | 117.2799       | 117.2799       | 3.5200e-<br>003 |     | 117.3678       |
| Total    | 0.1760 | 4.1265 | 1.3884 | 0.0131          | 0.3810           | 0.0135          | 0.3946        | 0.1034            | 0.0129           | 0.1163         |          | 1,409.521<br>2 | 1,409.521<br>2 | 0.0912          |     | 1,411.801<br>5 |

### Mitigated Construction On-Site

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 3.3074           | 0.0000          | 3.3074        | 0.5008            | 0.0000           | 0.5008         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.1651 | 31.4407 | 21.5650 | 0.0388 |                  | 1.5513          | 1.5513        |                   | 1.4411           | 1.4411         | 0.0000   | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |
| Total         | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 3.3074           | 1.5513          | 4.8588        | 0.5008            | 1.4411           | 1.9419         | 0.0000   | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |

### 3.2 Demolition - 2021

### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|-----|----------------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |                | lb/d           | day             |     |                |
| Hauling  | 0.1273 | 4.0952 | 0.9602 | 0.0119          | 0.2669           | 0.0126          | 0.2795        | 0.0732            | 0.0120           | 0.0852         |          | 1,292.241<br>3 | 1,292.241<br>3 | 0.0877          |     | 1,294.433<br>7 |
| 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         |
| Worker   | 0.0487 | 0.0313 | 0.4282 | 1.1800e-<br>003 | 0.1141           | 9.5000e-<br>004 | 0.1151        | 0.0303            | 8.8000e-<br>004  | 0.0311         |          | 117.2799       | 117.2799       | 3.5200e-<br>003 |     | 117.3678       |
| Total    | 0.1760 | 4.1265 | 1.3884 | 0.0131          | 0.3810           | 0.0135          | 0.3946        | 0.1034            | 0.0129           | 0.1163         |          | 1,409.521<br>2 | 1,409.521<br>2 | 0.0912          |     | 1,411.801<br>5 |

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 18.0663          | 0.0000          | 18.0663       | 9.9307            | 0.0000           | 9.9307         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.8882 | 40.4971 | 21.1543 | 0.0380 |                  | 2.0445          | 2.0445        |                   | 1.8809           | 1.8809         |          | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |
| Total         | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663          | 2.0445          | 20.1107       | 9.9307            | 1.8809           | 11.8116        |          | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |

### 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0584 | 0.0375 | 0.5139 | 1.4100e-<br>003 | 0.1369           | 1.1400e-<br>003 | 0.1381        | 0.0363            | 1.0500e-<br>003  | 0.0374         |          | 140.7359  | 140.7359  | 4.2200e-<br>003 |     | 140.8414 |
| Total    | 0.0584 | 0.0375 | 0.5139 | 1.4100e-<br>003 | 0.1369           | 1.1400e-<br>003 | 0.1381        | 0.0363            | 1.0500e-<br>003  | 0.0374         |          | 140.7359  | 140.7359  | 4.2200e-<br>003 |     | 140.8414 |

### Mitigated Construction On-Site

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 18.0663          | 0.0000          | 18.0663       | 9.9307            | 0.0000           | 9.9307         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.8882 | 40.4971 | 21.1543 | 0.0380 |                  | 2.0445          | 2.0445        |                   | 1.8809           | 1.8809         | 0.0000   | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |
| Total         | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663          | 2.0445          | 20.1107       | 9.9307            | 1.8809           | 11.8116        | 0.0000   | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |

### 3.3 Site Preparation - 2021

### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0584 | 0.0375 | 0.5139 | 1.4100e-<br>003 | 0.1369           | 1.1400e-<br>003 | 0.1381        | 0.0363            | 1.0500e-<br>003  | 0.0374         |          | 140.7359  | 140.7359  | 4.2200e-<br>003 |     | 140.8414 |
| Total    | 0.0584 | 0.0375 | 0.5139 | 1.4100e-<br>003 | 0.1369           | 1.1400e-<br>003 | 0.1381        | 0.0363            | 1.0500e-<br>003  | 0.0374         |          | 140.7359  | 140.7359  | 4.2200e-<br>003 |     | 140.8414 |

3.4 Grading - 2021

Unmitigated Construction On-Site

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/d           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 4.1912 | 46.3998 | 30.8785 | 0.0620 |                  | 1.9853          | 1.9853        |                   | 1.8265           | 1.8265         |          | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |
| Total         | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 8.6733           | 1.9853          | 10.6587       | 3.5965            | 1.8265           | 5.4230         |          | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |

# 3.4 Grading - 2021

# Unmitigated Construction Off-Site

|          | ROG    | NOx    | со     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0649 | 0.0417 | 0.5710 | 1.5700e-<br>003 | 0.1521           | 1.2700e-<br>003 | 0.1534        | 0.0404            | 1.1700e-<br>003  | 0.0415         |          | 156.3732  | 156.3732  | 4.6900e-<br>003 |     | 156.4904 |
| Total    | 0.0649 | 0.0417 | 0.5710 | 1.5700e-<br>003 | 0.1521           | 1.2700e-<br>003 | 0.1534        | 0.0404            | 1.1700e-<br>003  | 0.0415         |          | 156.3732  | 156.3732  | 4.6900e-<br>003 |     | 156.4904 |

### Mitigated Construction On-Site

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 4.1912 | 46.3998 | 30.8785 | 0.0620 |                  | 1.9853          | 1.9853        |                   | 1.8265           | 1.8265         | 0.0000   | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |
| Total         | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 8.6733           | 1.9853          | 10.6587       | 3.5965            | 1.8265           | 5.4230         | 0.0000   | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |

# 3.4 Grading - 2021

### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0649 | 0.0417 | 0.5710 | 1.5700e-<br>003 | 0.1521           | 1.2700e-<br>003 | 0.1534        | 0.0404            | 1.1700e-<br>003  | 0.0415         |          | 156.3732  | 156.3732  | 4.6900e-<br>003 |     | 156.4904 |
| Total    | 0.0649 | 0.0417 | 0.5710 | 1.5700e-<br>003 | 0.1521           | 1.2700e-<br>003 | 0.1534        | 0.0404            | 1.1700e-<br>003  | 0.0415         |          | 156.3732  | 156.3732  | 4.6900e-<br>003 |     | 156.4904 |

3.4 Grading - 2022

Unmitigated Construction On-Site

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.6248 | 38.8435 | 29.0415 | 0.0621 |                  | 1.6349          | 1.6349        |                   | 1.5041           | 1.5041         |          | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |
| Total         | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 8.6733           | 1.6349          | 10.3082       | 3.5965            | 1.5041           | 5.1006         |          | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |

# 3.4 Grading - 2022

# Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0607 | 0.0376 | 0.5263 | 1.5100e-<br>003 | 0.1521           | 1.2300e-<br>003 | 0.1534        | 0.0404            | 1.1300e-<br>003  | 0.0415         |          | 150.8754  | 150.8754  | 4.2400e-<br>003 |     | 150.9813 |
| Total    | 0.0607 | 0.0376 | 0.5263 | 1.5100e-<br>003 | 0.1521           | 1.2300e-<br>003 | 0.1534        | 0.0404            | 1.1300e-<br>003  | 0.0415         |          | 150.8754  | 150.8754  | 4.2400e-<br>003 |     | 150.9813 |

### Mitigated Construction On-Site

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.6248 | 38.8435 | 29.0415 | 0.0621 |                  | 1.6349          | 1.6349        |                   | 1.5041           | 1.5041         | 0.0000   | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |
| Total         | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 8.6733           | 1.6349          | 10.3082       | 3.5965            | 1.5041           | 5.1006         | 0.0000   | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |

# 3.4 Grading - 2022

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             |                 |               |                   | lb/d             | day            |          |           |           |                 |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0607 | 0.0376 | 0.5263 | 1.5100e-<br>003 | 0.1521           | 1.2300e-<br>003 | 0.1534        | 0.0404            | 1.1300e-<br>003  | 0.0415         |          | 150.8754  | 150.8754  | 4.2400e-<br>003 |     | 150.9813 |
| Total    | 0.0607 | 0.0376 | 0.5263 | 1.5100e-<br>003 | 0.1521           | 1.2300e-<br>003 | 0.1534        | 0.0404            | 1.1300e-<br>003  | 0.0415         |          | 150.8754  | 150.8754  | 4.2400e-<br>003 |     | 150.9813 |

3.5 Building Construction - 2022

Unmitigated Construction On-Site

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/c             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         |          | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |
| Total    | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         |          | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |

### 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             |                 |               |                   | lb/d             | lay            |          |                |                |        |     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.4079 | 13.2032 | 3.4341  | 0.0364 | 0.9155           | 0.0248          | 0.9404        | 0.2636            | 0.0237           | 0.2873         |          | 3,896.548<br>2 | 3,896.548<br>2 | 0.2236 |     | 3,902.138<br>4 |
| Worker   | 2.4299 | 1.5074  | 21.0801 | 0.0607 | 6.0932           | 0.0493          | 6.1425        | 1.6163            | 0.0454           | 1.6617         |          | 6,042.558<br>5 | 6,042.558<br>5 | 0.1697 |     | 6,046.800<br>0 |
| Total    | 2.8378 | 14.7106 | 24.5142 | 0.0971 | 7.0087           | 0.0741          | 7.0828        | 1.8799            | 0.0691           | 1.9490         |          | 9,939.106<br>7 | 9,939.106<br>7 | 0.3933 |     | 9,948.938<br>4 |

### Mitigated Construction On-Site

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         | 0.0000   | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |
| Total    | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         | 0.0000   | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |

### 3.5 Building Construction - 2022

### Mitigated Construction Off-Site

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             |                 |               |                   | lb/c             | lay            |          |                |                |        |     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.4079 | 13.2032 | 3.4341  | 0.0364 | 0.9155           | 0.0248          | 0.9404        | 0.2636            | 0.0237           | 0.2873         |          | 3,896.548<br>2 | 3,896.548<br>2 | 0.2236 |     | 3,902.138<br>4 |
| Worker   | 2.4299 | 1.5074  | 21.0801 | 0.0607 | 6.0932           | 0.0493          | 6.1425        | 1.6163            | 0.0454           | 1.6617         |          | 6,042.558<br>5 | 6,042.558<br>5 | 0.1697 |     | 6,046.800<br>0 |
| Total    | 2.8378 | 14.7106 | 24.5142 | 0.0971 | 7.0087           | 0.0741          | 7.0828        | 1.8799            | 0.0691           | 1.9490         |          | 9,939.106<br>7 | 9,939.106<br>7 | 0.3933 |     | 9,948.938<br>4 |

3.5 Building Construction - 2023

Unmitigated Construction On-Site

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
|          | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        | 1<br>1<br>1       | 0.6584           | 0.6584         |          | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |
| Total    | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        |                   | 0.6584           | 0.6584         |          | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |

### 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             |                 |               |                   | lb/d             | lay            |          |                |                |        |     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.3027 | 10.0181 | 3.1014  | 0.0352 | 0.9156           | 0.0116          | 0.9271        | 0.2636            | 0.0111           | 0.2747         |          | 3,773.876<br>2 | 3,773.876<br>2 | 0.1982 |     | 3,778.830<br>0 |
| Worker   | 2.2780 | 1.3628  | 19.4002 | 0.0584 | 6.0932           | 0.0479          | 6.1411        | 1.6163            | 0.0441           | 1.6604         |          | 5,821.402<br>8 | 5,821.402<br>8 | 0.1529 |     | 5,825.225<br>4 |
| Total    | 2.5807 | 11.3809 | 22.5017 | 0.0936 | 7.0088           | 0.0595          | 7.0682        | 1.8799            | 0.0552           | 1.9350         |          | 9,595.279<br>0 | 9,595.279<br>0 | 0.3511 |     | 9,604.055<br>4 |

### Mitigated Construction On-Site

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        | -<br>             | 0.6584           | 0.6584         | 0.0000   | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |
| Total    | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        |                   | 0.6584           | 0.6584         | 0.0000   | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |

### 3.5 Building Construction - 2023

### Mitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.3027 | 10.0181 | 3.1014  | 0.0352 | 0.9156           | 0.0116          | 0.9271        | 0.2636            | 0.0111           | 0.2747         |          | 3,773.876<br>2 | 3,773.876<br>2 | 0.1982 |     | 3,778.830<br>0 |
| Worker   | 2.2780 | 1.3628  | 19.4002 | 0.0584 | 6.0932           | 0.0479          | 6.1411        | 1.6163            | 0.0441           | 1.6604         |          | 5,821.402<br>8 | 5,821.402<br>8 | 0.1529 |     | 5,825.225<br>4 |
| Total    | 2.5807 | 11.3809 | 22.5017 | 0.0936 | 7.0088           | 0.0595          | 7.0682        | 1.8799            | 0.0552           | 1.9350         |          | 9,595.279<br>0 | 9,595.279<br>0 | 0.3511 |     | 9,604.055<br>4 |

3.6 Paving - 2023

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         |          | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |
| Paving   | 0.0000 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         |          | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |

# 3.6 Paving - 2023

### Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0427 | 0.0255 | 0.3633 | 1.0900e-<br>003 | 0.1141           | 9.0000e-<br>004 | 0.1150        | 0.0303            | 8.3000e-<br>004  | 0.0311         |          | 109.0150  | 109.0150  | 2.8600e-<br>003 |     | 109.0866 |
| Total    | 0.0427 | 0.0255 | 0.3633 | 1.0900e-<br>003 | 0.1141           | 9.0000e-<br>004 | 0.1150        | 0.0303            | 8.3000e-<br>004  | 0.0311         |          | 109.0150  | 109.0150  | 2.8600e-<br>003 |     | 109.0866 |

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         | 0.0000   | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |
| Paving   | 0.0000 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         | 0.0000   | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |

# 3.6 Paving - 2023

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0427 | 0.0255 | 0.3633 | 1.0900e-<br>003 | 0.1141           | 9.0000e-<br>004 | 0.1150        | 0.0303            | 8.3000e-<br>004  | 0.0311         |          | 109.0150  | 109.0150  | 2.8600e-<br>003 |     | 109.0866 |
| Total    | 0.0427 | 0.0255 | 0.3633 | 1.0900e-<br>003 | 0.1141           | 9.0000e-<br>004 | 0.1150        | 0.0303            | 8.3000e-<br>004  | 0.0311         |          | 109.0150  | 109.0150  | 2.8600e-<br>003 |     | 109.0866 |

3.6 Paving - 2024

|          | ROG    | NOx    | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         |          | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |
| Paving   | 0.0000 |        |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         |          | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |

# 3.6 Paving - 2024

### Unmitigated Construction Off-Site

|          | ROG    | NOx    | со     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0403 | 0.0233 | 0.3384 | 1.0600e-<br>003 | 0.1141           | 8.8000e-<br>004 | 0.1150        | 0.0303            | 8.1000e-<br>004  | 0.0311         |          | 105.6336  | 105.6336  | 2.6300e-<br>003 |     | 105.6992 |
| Total    | 0.0403 | 0.0233 | 0.3384 | 1.0600e-<br>003 | 0.1141           | 8.8000e-<br>004 | 0.1150        | 0.0303            | 8.1000e-<br>004  | 0.0311         |          | 105.6336  | 105.6336  | 2.6300e-<br>003 |     | 105.6992 |

|          | ROG    | NOx    | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         | 0.0000   | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |
| Paving   | 0.0000 |        |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         | 0.0000   | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |

# 3.6 Paving - 2024

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0403 | 0.0233 | 0.3384 | 1.0600e-<br>003 | 0.1141           | 8.8000e-<br>004 | 0.1150        | 0.0303            | 8.1000e-<br>004  | 0.0311         |          | 105.6336  | 105.6336  | 2.6300e-<br>003 |     | 105.6992 |
| Total    | 0.0403 | 0.0233 | 0.3384 | 1.0600e-<br>003 | 0.1141           | 8.8000e-<br>004 | 0.1150        | 0.0303            | 8.1000e-<br>004  | 0.0311         |          | 105.6336  | 105.6336  | 2.6300e-<br>003 |     | 105.6992 |

3.7 Architectural Coating - 2024

|                 | ROG      | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|-----------------|----------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category        |          |        |        |                 | lb/d             | day             |               |                   |                  |                |          |           | lb/c      | lay    |     |          |
| Archit. Coating | 236.4115 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.1808   | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         |          | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |
| Total           | 236.5923 | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         |          | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |

### 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

|          | ROG    | NOx    | со     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |        |        | lb/              | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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         |
| Worker   | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171           | 9.4300e-<br>003 | 1.2266        | 0.3229            | 8.6800e-<br>003  | 0.3315         |          | 1,126.758<br>3 | 1,126.758<br>3 | 0.0280 |     | 1,127.458<br>3 |
| Total    | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171           | 9.4300e-<br>003 | 1.2266        | 0.3229            | 8.6800e-<br>003  | 0.3315         |          | 1,126.758<br>3 | 1,126.758<br>3 | 0.0280 |     | 1,127.458<br>3 |

|                 | ROG      | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|-----------------|----------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category        |          |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | day    |     |          |
| Archit. Coating | 236.4115 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.1808   | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         | 0.0000   | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |
| Total           | 236.5923 | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         | 0.0000   | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |

### 3.7 Architectural Coating - 2024

### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |        |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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         |
| Worker   | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171           | 9.4300e-<br>003 | 1.2266        | 0.3229            | 8.6800e-<br>003  | 0.3315         |          | 1,126.758<br>3 | 1,126.758<br>3 | 0.0280 |     | 1,127.458<br>3 |
| Total    | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171           | 9.4300e-<br>003 | 1.2266        | 0.3229            | 8.6800e-<br>003  | 0.3315         |          | 1,126.758<br>3 | 1,126.758<br>3 | 0.0280 |     | 1,127.458<br>3 |

## 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

|             | ROG    | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|-------------|--------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category    |        |         |          |        | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |     |                 |
| Mitigated   | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592          | 0.3360          | 46.2951       | 12.2950           | 0.3119           | 12.6070        |          | 50,306.60<br>34 | 50,306.60<br>34 | 2.1807 |     | 50,361.12<br>08 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592          | 0.3360          | 46.2951       | 12.2950           | 0.3119           | 12.6070        |          | 50,306.60<br>34 | 50,306.60<br>34 | 2.1807 |     | 50,361.12<br>08 |

### 4.2 Trip Summary Information

|                                     | Ave      | rage Daily Trip Ra | ite      | Unmitigated | Mitigated  |
|-------------------------------------|----------|--------------------|----------|-------------|------------|
| Land Use                            | Weekday  | Saturday           | Sunday   | Annual VMT  | Annual VMT |
| Apartments Low Rise                 | 145.75   | 154.25             | 154.00   | 506,227     | 506,227    |
| Apartments Mid Rise                 | 4,026.75 | 3,773.25           | 4075.50  | 13,660,065  | 13,660,065 |
| General Office Building             | 288.45   | 62.55              | 31.05    | 706,812     | 706,812    |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52           | 2817.72  | 3,413,937   | 3,413,937  |
| Hotel                               | 192.00   | 187.50             | 160.00   | 445,703     | 445,703    |
| Quality Restaurant                  | 501.12   | 511.92             | 461.20   | 707,488     | 707,488    |
| Regional Shopping Center            | 528.08   | 601.44             | 357.84   | 1,112,221   | 1,112,221  |
| Total                               | 8,050.95 | 8,164.43           | 8,057.31 | 20,552,452  | 20,552,452 |

4.3 Trip Type Information

|                          |            | Miles      |             |            | Trip %     |             |         | Trip Purpos | e %     |
|--------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| 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 Low Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| Apartments Mid Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| General Office Building  | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 77      | 19          | 4       |
| High Turnover (Sit Down  | 16.60      | 8.40       | 6.90        | 8.50       | 72.50      | 19.00       | 37      | 20          | 43      |
| Hotel                    | 16.60      | 8.40       | 6.90        | 19.40      | 61.60      | 19.00       | 58      | 38          | 4       |
| Quality Restaurant       | 16.60      | 8.40       | 6.90        | 12.00      | 69.00      | 19.00       | 38      | 18          | 44      |
| Regional Shopping Center | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54      | 35          | 11      |

#### 4.4 Fleet Mix

| Land Use                               | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Low Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building                | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down<br>Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel                                  | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant                     | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center               | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

# 5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                           | ROG    | NOx    | СО     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------------------------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category                  |        |        |        |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |        |                |
| NaturalGas<br>Mitigated   | 0.7660 | 6.7462 | 4.2573 | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602 | 0.1532 | 8,405.638<br>7 |
| NaturalGas<br>Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602 | 0.1532 | 8,405.638<br>7 |

### 5.2 Energy by Land Use - NaturalGas

### <u>Unmitigated</u>

|  | NaturalGa<br>s Use | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |        |        |                 | lb/e             | day             |                 |                   |                  |                 |          |                | lb/c           | day             |                 |                |
| Apartments Low<br>Rise                 | 1119.16            | 0.0121          | 0.1031 | 0.0439 | 6.6000e-<br>004 |                  | 8.3400e-<br>003 | 8.3400e-<br>003 |                   | 8.3400e-<br>003  | 8.3400e-<br>003 |          | 131.6662       | 131.6662       | 2.5200e-<br>003 | 2.4100e-<br>003 | 132.4486       |
| Apartments Mid<br>Rise                 | 35784.3            | 0.3859          | 3.2978 | 1.4033 | 0.0211          |                  | 0.2666          | 0.2666          |                   | 0.2666           | 0.2666          |          | 4,209.916<br>4 | 4,209.916<br>4 | 0.0807          | 0.0772          | 4,234.933<br>9 |
| General Office<br>Building             | 1283.42            | 0.0138          | 0.1258 | 0.1057 | 7.5000e-<br>004 |                  | 9.5600e-<br>003 | 9.5600e-<br>003 |                   | 9.5600e-<br>003  | 9.5600e-<br>003 |          | 150.9911       | 150.9911       | 2.8900e-<br>003 | 2.7700e-<br>003 | 151.8884       |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.2455          | 2.2314 | 1.8743 | 0.0134          |                  | 0.1696          | 0.1696          |                   | 0.1696           | 0.1696          |          | 2,677.634<br>2 | 2,677.634<br>2 | 0.0513          | 0.0491          | 2,693.546<br>0 |
| Hotel                                  | 4769.72            | 0.0514          | 0.4676 | 0.3928 | 2.8100e-<br>003 |                  | 0.0355          | 0.0355          | ,                 | 0.0355           | 0.0355          |          | 561.1436       | 561.1436       | 0.0108          | 0.0103          | 564.4782       |
| Quality<br>Restaurant                  | 5057.75            | 0.0545          | 0.4959 | 0.4165 | 2.9800e-<br>003 |                  | 0.0377          | 0.0377          | ,                 | 0.0377           | 0.0377          |          | 595.0298       | 595.0298       | 0.0114          | 0.0109          | 598.5658       |
| Regional<br>Shopping Center            |                    | 2.7100e-<br>003 | 0.0247 | 0.0207 | 1.5000e-<br>004 |                  | 1.8700e-<br>003 | 1.8700e-<br>003 |                   | 1.8700e-<br>003  | 1.8700e-<br>003 |          | 29.6019        | 29.6019        | 5.7000e-<br>004 | 5.4000e-<br>004 | 29.7778        |
| Total                                  |                    | 0.7660          | 6.7463 | 4.2573 | 0.0418          |                  | 0.5292          | 0.5292          |                   | 0.5292           | 0.5292          |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602          | 0.1532          | 8,405.638<br>7 |

### 5.2 Energy by Land Use - NaturalGas

### Mitigated

|  | NaturalGa<br>s Use | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |        |        |                 | lb/e             | day             |                 |                   |                  |                 |          |                | lb/d           | day             |                 |                |
| Apartments Low<br>Rise                 | 1.11916            | 0.0121          | 0.1031 | 0.0439 | 6.6000e-<br>004 |                  | 8.3400e-<br>003 | 8.3400e-<br>003 |                   | 8.3400e-<br>003  | 8.3400e-<br>003 |          | 131.6662       | 131.6662       | 2.5200e-<br>003 | 2.4100e-<br>003 | 132.4486       |
| Apartments Mid<br>Rise                 | 35.7843            | 0.3859          | 3.2978 | 1.4033 | 0.0211          |                  | 0.2666          | 0.2666          |                   | 0.2666           | 0.2666          |          | 4,209.916<br>4 | 4,209.916<br>4 | 0.0807          | 0.0772          | 4,234.933<br>9 |
| General Office<br>Building             | 1.28342            | 0.0138          | 0.1258 | 0.1057 | 7.5000e-<br>004 |                  | 9.5600e-<br>003 | 9.5600e-<br>003 |                   | 9.5600e-<br>003  | 9.5600e-<br>003 |          | 150.9911       | 150.9911       | 2.8900e-<br>003 | 2.7700e-<br>003 | 151.8884       |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.2455          | 2.2314 | 1.8743 | 0.0134          |                  | 0.1696          | 0.1696          |                   | 0.1696           | 0.1696          |          | 2,677.634<br>2 | 2,677.634<br>2 | 0.0513          | 0.0491          | 2,693.546<br>0 |
| Hotel                                  | 4.76972            | 0.0514          | 0.4676 | 0.3928 | 2.8100e-<br>003 |                  | 0.0355          | 0.0355          |                   | 0.0355           | 0.0355          |          | 561.1436       | 561.1436       | 0.0108          | 0.0103          | 564.4782       |
| Quality<br>Restaurant                  | 5.05775            | 0.0545          | 0.4959 | 0.4165 | 2.9800e-<br>003 |                  | 0.0377          | 0.0377          | ,                 | 0.0377           | 0.0377          |          | 595.0298       | 595.0298       | 0.0114          | 0.0109          | 598.5658       |
| Regional<br>Shopping Center            |                    | 2.7100e-<br>003 | 0.0247 | 0.0207 | 1.5000e-<br>004 |                  | 1.8700e-<br>003 | 1.8700e-<br>003 | ,                 | 1.8700e-<br>003  | 1.8700e-<br>003 |          | 29.6019        | 29.6019        | 5.7000e-<br>004 | 5.4000e-<br>004 | 29.7778        |
| Total                                  |                    | 0.7660          | 6.7463 | 4.2573 | 0.0418          |                  | 0.5292          | 0.5292          |                   | 0.5292           | 0.5292          |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602          | 0.1532          | 8,405.638<br>7 |

# 6.0 Area Detail

6.1 Mitigation Measures Area

|             | ROG     | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|-------------|---------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category    |         |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/d            | lay    |        |                 |
| Mitigated   | 30.5020 | 15.0496 | 88.4430 | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

# 6.2 Area by SubCategory

### <u>Unmitigated</u>

|                          | ROG     | NOx     | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|--------------------------|---------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| SubCategory              |         |         |         |                 | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Architectural<br>Coating | 2.2670  |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Consumer<br>Products     | 24.1085 |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Hearth                   | 1.6500  | 14.1000 | 6.0000  | 0.0900          |                  | 1.1400          | 1.1400        |                   | 1.1400           | 1.1400         | 0.0000   | 18,000.00<br>00 | 18,000.00<br>00 | 0.3450 | 0.3300 | 18,106.96<br>50 |
| Landscaping              | 2.4766  | 0.9496  | 82.4430 | 4.3600e-<br>003 |                  | 0.4574          | 0.4574        |                   | 0.4574           | 0.4574         |          | 148.5950        | 148.5950        | 0.1424 |        | 152.1542        |
| Total                    | 30.5020 | 15.0496 | 88.4430 | 0.0944          |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

### 6.2 Area by SubCategory

#### **Mitigated**

|                          | ROG     | NOx     | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|--------------------------|---------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| SubCategory              |         |         |         |                 | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | day    |        |                 |
| Architectural<br>Coating | 2.2670  |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Consumer<br>Products     | 24.1085 |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Hearth                   | 1.6500  | 14.1000 | 6.0000  | 0.0900          |                  | 1.1400          | 1.1400        |                   | 1.1400           | 1.1400         | 0.0000   | 18,000.00<br>00 | 18,000.00<br>00 | 0.3450 | 0.3300 | 18,106.96<br>50 |
| Landscaping              | 2.4766  | 0.9496  | 82.4430 | 4.3600e-<br>003 |                  | 0.4574          | 0.4574        |                   | 0.4574           | 0.4574         |          | 148.5950        | 148.5950        | 0.1424 |        | 152.1542        |
| Total                    | 30.5020 | 15.0496 | 88.4430 | 0.0944          |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

# 7.0 Water Detail

### 7.1 Mitigation Measures Water

### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

### 9.0 Operational Offroad

# **10.0 Stationary Equipment**

#### Fire Pumps and Emergency Generators

| Equipment Type         | Number | Hours/Day      | Hours/Year      | Horse Power   | Load Factor | Fuel Type |
|------------------------|--------|----------------|-----------------|---------------|-------------|-----------|
| <u>Boilers</u>         |        |                |                 |               |             |           |
| Equipment Type         | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type   |           |
| User Defined Equipment |        |                |                 |               |             |           |
| Equipment Type         | Number |                |                 |               |             |           |

# Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

### **1.0 Project Characteristics**

### 1.1 Land Usage

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| General Office Building             | 45.00  | 1000sqft      | 1.03        | 45,000.00          | 0          |
| High Turnover (Sit Down Restaurant) | 36.00  | 1000sqft      | 0.83        | 36,000.00          | 0          |
| Hotel                               | 50.00  | Room          | 1.67        | 72,600.00          | 0          |
| Quality Restaurant                  | 8.00   | 1000sqft      | 0.18        | 8,000.00           | 0          |
| Apartments Low Rise                 | 25.00  | Dwelling Unit | 1.56        | 25,000.00          | 72         |
| Apartments Mid Rise                 | 975.00 | Dwelling Unit | 25.66       | 975,000.00         | 2789       |
| Regional Shopping Center            | 56.00  | 1000sqft      | 1.29        | 56,000.00          | 0          |

# **1.2 Other Project Characteristics**

| Urbanization               | Urban                     | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 33    |
|----------------------------|---------------------------|----------------------------|-------|----------------------------|-------|
| Climate Zone               | 9                         |                            |       | <b>Operational Year</b>    | 2028  |
| Utility Company            | Southern California Ediso | n                          |       |                            |       |
| CO2 Intensity<br>(Ib/MWhr) | 702.44                    | CH4 Intensity<br>(Ib/MWhr) | 0.029 | N2O Intensity<br>(Ib/MWhr) | 0.006 |

### **1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name      | Column Name       | Default Value | New Value |
|-----------------|-------------------|---------------|-----------|
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | FireplaceWoodMass | 1,019.20      | 0.00      |
| tblFireplaces   | NumberWood        | 1.25          | 0.00      |
| tblFireplaces   | NumberWood        | 48.75         | 0.00      |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblTripsAndVMT  | WorkerTripLength  | 14.70         | 10.00     |
| tblVehicleTrips | ST_TR             | 7.16          | 6.17      |
| tblVehicleTrips | ST_TR             | 6.39          | 3.87      |
| tblVehicleTrips | ST_TR             | 2.46          | 1.39      |
| tblVehicleTrips | ST_TR             | 158.37        | 79.82     |

| Village South Specific Plan | (Proposed) | ) - Los Angeles-South | Coast County, Winter |
|-----------------------------|------------|-----------------------|----------------------|
|                             |            |                       |                      |

| tblVehicleTrips | ST_TR              | 8.19   | 3.75  |
|-----------------|--------------------|--------|-------|
| tblVehicleTrips | ST_TR              | 94.36  | 63.99 |
| tblVehicleTrips | ST_TR              | 49.97  | 10.74 |
| tblVehicleTrips | SU_TR              | 6.07   | 6.16  |
| tblVehicleTrips | SU_TR              | 5.86   | 4.18  |
| tblVehicleTrips | SU_TR              | 1.05   | 0.69  |
| tblVehicleTrips | SU_TR              | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR              | 5.95   | 3.20  |
| tblVehicleTrips | SU_TR              | 72.16  | 57.65 |
| tblVehicleTrips | SU_TR              | 25.24  | 6.39  |
| tblVehicleTrips | WD_TR              | 6.59   | 5.83  |
| tblVehicleTrips | WD_TR              | 6.65   | 4.13  |
| tblVehicleTrips | WD_TR              | 11.03  | 6.41  |
| tblVehicleTrips | WD_TR              | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR              | 8.17   | 3.84  |
| tblVehicleTrips | WD_TR              | 89.95  | 62.64 |
| tblVehicleTrips | WD_TR              | 42.70  | 9.43  |
| tblWoodstoves   | NumberCatalytic    | 1.25   | 0.00  |
| tblWoodstoves   | NumberCatalytic    | 48.75  | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 1.25   | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 48.75  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |
|                 |                    |        |       |

# 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction** 

|         | ROG      | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|---------|----------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year    |          |         |         |        | lb/e             | day             |               |                   |                  |                |          |                 | lb/d            | lay    |        |                 |
| 2021    | 4.2621   | 46.4460 | 31.4068 | 0.0635 | 18.2032          | 2.0456          | 20.2488       | 9.9670            | 1.8820           | 11.8490        | 0.0000   | 6,154.337<br>7  | 6,154.337<br>7  | 1.9472 | 0.0000 | 6,203.018<br>6  |
| 2022    | 4.7966   | 38.8851 | 39.6338 | 0.1195 | 8.8255           | 1.6361          | 10.4616       | 3.6369            | 1.5052           | 5.1421         | 0.0000   | 12,035.34<br>40 | 12,035.34<br>40 | 1.9482 | 0.0000 | 12,060.60<br>13 |
| 2023    | 4.3939   | 25.8648 | 37.5031 | 0.1162 | 7.0088           | 0.7598          | 7.7685        | 1.8799            | 0.7142           | 2.5940         | 0.0000   | 11,710.40<br>80 | 11,710.40<br>80 | 0.9617 | 0.0000 | 11,734.44<br>97 |
| 2024    | 237.0656 | 9.5503  | 14.9372 | 0.0238 | 1.2171           | 0.4694          | 1.2875        | 0.3229            | 0.4319           | 0.4621         | 0.0000   | 2,307.051<br>7  | 2,307.051<br>7  | 0.7164 | 0.0000 | 2,324.962<br>7  |
| Maximum | 237.0656 | 46.4460 | 39.6338 | 0.1195 | 18.2032          | 2.0456          | 20.2488       | 9.9670            | 1.8820           | 11.8490        | 0.0000   | 12,035.34<br>40 | 12,035.34<br>40 | 1.9482 | 0.0000 | 12,060.60<br>13 |

### 2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

|         | ROG      | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|---------|----------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year    |          |         |         |        | lb/              | ′day            | •             |                   |                  |                |          |                 | lb/o            | day    |        |                 |
| 2021    | 4.2621   | 46.4460 | 31.4068 | 0.0635 | 18.2032          | 2.0456          | 20.2488       | 9.9670            | 1.8820           | 11.8490        | 0.0000   | 6,154.337<br>7  | 6,154.337<br>7  | 1.9472 | 0.0000 | 6,203.018<br>6  |
| 2022    | 4.7966   | 38.8851 | 39.6338 | 0.1195 | 8.8255           | 1.6361          | 10.4616       | 3.6369            | 1.5052           | 5.1421         | 0.0000   | 12,035.34<br>40 | 12,035.34<br>40 | 1.9482 | 0.0000 | 12,060.60<br>13 |
| 2023    | 4.3939   | 25.8648 | 37.5031 | 0.1162 | 7.0088           | 0.7598          | 7.7685        | 1.8799            | 0.7142           | 2.5940         | 0.0000   | 11,710.40<br>80 | 11,710.40<br>80 | 0.9617 | 0.0000 | 11,734.44<br>97 |
| 2024    | 237.0656 | 9.5503  | 14.9372 | 0.0238 | 1.2171           | 0.4694          | 1.2875        | 0.3229            | 0.4319           | 0.4621         | 0.0000   | 2,307.051<br>7  | 2,307.051<br>7  | 0.7164 | 0.0000 | 2,324.962<br>7  |
| Maximum | 237.0656 | 46.4460 | 39.6338 | 0.1195 | 18.2032          | 2.0456          | 20.2488       | 9.9670            | 1.8820           | 11.8490        | 0.0000   | 12,035.34<br>40 | 12,035.34<br>40 | 1.9482 | 0.0000 | 12,060.60<br>13 |
|         | ROG      | NOx     | CO      | SO2    | Fugitive         | Exhaust         | PM10<br>Total | Fugitive          | Exhaust          | PM2.5          | Bio- CO2 | NBio-CO2        | Total CO2       | CH4    | N20    | CO2e            |

|                      | ROG  | NOx  | со   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>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 |

# 2.2 Overall Operational

### Unmitigated Operational

|          | ROG     | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |        | lb/              | day             |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Area     | 30.5020 | 15.0496 | 88.4430  | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Energy   | 0.7660  | 6.7462  | 4.2573   | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2  | 8,355.983<br>2  | 0.1602 | 0.1532 | 8,405.638<br>7  |
| Mobile   | 9.5233  | 45.9914 | 110.0422 | 0.4681 | 45.9592          | 0.3373          | 46.2965       | 12.2950           | 0.3132           | 12.6083        |          | 47,917.80<br>05 | 47,917.80<br>05 | 2.1953 |        | 47,972.68<br>39 |
| Total    | 40.7912 | 67.7872 | 202.7424 | 0.6043 | 45.9592          | 2.4640          | 48.4231       | 12.2950           | 2.4399           | 14.7349        | 0.0000   | 74,422.37<br>87 | 74,422.37<br>87 | 2.8429 | 0.4832 | 74,637.44<br>17 |

### Mitigated Operational

|          | ROG     | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |        | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | Jay    |        |                 |
| Area     | 30.5020 | 15.0496 | 88.4430  | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Energy   | 0.7660  | 6.7462  | 4.2573   | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2  | 8,355.983<br>2  | 0.1602 | 0.1532 | 8,405.638<br>7  |
| Mobile   | 9.5233  | 45.9914 | 110.0422 | 0.4681 | 45.9592          | 0.3373          | 46.2965       | 12.2950           | 0.3132           | 12.6083        |          | 47,917.80<br>05 | 47,917.80<br>05 | 2.1953 |        | 47,972.68<br>39 |
| Total    | 40.7912 | 67.7872 | 202.7424 | 0.6043 | 45.9592          | 2.4640          | 48.4231       | 12.2950           | 2.4399           | 14.7349        | 0.0000   | 74,422.37<br>87 | 74,422.37<br>87 | 2.8429 | 0.4832 | 74,637.44<br>17 |

|                      | ROG  | NOx  | со   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>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<br>Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days<br>Week | Num Days | Phase Description |
|-----------------|-----------------------|-----------------------|------------|------------|------------------|----------|-------------------|
| 1               | Demolition            | Demolition            | 9/1/2021   | 10/12/2021 | 5                | 30       |                   |
| 2               | Site Preparation      | Site Preparation      | 10/13/2021 | 11/9/2021  | 5                | 20       |                   |
| 3               | Grading               | Grading               | 11/10/2021 | 1/11/2022  | 5                | 45       |                   |
| 4               | Building Construction | Building Construction | 1/12/2022  | 12/12/2023 | 5                | 500      |                   |
| 5               | Paving                | Paving                | 12/13/2023 | 1/30/2024  | 5                | 35       |                   |
| 6               | Architectural Coating | Architectural Coating | 1/31/2024  | 3/19/2024  | 5                | 35       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

| 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        |
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Building Construction | Cranes                    | 1      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Paving                | Pavers                    | 2      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 2      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |

Trips and VMT

| Phase Name            | Offroad Equipment<br>Count | Worker Trip<br>Number | Vendor Trip<br>Number | Hauling Trip<br>Number | Worker Trip<br>Length | Vendor Trip<br>Length | Hauling Trip<br>Length | Worker Vehicle<br>Class | Vendor<br>Vehicle Class | Hauling<br>Vehicle Class |
|-----------------------|----------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Demolition            | 6                          | 15.00                 | 0.00                  | 458.00                 | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Site Preparation      | 7                          | 18.00                 | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Grading               | 8                          | 20.00                 | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Building Construction | 9                          | 801.00                | 143.00                | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Paving                | 6                          | 15.00                 | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Architectural Coating | 1                          | 160.00                | 0.00                  | 0.00                   | 10.00                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |

### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2021

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 3.3074           | 0.0000          | 3.3074        | 0.5008            | 0.0000           | 0.5008         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.1651 | 31.4407 | 21.5650 | 0.0388 |                  | 1.5513          | 1.5513        |                   | 1.4411           | 1.4411         |          | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |
| Total         | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 3.3074           | 1.5513          | 4.8588        | 0.5008            | 1.4411           | 1.9419         |          | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |

### 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|-----|----------------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |                | lb/c           | lay             |     |                |
| Hauling  | 0.1304 | 4.1454 | 1.0182 | 0.0117          | 0.2669           | 0.0128          | 0.2797        | 0.0732            | 0.0122           | 0.0854         |          | 1,269.855<br>5 | 1,269.855<br>5 | 0.0908          |     | 1,272.125<br>2 |
| 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         |
| Worker   | 0.0532 | 0.0346 | 0.3963 | 1.1100e-<br>003 | 0.1141           | 9.5000e-<br>004 | 0.1151        | 0.0303            | 8.8000e-<br>004  | 0.0311         |          | 110.4707       | 110.4707       | 3.3300e-<br>003 |     | 110.5539       |
| Total    | 0.1835 | 4.1800 | 1.4144 | 0.0128          | 0.3810           | 0.0137          | 0.3948        | 0.1034            | 0.0131           | 0.1165         |          | 1,380.326<br>2 | 1,380.326<br>2 | 0.0941          |     | 1,382.679<br>1 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 3.3074           | 0.0000          | 3.3074        | 0.5008            | 0.0000           | 0.5008         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.1651 | 31.4407 | 21.5650 | 0.0388 |                  | 1.5513          | 1.5513        |                   | 1.4411           | 1.4411         | 0.0000   | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |
| Total         | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 3.3074           | 1.5513          | 4.8588        | 0.5008            | 1.4411           | 1.9419         | 0.0000   | 3,747.944<br>9 | 3,747.944<br>9 | 1.0549 |     | 3,774.317<br>4 |

### 3.2 Demolition - 2021

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|-----|----------------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |                | lb/d           | day             |     |                |
| Hauling  | 0.1304 | 4.1454 | 1.0182 | 0.0117          | 0.2669           | 0.0128          | 0.2797        | 0.0732            | 0.0122           | 0.0854         |          | 1,269.855<br>5 | 1,269.855<br>5 | 0.0908          |     | 1,272.125<br>2 |
| 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         |
| Worker   | 0.0532 | 0.0346 | 0.3963 | 1.1100e-<br>003 | 0.1141           | 9.5000e-<br>004 | 0.1151        | 0.0303            | 8.8000e-<br>004  | 0.0311         |          | 110.4707       | 110.4707       | 3.3300e-<br>003 |     | 110.5539       |
| Total    | 0.1835 | 4.1800 | 1.4144 | 0.0128          | 0.3810           | 0.0137          | 0.3948        | 0.1034            | 0.0131           | 0.1165         |          | 1,380.326<br>2 | 1,380.326<br>2 | 0.0941          |     | 1,382.679<br>1 |

3.3 Site Preparation - 2021

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 18.0663          | 0.0000          | 18.0663       | 9.9307            | 0.0000           | 9.9307         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.8882 | 40.4971 | 21.1543 | 0.0380 |                  | 2.0445          | 2.0445        |                   | 1.8809           | 1.8809         |          | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |
| Total         | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663          | 2.0445          | 20.1107       | 9.9307            | 1.8809           | 11.8116        |          | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |

### 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0638 | 0.0415 | 0.4755 | 1.3300e-<br>003 | 0.1369           | 1.1400e-<br>003 | 0.1381        | 0.0363            | 1.0500e-<br>003  | 0.0374         |          | 132.5649  | 132.5649  | 3.9900e-<br>003 |     | 132.6646 |
| Total    | 0.0638 | 0.0415 | 0.4755 | 1.3300e-<br>003 | 0.1369           | 1.1400e-<br>003 | 0.1381        | 0.0363            | 1.0500e-<br>003  | 0.0374         |          | 132.5649  | 132.5649  | 3.9900e-<br>003 |     | 132.6646 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | day    |     |                |
| Fugitive Dust |        |         |         |        | 18.0663          | 0.0000          | 18.0663       | 9.9307            | 0.0000           | 9.9307         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.8882 | 40.4971 | 21.1543 | 0.0380 |                  | 2.0445          | 2.0445        |                   | 1.8809           | 1.8809         | 0.0000   | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |
| Total         | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663          | 2.0445          | 20.1107       | 9.9307            | 1.8809           | 11.8116        | 0.0000   | 3,685.656<br>9 | 3,685.656<br>9 | 1.1920 |     | 3,715.457<br>3 |

### 3.3 Site Preparation - 2021

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0638 | 0.0415 | 0.4755 | 1.3300e-<br>003 | 0.1369           | 1.1400e-<br>003 | 0.1381        | 0.0363            | 1.0500e-<br>003  | 0.0374         |          | 132.5649  | 132.5649  | 3.9900e-<br>003 |     | 132.6646 |
| Total    | 0.0638 | 0.0415 | 0.4755 | 1.3300e-<br>003 | 0.1369           | 1.1400e-<br>003 | 0.1381        | 0.0363            | 1.0500e-<br>003  | 0.0374         |          | 132.5649  | 132.5649  | 3.9900e-<br>003 |     | 132.6646 |

3.4 Grading - 2021

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 4.1912 | 46.3998 | 30.8785 | 0.0620 |                  | 1.9853          | 1.9853        |                   | 1.8265           | 1.8265         |          | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |
| Total         | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 8.6733           | 1.9853          | 10.6587       | 3.5965            | 1.8265           | 5.4230         |          | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |

# 3.4 Grading - 2021

Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0709 | 0.0462 | 0.5284 | 1.4800e-<br>003 | 0.1521           | 1.2700e-<br>003 | 0.1534        | 0.0404            | 1.1700e-<br>003  | 0.0415         |          | 147.2943  | 147.2943  | 4.4300e-<br>003 | ,   | 147.4051 |
| Total    | 0.0709 | 0.0462 | 0.5284 | 1.4800e-<br>003 | 0.1521           | 1.2700e-<br>003 | 0.1534        | 0.0404            | 1.1700e-<br>003  | 0.0415         |          | 147.2943  | 147.2943  | 4.4300e-<br>003 |     | 147.4051 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 4.1912 | 46.3998 | 30.8785 | 0.0620 |                  | 1.9853          | 1.9853        |                   | 1.8265           | 1.8265         | 0.0000   | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |
| Total         | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 8.6733           | 1.9853          | 10.6587       | 3.5965            | 1.8265           | 5.4230         | 0.0000   | 6,007.043<br>4 | 6,007.043<br>4 | 1.9428 |     | 6,055.613<br>4 |

# 3.4 Grading - 2021

# Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0709 | 0.0462 | 0.5284 | 1.4800e-<br>003 | 0.1521           | 1.2700e-<br>003 | 0.1534        | 0.0404            | 1.1700e-<br>003  | 0.0415         |          | 147.2943  | 147.2943  | 4.4300e-<br>003 |     | 147.4051 |
| Total    | 0.0709 | 0.0462 | 0.5284 | 1.4800e-<br>003 | 0.1521           | 1.2700e-<br>003 | 0.1534        | 0.0404            | 1.1700e-<br>003  | 0.0415         |          | 147.2943  | 147.2943  | 4.4300e-<br>003 |     | 147.4051 |

3.4 Grading - 2022

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.6248 | 38.8435 | 29.0415 | 0.0621 |                  | 1.6349          | 1.6349        |                   | 1.5041           | 1.5041         |          | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |
| Total         | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 8.6733           | 1.6349          | 10.3082       | 3.5965            | 1.5041           | 5.1006         |          | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |

# 3.4 Grading - 2022

## Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0665 | 0.0416 | 0.4861 | 1.4300e-<br>003 | 0.1521           | 1.2300e-<br>003 | 0.1534        | 0.0404            | 1.1300e-<br>003  | 0.0415         |          | 142.1207  | 142.1207  | 4.0000e-<br>003 |     | 142.2207 |
| Total    | 0.0665 | 0.0416 | 0.4861 | 1.4300e-<br>003 | 0.1521           | 1.2300e-<br>003 | 0.1534        | 0.0404            | 1.1300e-<br>003  | 0.0415         |          | 142.1207  | 142.1207  | 4.0000e-<br>003 |     | 142.2207 |

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | day    |     |                |
| Fugitive Dust |        |         |         |        | 8.6733           | 0.0000          | 8.6733        | 3.5965            | 0.0000           | 3.5965         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.6248 | 38.8435 | 29.0415 | 0.0621 |                  | 1.6349          | 1.6349        |                   | 1.5041           | 1.5041         | 0.0000   | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |
| Total         | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 8.6733           | 1.6349          | 10.3082       | 3.5965            | 1.5041           | 5.1006         | 0.0000   | 6,011.410<br>5 | 6,011.410<br>5 | 1.9442 |     | 6,060.015<br>8 |

Page 17 of 35

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

# 3.4 Grading - 2022

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0665 | 0.0416 | 0.4861 | 1.4300e-<br>003 | 0.1521           | 1.2300e-<br>003 | 0.1534        | 0.0404            | 1.1300e-<br>003  | 0.0415         |          | 142.1207  | 142.1207  | 4.0000e-<br>003 |     | 142.2207 |
| Total    | 0.0665 | 0.0416 | 0.4861 | 1.4300e-<br>003 | 0.1521           | 1.2300e-<br>003 | 0.1534        | 0.0404            | 1.1300e-<br>003  | 0.0415         |          | 142.1207  | 142.1207  | 4.0000e-<br>003 |     | 142.2207 |

3.5 Building Construction - 2022

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/c             | lay             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         |          | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |
| Total    | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         |          | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |

### 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.4284 | 13.1673 | 3.8005  | 0.0354 | 0.9155           | 0.0256          | 0.9412        | 0.2636            | 0.0245           | 0.2881         |          | 3,789.075<br>0 | 3,789.075<br>0 | 0.2381 |     | 3,795.028<br>3 |
| Worker   | 2.6620 | 1.6677  | 19.4699 | 0.0571 | 6.0932           | 0.0493          | 6.1425        | 1.6163            | 0.0454           | 1.6617         |          | 5,691.935<br>4 | 5,691.935<br>4 | 0.1602 |     | 5,695.940<br>8 |
| Total    | 3.0904 | 14.8350 | 23.2704 | 0.0926 | 7.0087           | 0.0749          | 7.0836        | 1.8799            | 0.0699           | 1.9498         |          | 9,481.010<br>4 | 9,481.010<br>4 | 0.3984 |     | 9,490.969<br>1 |

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        | 1<br>1<br>1       | 0.7612           | 0.7612         | 0.0000   | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |
| Total    | 1.7062 | 15.6156 | 16.3634 | 0.0269 |                  | 0.8090          | 0.8090        |                   | 0.7612           | 0.7612         | 0.0000   | 2,554.333<br>6 | 2,554.333<br>6 | 0.6120 |     | 2,569.632<br>2 |

### 3.5 Building Construction - 2022

### **Mitigated Construction Off-Site**

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.4284 | 13.1673 | 3.8005  | 0.0354 | 0.9155           | 0.0256          | 0.9412        | 0.2636            | 0.0245           | 0.2881         |          | 3,789.075<br>0 | 3,789.075<br>0 | 0.2381 |     | 3,795.028<br>3 |
| Worker   | 2.6620 | 1.6677  | 19.4699 | 0.0571 | 6.0932           | 0.0493          | 6.1425        | 1.6163            | 0.0454           | 1.6617         |          | 5,691.935<br>4 | 5,691.935<br>4 | 0.1602 |     | 5,695.940<br>8 |
| Total    | 3.0904 | 14.8350 | 23.2704 | 0.0926 | 7.0087           | 0.0749          | 7.0836        | 1.8799            | 0.0699           | 1.9498         |          | 9,481.010<br>4 | 9,481.010<br>4 | 0.3984 |     | 9,490.969<br>1 |

3.5 Building Construction - 2023

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        |                   | 0.6584           | 0.6584         |          | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |
| Total    | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        |                   | 0.6584           | 0.6584         |          | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |

### 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |  |  |  |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|--|--|--|
| Category | lb/day |         |         |        |                  |                 |               |                   |                  |                |          | lb/day         |                |        |     |                |  |  |  |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |  |  |  |
| Vendor   | 0.3183 | 9.9726  | 3.3771  | 0.0343 | 0.9156           | 0.0122          | 0.9277        | 0.2636            | 0.0116           | 0.2752         |          | 3,671.400<br>7 | 3,671.400<br>7 | 0.2096 |     | 3,676.641<br>7 |  |  |  |
| Worker   | 2.5029 | 1.5073  | 17.8820 | 0.0550 | 6.0932           | 0.0479          | 6.1411        | 1.6163            | 0.0441           | 1.6604         |          | 5,483.797<br>4 | 5,483.797<br>4 | 0.1442 |     | 5,487.402<br>0 |  |  |  |
| Total    | 2.8211 | 11.4799 | 21.2591 | 0.0893 | 7.0088           | 0.0601          | 7.0688        | 1.8799            | 0.0557           | 1.9356         |          | 9,155.198<br>1 | 9,155.198<br>1 | 0.3538 |     | 9,164.043<br>7 |  |  |  |

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |  |  |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|--|--|
| Category | lb/day |         |         |        |                  |                 |               |                   |                  |                | lb/day   |                |                |        |     |                |  |  |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        | -<br>             | 0.6584           | 0.6584         | 0.0000   | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |  |  |
| Total    | 1.5728 | 14.3849 | 16.2440 | 0.0269 |                  | 0.6997          | 0.6997        |                   | 0.6584           | 0.6584         | 0.0000   | 2,555.209<br>9 | 2,555.209<br>9 | 0.6079 |     | 2,570.406<br>1 |  |  |

### 3.5 Building Construction - 2023

### Mitigated Construction Off-Site

|          | ROG    | NOx     | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |  |  |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|--|--|
| Category | lb/day |         |         |        |                  |                 |               |                   |                  |                |          | lb/day         |                |        |     |                |  |  |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |  |  |
| Vendor   | 0.3183 | 9.9726  | 3.3771  | 0.0343 | 0.9156           | 0.0122          | 0.9277        | 0.2636            | 0.0116           | 0.2752         |          | 3,671.400<br>7 | 3,671.400<br>7 | 0.2096 |     | 3,676.641<br>7 |  |  |
| Worker   | 2.5029 | 1.5073  | 17.8820 | 0.0550 | 6.0932           | 0.0479          | 6.1411        | 1.6163            | 0.0441           | 1.6604         |          | 5,483.797<br>4 | 5,483.797<br>4 | 0.1442 |     | 5,487.402<br>0 |  |  |
| Total    | 2.8211 | 11.4799 | 21.2591 | 0.0893 | 7.0088           | 0.0601          | 7.0688        | 1.8799            | 0.0557           | 1.9356         |          | 9,155.198<br>1 | 9,155.198<br>1 | 0.3538 |     | 9,164.043<br>7 |  |  |

3.6 Paving - 2023

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |  |  |  |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|--|--|--|
| Category | lb/day |         |         |        |                  |                 |               |                   |                  |                |          | lb/day         |                |        |     |                |  |  |  |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         |          | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |  |  |  |
| Paving   | 0.0000 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |  |  |  |
| Total    | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         |          | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |  |  |  |

# 3.6 Paving - 2023

#### Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0469 | 0.0282 | 0.3349 | 1.0300e-<br>003 | 0.1141           | 9.0000e-<br>004 | 0.1150        | 0.0303            | 8.3000e-<br>004  | 0.0311         |          | 102.6928  | 102.6928  | 2.7000e-<br>003 |     | 102.7603 |
| Total    | 0.0469 | 0.0282 | 0.3349 | 1.0300e-<br>003 | 0.1141           | 9.0000e-<br>004 | 0.1150        | 0.0303            | 8.3000e-<br>004  | 0.0311         |          | 102.6928  | 102.6928  | 2.7000e-<br>003 |     | 102.7603 |

#### Mitigated Construction On-Site

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/              | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         | 0.0000   | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |
| Paving   | 0.0000 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 1.0327 | 10.1917 | 14.5842 | 0.0228 |                  | 0.5102          | 0.5102        |                   | 0.4694           | 0.4694         | 0.0000   | 2,207.584<br>1 | 2,207.584<br>1 | 0.7140 |     | 2,225.433<br>6 |

# 3.6 Paving - 2023

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/o             | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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   |
| Worker   | 0.0469 | 0.0282 | 0.3349 | 1.0300e-<br>003 | 0.1141           | 9.0000e-<br>004 | 0.1150        | 0.0303            | 8.3000e-<br>004  | 0.0311         |          | 102.6928  | 102.6928  | 2.7000e-<br>003 |     | 102.7603 |
| Total    | 0.0469 | 0.0282 | 0.3349 | 1.0300e-<br>003 | 0.1141           | 9.0000e-<br>004 | 0.1150        | 0.0303            | 8.3000e-<br>004  | 0.0311         |          | 102.6928  | 102.6928  | 2.7000e-<br>003 |     | 102.7603 |

3.6 Paving - 2024

Unmitigated Construction On-Site

|          | ROG    | NOx    | со      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         |          | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |
| Paving   | 0.0000 |        |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          | ,              | 0.0000         |        |     | 0.0000         |
| Total    | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         |          | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |

# 3.6 Paving - 2024

#### Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e    |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|---------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | lay             |     |         |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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  |
| Worker   | 0.0444 | 0.0257 | 0.3114 | 1.0000e-<br>003 | 0.1141           | 8.8000e-<br>004 | 0.1150        | 0.0303            | 8.1000e-<br>004  | 0.0311         |          | 99.5045   | 99.5045   | 2.4700e-<br>003 |     | 99.5663 |
| Total    | 0.0444 | 0.0257 | 0.3114 | 1.0000e-<br>003 | 0.1141           | 8.8000e-<br>004 | 0.1150        | 0.0303            | 8.1000e-<br>004  | 0.0311         |          | 99.5045   | 99.5045   | 2.4700e-<br>003 |     | 99.5663 |

#### Mitigated Construction On-Site

|          | ROG    | NOx    | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         | 0.0000   | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |
| Paving   | 0.0000 |        |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 0.9882 | 9.5246 | 14.6258 | 0.0228 |                  | 0.4685          | 0.4685        |                   | 0.4310           | 0.4310         | 0.0000   | 2,207.547<br>2 | 2,207.547<br>2 | 0.7140 |     | 2,225.396<br>3 |

# 3.6 Paving - 2024

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e    |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|---------|
| Category |        |        |        |                 | lb/              | day             |               | <u>.</u>          |                  |                |          |           | lb/c      | day             |     |         |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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  |
| Worker   | 0.0444 | 0.0257 | 0.3114 | 1.0000e-<br>003 | 0.1141           | 8.8000e-<br>004 | 0.1150        | 0.0303            | 8.1000e-<br>004  | 0.0311         |          | 99.5045   | 99.5045   | 2.4700e-<br>003 |     | 99.5663 |
| Total    | 0.0444 | 0.0257 | 0.3114 | 1.0000e-<br>003 | 0.1141           | 8.8000e-<br>004 | 0.1150        | 0.0303            | 8.1000e-<br>004  | 0.0311         |          | 99.5045   | 99.5045   | 2.4700e-<br>003 |     | 99.5663 |

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

|                 | ROG      | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|-----------------|----------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category        |          |        |        |                 | lb/d             | day             |               |                   |                  |                |          |           | lb/c      | lay    |     |          |
| Archit. Coating | 236.4115 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.1808   | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         |          | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |
| Total           | 236.5923 | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         |          | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |

#### 3.7 Architectural Coating - 2024

#### Unmitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |        |        | lb/              | day             |               |                   |                  |                |          |                | lb/d           | day    |     |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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         |
| Worker   | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171           | 9.4300e-<br>003 | 1.2266        | 0.3229            | 8.6800e-<br>003  | 0.3315         |          | 1,061.381<br>8 | 1,061.381<br>8 | 0.0264 |     | 1,062.041<br>0 |
| Total    | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171           | 9.4300e-<br>003 | 1.2266        | 0.3229            | 8.6800e-<br>003  | 0.3315         |          | 1,061.381<br>8 | 1,061.381<br>8 | 0.0264 |     | 1,062.041<br>0 |

#### Mitigated Construction On-Site

|                 | ROG      | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|-----------------|----------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category        |          |        |        |                 | lb/e             | day             |               |                   |                  |                |          |           | lb/c      | day    |     |          |
| Archit. Coating | 236.4115 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.1808   | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         | 0.0000   | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |
| Total           | 236.5923 | 1.2188 | 1.8101 | 2.9700e-<br>003 |                  | 0.0609          | 0.0609        |                   | 0.0609           | 0.0609         | 0.0000   | 281.4481  | 281.4481  | 0.0159 |     | 281.8443 |

#### 3.7 Architectural Coating - 2024

#### Mitigated Construction Off-Site

|          | ROG    | NOx    | со     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |        |        | lb/e             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 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         |
| Worker   | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171           | 9.4300e-<br>003 | 1.2266        | 0.3229            | 8.6800e-<br>003  | 0.3315         |          | 1,061.381<br>8 | 1,061.381<br>8 | 0.0264 |     | 1,062.041<br>0 |
| Total    | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171           | 9.4300e-<br>003 | 1.2266        | 0.3229            | 8.6800e-<br>003  | 0.3315         |          | 1,061.381<br>8 | 1,061.381<br>8 | 0.0264 |     | 1,062.041<br>0 |

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

|             | ROG    | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|-------------|--------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category    |        |         |          |        | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |     |                 |
| Mitigated   | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592          | 0.3373          | 46.2965       | 12.2950           | 0.3132           | 12.6083        |          | 47,917.80<br>05 | 47,917.80<br>05 | 2.1953 |     | 47,972.68<br>39 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592          | 0.3373          | 46.2965       | 12.2950           | 0.3132           | 12.6083        |          | 47,917.80<br>05 | 47,917.80<br>05 | 2.1953 |     | 47,972.68<br>39 |

#### 4.2 Trip Summary Information

|                                     | Ave      | rage Daily Trip Ra | ite      | Unmitigated | Mitigated  |
|-------------------------------------|----------|--------------------|----------|-------------|------------|
| Land Use                            | Weekday  | Saturday           | Sunday   | Annual VMT  | Annual VMT |
| Apartments Low Rise                 | 145.75   | 154.25             | 154.00   | 506,227     | 506,227    |
| Apartments Mid Rise                 | 4,026.75 | 3,773.25           | 4075.50  | 13,660,065  | 13,660,065 |
| General Office Building             | 288.45   | 62.55              | 31.05    | 706,812     | 706,812    |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52           | 2817.72  | 3,413,937   | 3,413,937  |
| Hotel                               | 192.00   | 187.50             | 160.00   | 445,703     | 445,703    |
| Quality Restaurant                  | 501.12   | 511.92             | 461.20   | 707,488     | 707,488    |
| Regional Shopping Center            | 528.08   | 601.44             | 357.84   | 1,112,221   | 1,112,221  |
| Total                               | 8,050.95 | 8,164.43           | 8,057.31 | 20,552,452  | 20,552,452 |

4.3 Trip Type Information

|                          |            | Miles      |             |            | Trip %     |             |         | Trip Purpos | e %     |
|--------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| 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 Low Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| Apartments Mid Rise      | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| General Office Building  | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 77      | 19          | 4       |
| High Turnover (Sit Down  | 16.60      | 8.40       | 6.90        | 8.50       | 72.50      | 19.00       | 37      | 20          | 43      |
| Hotel                    | 16.60      | 8.40       | 6.90        | 19.40      | 61.60      | 19.00       | 58      | 38          | 4       |
| Quality Restaurant       | 16.60      | 8.40       | 6.90        | 12.00      | 69.00      | 19.00       | 38      | 18          | 44      |
| Regional Shopping Center | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54      | 35          | 11      |

#### 4.4 Fleet Mix

| Land Use                               | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Low Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise                    | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building                | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down<br>Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel                                  | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant                     | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center               | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

# 5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                           | ROG         | NOx    | со     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------------------------|-------------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category                  | gory Ib/day |        |        |        |                  |                 |               |                   |                  |                |          |                | lb/c           | day    |        |                |
| NaturalGas<br>Mitigated   | 0.7660      | 6.7462 | 4.2573 | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602 | 0.1532 | 8,405.638<br>7 |
| NaturalGas<br>Unmitigated | 0.7660      | 6.7462 | 4.2573 | 0.0418 |                  | 0.5292          | 0.5292        |                   | 0.5292           | 0.5292         |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602 | 0.1532 | 8,405.638<br>7 |

#### 5.2 Energy by Land Use - NaturalGas

#### <u>Unmitigated</u>

|  | NaturalGa<br>s Use | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |        |        |                 | lb/              | day             |                 |                   |                  |                 |          |                | lb/d           | lay             |                 |                |
| Apartments Low<br>Rise                 | 1119.16            | 0.0121          | 0.1031 | 0.0439 | 6.6000e-<br>004 |                  | 8.3400e-<br>003 | 8.3400e-<br>003 |                   | 8.3400e-<br>003  | 8.3400e-<br>003 |          | 131.6662       | 131.6662       | 2.5200e-<br>003 | 2.4100e-<br>003 | 132.4486       |
| Apartments Mid<br>Rise                 | 35784.3            | 0.3859          | 3.2978 | 1.4033 | 0.0211          |                  | 0.2666          | 0.2666          |                   | 0.2666           | 0.2666          |          | 4,209.916<br>4 | 4,209.916<br>4 | 0.0807          | 0.0772          | 4,234.933<br>9 |
| General Office<br>Building             | 1283.42            | 0.0138          | 0.1258 | 0.1057 | 7.5000e-<br>004 |                  | 9.5600e-<br>003 | 9.5600e-<br>003 |                   | 9.5600e-<br>003  | 9.5600e-<br>003 |          | 150.9911       | 150.9911       | 2.8900e-<br>003 | 2.7700e-<br>003 | 151.8884       |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.2455          | 2.2314 | 1.8743 | 0.0134          |                  | 0.1696          | 0.1696          |                   | 0.1696           | 0.1696          |          | 2,677.634<br>2 | 2,677.634<br>2 | 0.0513          | 0.0491          | 2,693.546<br>0 |
| Hotel                                  | 4769.72            | 0.0514          | 0.4676 | 0.3928 | 2.8100e-<br>003 |                  | 0.0355          | 0.0355          | ,                 | 0.0355           | 0.0355          |          | 561.1436       | 561.1436       | 0.0108          | 0.0103          | 564.4782       |
| Quality<br>Restaurant                  | 5057.75            | 0.0545          | 0.4959 | 0.4165 | 2.9800e-<br>003 |                  | 0.0377          | 0.0377          | 1                 | 0.0377           | 0.0377          |          | 595.0298       | 595.0298       | 0.0114          | 0.0109          | 598.5658       |
| Regional<br>Shopping Center            |                    | 2.7100e-<br>003 | 0.0247 | 0.0207 | 1.5000e-<br>004 |                  | 1.8700e-<br>003 | 1.8700e-<br>003 | 1                 | 1.8700e-<br>003  | 1.8700e-<br>003 |          | 29.6019        | 29.6019        | 5.7000e-<br>004 | 5.4000e-<br>004 | 29.7778        |
| Total                                  |                    | 0.7660          | 6.7463 | 4.2573 | 0.0418          |                  | 0.5292          | 0.5292          |                   | 0.5292           | 0.5292          |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602          | 0.1532          | 8,405.638<br>7 |

#### 5.2 Energy by Land Use - NaturalGas

#### Mitigated

|  | NaturalGa<br>s Use | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--|--------------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                               | kBTU/yr            |                 |        |        |                 | lb/e             | day             |                 |                   |                  |                 |          |                | lb/d           | day             |                 |                |
| Apartments Low<br>Rise                 | 1.11916            | 0.0121          | 0.1031 | 0.0439 | 6.6000e-<br>004 |                  | 8.3400e-<br>003 | 8.3400e-<br>003 |                   | 8.3400e-<br>003  | 8.3400e-<br>003 |          | 131.6662       | 131.6662       | 2.5200e-<br>003 | 2.4100e-<br>003 | 132.4486       |
| Apartments Mid<br>Rise                 | 35.7843            | 0.3859          | 3.2978 | 1.4033 | 0.0211          |                  | 0.2666          | 0.2666          |                   | 0.2666           | 0.2666          |          | 4,209.916<br>4 | 4,209.916<br>4 | 0.0807          | 0.0772          | 4,234.933<br>9 |
| General Office<br>Building             | 1.28342            | 0.0138          | 0.1258 | 0.1057 | 7.5000e-<br>004 |                  | 9.5600e-<br>003 | 9.5600e-<br>003 |                   | 9.5600e-<br>003  | 9.5600e-<br>003 |          | 150.9911       | 150.9911       | 2.8900e-<br>003 | 2.7700e-<br>003 | 151.8884       |
| High Turnover (Sit<br>Down Restaurant) |                    | 0.2455          | 2.2314 | 1.8743 | 0.0134          |                  | 0.1696          | 0.1696          |                   | 0.1696           | 0.1696          |          | 2,677.634<br>2 | 2,677.634<br>2 | 0.0513          | 0.0491          | 2,693.546<br>0 |
| Hotel                                  | 4.76972            | 0.0514          | 0.4676 | 0.3928 | 2.8100e-<br>003 |                  | 0.0355          | 0.0355          |                   | 0.0355           | 0.0355          |          | 561.1436       | 561.1436       | 0.0108          | 0.0103          | 564.4782       |
| Quality<br>Restaurant                  | 5.05775            | 0.0545          | 0.4959 | 0.4165 | 2.9800e-<br>003 |                  | 0.0377          | 0.0377          | ,                 | 0.0377           | 0.0377          |          | 595.0298       | 595.0298       | 0.0114          | 0.0109          | 598.5658       |
| Regional<br>Shopping Center            |                    | 2.7100e-<br>003 | 0.0247 | 0.0207 | 1.5000e-<br>004 |                  | 1.8700e-<br>003 | 1.8700e-<br>003 | ,                 | 1.8700e-<br>003  | 1.8700e-<br>003 |          | 29.6019        | 29.6019        | 5.7000e-<br>004 | 5.4000e-<br>004 | 29.7778        |
| Total                                  |                    | 0.7660          | 6.7463 | 4.2573 | 0.0418          |                  | 0.5292          | 0.5292          |                   | 0.5292           | 0.5292          |          | 8,355.983<br>2 | 8,355.983<br>2 | 0.1602          | 0.1532          | 8,405.638<br>7 |

# 6.0 Area Detail

6.1 Mitigation Measures Area

Page 33 of 35

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

|             | ROG         | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|-------------|-------------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category    | jory Ib/day |         |         |        |                  |                 |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Mitigated   | 30.5020     | 15.0496 | 88.4430 | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |
| Unmitigated | 30.5020     | 15.0496 | 88.4430 | 0.0944 |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

|                          | ROG     | NOx     | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|--------------------------|---------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| SubCategory              |         |         |         |                 | lb/e             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |        |                 |
| Architectural<br>Coating | 2.2670  |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Consumer<br>Products     | 24.1085 |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Hearth                   | 1.6500  | 14.1000 | 6.0000  | 0.0900          |                  | 1.1400          | 1.1400        |                   | 1.1400           | 1.1400         | 0.0000   | 18,000.00<br>00 | 18,000.00<br>00 | 0.3450 | 0.3300 | 18,106.96<br>50 |
| Landscaping              | 2.4766  | 0.9496  | 82.4430 | 4.3600e-<br>003 |                  | 0.4574          | 0.4574        |                   | 0.4574           | 0.4574         |          | 148.5950        | 148.5950        | 0.1424 |        | 152.1542        |
| Total                    | 30.5020 | 15.0496 | 88.4430 | 0.0944          |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

#### 6.2 Area by SubCategory

#### **Mitigated**

|                          | ROG     | NOx     | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|--------------------------|---------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| SubCategory              |         |         |         |                 | lb/o             | day             |               |                   |                  |                |          |                 | lb/c            | day    |        |                 |
| Architectural<br>Coating | 2.2670  |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Consumer<br>Products     | 24.1085 |         |         |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                 | 0.0000          |        |        | 0.0000          |
| Hearth                   | 1.6500  | 14.1000 | 6.0000  | 0.0900          |                  | 1.1400          | 1.1400        |                   | 1.1400           | 1.1400         | 0.0000   | 18,000.00<br>00 | 18,000.00<br>00 | 0.3450 | 0.3300 | 18,106.96<br>50 |
| Landscaping              | 2.4766  | 0.9496  | 82.4430 | 4.3600e-<br>003 |                  | 0.4574          | 0.4574        |                   | 0.4574           | 0.4574         |          | 148.5950        | 148.5950        | 0.1424 |        | 152.1542        |
| Total                    | 30.5020 | 15.0496 | 88.4430 | 0.0944          |                  | 1.5974          | 1.5974        |                   | 1.5974           | 1.5974         | 0.0000   | 18,148.59<br>50 | 18,148.59<br>50 | 0.4874 | 0.3300 | 18,259.11<br>92 |

# 7.0 Water Detail

#### 7.1 Mitigation Measures Water

# 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

#### 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

| Local Hire Provision Net Change                  |        |
|--|--------|
| Without Local Hire Provision                     |        |
| Total Construction GHG Emissions (MT CO2e)       | 3,623  |
| Amortized (MT CO2e/year)                         | 120.77 |
| With Local Hire Provision                        |        |
| Total Construction GHG Emissions (MT CO2e)       | 3,024  |
| Amortized (MT CO2e/year)                         | 100.80 |
| % Decrease in Construction-related GHG Emissions | 17%    |

# EXHIBIT B



# Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

**Risk Assessment & Remediation Specialist** 

# **Education**

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

# **Professional Experience**

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

# **Professional History:**

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher) UCLA School of Public Health; 2003 to 2006; Adjunct Professor UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator UCLA Institute of the Environment, 2001-2002; Research Associate Komex H<sub>2</sub>O Science, 2001 to 2003; Senior Remediation Scientist National Groundwater Association, 2002-2004; Lecturer San Diego State University, 1999-2001; Adjunct Professor Anteon Corp., San Diego, 2000-2001; Remediation Project Manager Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager Bechtel, San Diego, California, 1999 - 2000; Risk Assessor King County, Seattle, 1996 - 1999; Scientist James River Corp., Washington, 1995-96; Scientist Big Creek Lumber, Davenport, California, 1995; Scientist Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

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**Rosenfeld, P. E.** (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

**Rosenfeld**, **P. E.** (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

#### **Presentations:**

**Rosenfeld**, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. 44th Western Regional Meeting, American Chemical Society. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

**Rosenfeld, P.E.** (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, Lecture conducted from Tuscon, AZ.

**Rosenfeld, P.E.** (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

**Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D**. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D**. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D.** (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. 2005 National Groundwater Association Ground Water And Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. 2005 National Groundwater Association Ground Water and Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld**, **Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

**Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference Orlando, FL.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants.*. Lecture conducted from Hyatt Regency Phoenix Arizona.

**Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

**Paul Rosenfeld, Ph.D.** (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

**Rosenfeld**, **P.E**. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld**, **P.E**. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld**, **P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

**Rosenfeld**, **P.E**. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

**Rosenfeld.** P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld**, **P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld**, **P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

# **Teaching Experience:**

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

# **Academic Grants Awarded:**

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

# **Deposition and/or Trial Testimony:**

|             | *   |
|-------------|---|
| I<br>C      | ited States District Court For The District of New Jersey<br>Duarte et al, <i>Plaintiffs</i> , vs. United States Metals Refining Company et. al. <i>Defendant</i> .<br>Case No.: 2:17-cv-01624-ES-SCM<br>Rosenfeld Deposition. 6-7-2019   |
| N<br>1<br>0 | ited States District Court of Southern District of Texas Galveston Division<br>M/T Carla Maersk, <i>Plaintiffs</i> , vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido"<br><i>Defendant</i> .<br>Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237<br>Rosenfeld Deposition. 5-9-2019 |
| (           | perior Court of the State of California In And For The County Of Los Angeles – Santa Monica<br>Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants<br>Case No.: No. BC615636<br>Rosenfeld Deposition, 1-26-2019   |
| ]<br>(      | perior Court of the State of California In And For The County Of Los Angeles – Santa Monica<br>The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants<br>Case No.: No. BC646857<br>Rosenfeld Deposition, 10-6-2018; Trial 3-7-19                                    |
| H<br>C      | States District Court For The District of Colorado<br>Bells et al. Plaintiff vs. The 3M Company et al., Defendants<br>Case: No 1:16-cv-02531-RBJ<br>Rosenfeld Deposition, 3-15-2018 and 4-3-2018  |
| I<br>C      | strict Court Of Regan County, Texas, 112 <sup>th</sup> Judicial District<br>Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants<br>Cause No 1923<br>Rosenfeld Deposition, 11-17-2017  |
| S<br>(      | perior Court of the State of California In And For The County Of Contra Costa<br>Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants<br>Cause No C12-01481<br>Rosenfeld Deposition, 11-20-2017  |
| N<br>C      | rcuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois<br>Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants<br>Case No.: No. 0i9-L-2295<br>Rosenfeld Deposition, 8-23-2017  |
| N<br>(      | perior Court of the State of California, For The County of Los Angeles<br>Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC<br>Case No.: LC102019 (c/w BC582154)<br>Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018   |
| H<br>C      | rthern District Court of Mississippi, Greenville Division<br>Brenda J. Cooper, et al., <i>Plaintiffs</i> , vs. Meritor Inc., et al., <i>Defendants</i><br>Case Number: 4:16-cv-52-DMB-JVM<br>Possenfeld Deposition: July 2017   |

Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants Case No.: No. 13-2-03987-5 Rosenfeld Deposition, February 2017 Trial. March 2017 In The Superior Court of the State of California, County of Alameda Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants Case No.: RG14711115 Rosenfeld Deposition, September 2015 In The Iowa District Court In And For Poweshiek County Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants Case No.: LALA002187 Rosenfeld Deposition, August 2015 In The Iowa District Court For Wapello County Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants Law No,: LALA105144 - Division A Rosenfeld Deposition, August 2015 In The Iowa District Court For Wapello County Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants Law No,: LALA105144 - Division A Rosenfeld Deposition, August 2015 In The Circuit Court of Ohio County, West Virginia Robert Andrews, et al. v. Antero, et al. Civil Action N0. 14-C-30000 Rosenfeld Deposition, June 2015 In The Third Judicial District County of Dona Ana, New Mexico Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants Rosenfeld Deposition: July 2015 In The Iowa District Court For Muscatine County Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant Case No 4980 Rosenfeld Deposition: May 2015 In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant. Case Number CACE07030358 (26) Rosenfeld Deposition: December 2014 In the United States District Court Western District of Oklahoma Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants. Case No. 5:12-cv-01152-C Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*. Case Number cc-11-01650-E Rosenfeld Deposition: March and September 2013 Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants* Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987) Rosenfeld Deposition: October 2012

 In the United States District Court of Southern District of Texas Galveston Division
 Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*. Case 3:10-cv-00622
 Rosenfeld Deposition: February 2012
 Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland

Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants Case Number: 03-C-12-012487 OT Rosenfeld Deposition: September 2013

# EXHIBIT C



Technical Consultation, Data Analysis and Litigation Support for the Environment

> 1640 5<sup>th</sup> St., Suite 204 Santa Santa Monica, California 90401 Tel: (949) 887-9013 Email: <u>mhagemann@swape.com</u>

#### Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization Industrial Stormwater Compliance Investigation and Remediation Strategies Litigation Support and Testifying Expert CEQA Review

#### Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984. B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

#### **Professional Certifications:**

California Professional Geologist California Certified Hydrogeologist Qualified SWPPP Developer and Practitioner

#### **Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 present);
- Geology Instructor, Golden West College, 2010 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 1998);
- Instructor, College of Marin, Department of Science (1990 1995);
- Geologist, U.S. Forest Service (1986 1998); and
- Geologist, Dames & Moore (1984 1986).

# Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

• Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

# **Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

# <u>Hydrogeology:</u>

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

• Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

# Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

# Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

# <u>Teaching:</u>

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

# Invited Testimony, Reports, Papers and Presentations:

**Hagemann**, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann**, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

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# **Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

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139 South Hudson Avenue Suite 200 Pasadena, California 91101

## VIA E-MAIL

July 27, 2022 Rey Fukuda, Planning Assistant City of Los Angeles 221 North Figueroa Street, Suite 1350 Los Angeles, CA 90012 Em: rey.fukuda@lacity.org

# RE: <u>City of Los Angeles, 1360 North Vine Street Project</u> (SCH#:2017061063)

Dear Rey Fukuda,

On behalf of the Southwest Regional Council of Carpenters ("**Southwest Carpenter**" or "**SWRCC**"), my Office is submitting these comments for the City of Los Angeles' ("**City**") Draft Environmental Impact Report ("**DEIR**") for the 1360 North Vine Street Project (SCH #: 2017061063) ("**Project**").

The Southwest Carpenters would like to express their support for this Project and withdraw their prior July 25, 2022 comment letter. After receiving clarification and further information about this Project, SWRCC believes that this Project will benefit the environment and the local economy by utilizing a local skilled and trained workforce and will be built utilizing protocols that will protect worker health and safety.

If the City has any questions or concerns, feel free to contact my Office.

Sincerely,

Naira Soghbatyan Attorneys for Southwest Regional Council of Carpenters



Rey Fukuda <rey.fukuda@lacity.org>

## ENV-2016-3778-EIR

Hailey Buck <haileybuck98@gmail.com> To: rey.fukuda@lacity.org Mon, Jun 27, 2022 at 2:31 PM

Dear Rey Fukuda and the Department of City Planning,

I am writing to say I am against the development notified in ENV-2016-3778-EIR. The small Peruvian and Mexican restaurants at the corner of my street are delicious and I don't want to see them knocked down for another soulless high rise, especially if they decide upon the office option which will further impact housing. In addition the parking on De Longpre is already difficult when I get home from work and will be further impacted by construction. Also my roommate works nights and sleeps during the day and the daytime construction will detrimentally affect her life. The lot with rundown houses could be of use to our neighborhood, but knocking down community centers and small businesses is not the way to achieve this.

Best, Hailey Buck De Longpre Resident Michael Callahan mshawnme@hotmail.com July 15, 2022

Rey Fukuda City of Los Angeles Department of City Planning 221 N. Figueroa Street, Suite 1350 Los Angeles, CA 90012-2639 (213) 847-3686 rey.fukuda@lacity.org

Re: Case Number ENV-2016-3778-EIR

Attached are my comments regarding the Draft Environmental Impact Report (DEIR) for the proposed large-scale development project at 1360 N Vine Steet in Hollywood.

Overall, the presentation is very difficult to follow because the applicant has submitted two DEIRs (one for residential use, one for office and commercial use) combined and intermingled into one report. Key modeling assumptions are buried deep in the calculation worksheets and are not summarized in an easy to find table. Major issues of concern include:

- No effort is made to assess, either quantitatively or qualitatively, the potential impact of air toxic emissions. Reliance on a 30-year-old SCAQMD document is not a valid excuse for ignoring this issue. The applicant should be required to conduct an air toxic assessment.
- The assessment of project impact to the City of Los Angeles is too broad in scope and does not represent project impact on the Hollywood community. My calculations show that impact to the community is 10 to 30 times greater than the impact reported in the DEIR.
- No effort is made to assess cumulative impacts. My calculations show that the proposed projects for the Hollywood area exceed SCAG housing and employment projections by 236 percent and 588 percent, respectively for the year 2027. Even by 2040, SCAG projections are exceeded by 154 percent and 315 percent, respectively. Impact to the community is significant and will only worsen as new projects are proposed and developed.

Please see attached comments for specific issues regarding the assessment of Air Quality (Section IV\_A and Appendix B), Project Alternative (Section V), and Other CEQA Considerations (Section VI).

Thank you for your time and consideration.

Respectfully,

Michael Callahan, PE

# DRAFT EIR COMMENTS 1360 N VINE ST PROJECT

Case Number ENV-2016-3778-EIR Los Angeles Council District 13 Hollywood Community Plan Area Date Submitted: 15 July 2022

> Michael Callahan, PE mshawnme@hotmail.com

## A. General Comments

While the Draft Environmental Impact Report (DEIR) initially appears to be comprehensive, I find it lacks a clear presentation and analysis of the data. One is forced to dig through hundreds of repetitive pages of boiler plate text and calculation worksheets to find key modeling assumptions. Major sections of the DEIR do not supply a clear introduction and the lack of summary tables makes it difficult for the reader to follow the discussion.

The level of analysis is lacking. No effort is made to assess, either quantitatively or qualitatively, the potential impact of air toxic emissions. Reliance on a 30-year-old document is not a valid excuse for ignoring this issue. Little effort is made to assess cumulative impacts and the selected area of impact is too broad to supply meaning, Impacts are made to appear trivial by expanding the impact area far beyond the local area. My assessment of impacts to the Hollywood area shows that cumulative impacts are substantial, and that the area is already over-built.

The DEIR is overly complex and hard to follow because the applicant has not submitted a well-defined project. One would assume that a developer looking to invest money in a project of this size would already know specifically what they wanted to build. The applicant should be instructed to select one design (residential or office) and revise the DEIR accordingly.

## B. Section IV\_A – Air Quality

## B.1 <u>Air Toxics</u>

The Draft EIR is inadequate in its assessment of potential impacts due to air toxics. In fact, the DEIR dismisses this topic completely. In addressing air toxics, it is important to note:

- The products of diesel fuel combustion (i.e., acrolein, benzene, etc.) are of major concern. The DEIR ignores these impacts by stating that long-term impacts would not result given the construction schedule of 38 months and that SCAQMD CEQA guidance does not require a health risk assessment for short-term construction emissions.
- The SCAQMD CEQA guidance document was issued in April 1993 with slight revision in November of that year. No updates have been issued to date and copies are not available

online for review. It is my belief that the field of environmental toxicology has advanced in the last 30 years and that it is a disservice to the public to not even attempt an assessment.

- It is clearly recognized by others that young children can suffer long-term health effects from short-term exposure to toxins. In general, children are more vulnerable than adults to air pollutants because they have higher inhalation rates, narrower airways, and less mature immune systems.
- Other air agencies in the state of California do recognize the potential adverse and serious health impacts due to short-term exposure from construction emissions and require the potential impacts to be assessed.

I strongly urge the report authors to conduct a "look-up" level health risk assessment as a minimum attempt in addressing the issue of air toxics. I call your attention to the Bay Area AQMD report "Screening Tables for Air Toxics Evaluation During Construction," May 2010. This document clearly supplies a means of assessing the impacts of short-term exposures.

## C. Appendix B – Air Quality

Project air emissions were estimated by Eyestone Environmental, LLC using the SCAQMD recommended model CalEEMod (Version 2016.3.2). CalEEMod uses various canned models to estimate emissions for different construction and operating phases of the project. The model supplies a default set of data if site-specific data is not available.

It is difficult to assess the air emission estimate section because major modeling assumptions are buried in the calculation worksheets. The text supplies a general description of the method used but does not show where in the worksheets the calculations can be found. Some worksheets may be improperly formatted, with information cut off on the left side. Other worksheets are blank forms that present no data of use. The overall presentation and format make it difficult to review.

## C.1 Off-Road Equipment

A major generator of criteria pollutants during construction is the operation of off-road diesel-fuel equipment. Emissions are related to the size, load factor, usage, and number of equipment items present on site. Questions and comments about off-road equipment follows:

- The number of equipment items shown in the calculation worksheets appear to be low. Large projects of this size often employ multiple crews throughout construction with each crew having access to their own set of construction equipment.
- The air emission tables for construction do not account for an electric generator set. A gen-set is included in the estimation of energy usage in Appendix E, but it does not appear in the air emission section.
- The energy modeling assumption of 2 hours per day usage for the gen-set appears to be low. What safeguards will be taken to limit generator use to no more than 2 hours per day?
- No entries are shown for portable light generators. While it is assumed that all work will be conducted during daylight hours, some amount of lighting will likely be needed for subsurface work and for work in building interiors.
- Will the construction site be lit at night for security? If so, are there plans to use the existing electric grid, or will portable light generators be employed?
- To ensure modeled emissions are not exceeded, what controls will be in place to limit the amount of equipment brought on site? What will prevent the construction contractor from renting and using more equipment than modeled? What will prevent the contractor from adopting a ten-hour or 12-hour workday, or running two shifts to accelerate the schedule?
- Will the SCAQMD impose a Construction Monitoring Plan to require the daily tracking and reporting of equipment usage and fuel consumption? Such plans have been required by the SCAQMD at some industrial facilities during construction.

## C.2 On-Road Equipment

How does the construction emission model account for diesel emissions from on-road haulage and cement trucks? I did not see any estimate of cubic yards of soil extracted and cement poured and how that relates to the number of trucks needed. Though these on-road trucks are mobile sources subject to CARB authority, these emission sources should be included in the emission estimate while operating at the site.

## C.3 Fugitive Dust

The report states that the modeling of fugitive dust emissions follows AP-42 Section 11.9 Western Coal Operations. This section may not be proper for the modeling of fugitive dust emissions given the

physical differences between soil and coal. It is suggested that AP-42 Chapter 13.2.2 Heavy Construction Operations be reviewed and incorporated (note: some of the emission factors in Section 13.2.2 default to Section 11.9, but not all).

AP-42 Chapter 11.9 supplies PM emission factors in terms of pounds per VMT for off-road travel and pounds per ton for stockpiling and haulage. Have the calculations accounted for dust generation during the loading of soil into haul trucks? What is the PM control efficiency for watering during this activity?

A statement is made in the DEIR that watering will be conducted 3 times a day. I assume this relates to the control of dust emissions from access roads and pathways. How much water will be sprayed to control dust while loading soil into the haul trucks. How much water will be used for the truck and tire wash? Has all of this water use been accounted for in Section IV\_F Water?

## C.4 <u>Greenhouse Gas Emissions</u>

Greenhouse gas emissions are estimated in the DEIR by calculating energy usage via the CalEEMod model and then applying a carbon intensity (CI) factor for the build out year. The CI factors used for modeling are reportedly from SB100, Renewable Portfolio Standards. These factors appear to be highly optimistic, and they underestimate GHG emissions.

According to the City of Los Angeles publication "L.A.'s Green New Deal Annual Report, 2021-2022," the LADWP generated about 13 million MWh of electric power and emitted 7 million MT of CO2 equivalent in the year 2020 (page 16). This is equivalent to a CI factor of 1,187 lbs/MWh compared to a CI factor of 733 lbs/MWh used in the DEIR.

Clearly, the DEIR CI factor underestimates potential GHG emissions for the year 2020. A conservative modeling approach would assume a straight-line interpolation between 1,187 lbs/MWh for 2020 (given) and 0 lbs/MWh for 2045. These two datapoints result in a CI factor of 950 lbs/MWh for the build out year 2025. Thus, GHG emissions reported in the DEIR are under-estimated by 35 percent.

## C.5 <u>Wastewater Treatment</u>

The CalEEMod model bases annual emissions related to water supply, treatment, and distribution on the number of land use units of a given type. It is unclear how the CalEEMod land use types compare to the proposed project.

Will the proposed project include one or more HVAC cooling towers? If yes, the water demand for this equipment should be addressed. The same goes for blowdown and the periodic discharge of biocides and corrosion inhibitors.

The office option includes eight (8) subterranean levels of parking with the lowest level at 83 feet below ground surface. Since the historic high groundwater level is at 45 feet bgs, it seems doubtful that water seepage into the structure can be prevented by passive means only. An active pump discharge system will likely be required. Note that Appendix H – Soils Letter clearly states that active dewatering will be needed to protect the foundation. This is another disconnect in the DEIR between sections.

#### D. Section V – Alternatives

The DEIR is plagued by an analysis of excessive options and alternatives. The failure of the applicant to clearly define and limit project scope to that of a residential project or an office project adds complexity. It should not fall on the public to have to read excessive repetitive text that lacks the benefit of a clear presentation.

Overall, the number of alternatives and options analyzed appears to be excessive. Options about reduced density do not add to the understanding of potential impacts. What is the basis for the 25 percent reduction? Meaningful project alternatives include Alternative 1 (No Project/No Build) and Alternative 3 (Development in Accordance with Existing Zoning). Why does Alternative 3 for the office option require the splitting out of a fourth alternative? The logic is unclear and not reported.

I also question the inclusion of the alternatives to reduce significant noise and vibration impacts by extending the schedule or by reducing equipment usage. These are not project alternatives but are potential mitigation measures. The discussion of these measures would be better presented under Chapter VI Other CEQA – Noise.

## E. Section VI – Other CEQA Considerations

## E.1 On Site Construction Noise

The text mentions mitigation measure NOI-MM-1 without supplying a description of the measure. How will this measure be implemented? Is it a movable or fixed mitigation measure? How will compliance be monitored and insured? The reader should not have to search through an extensive document to find out what is being discussed.

The text does not address other practical mitigation measures to control noise and vibration. One major activity associated with noise and vibration is the placement of pilings. What type of equipment will be used for this activity: pile driver or rotary drilling? Rotary drilling versus impact driving should be looked at as a potential mitigation measure.

Objectionable noise is also created by diesel powered construction equipment such as back-hoes, front end loaders, etc. No mention is made as to the use of electric equipment. Electric equipment tends to be quieter and avoids air emissions associated with diesel ICE. Electric construction equipment is rapidly entering the market and its use should be promoted, where possible.

The on-site construction equipment monitoring plan should include routine noise monitoring at the fence-line. When noise levels exceed a pre-set limit, measures should be taken to reduce equipment usage. The equipment brought onsite should be periodically checked for excessive noise per the manufacturer's performance data.

## E.2 Energy Consumption

The DEIR routinely compares overall utility demand to the supply and infrastructure service capability of the LADWP. Utility demands should be compared to local utility demands, not the overall city. Has the LADWP verified that the electric grid that serves the area can manage the increased demand? To what extent will the added load increase the potential for brownouts or service interruption? Assessing the local impact should also be performed for other utilities such as water and wastewater.

## E.3 <u>Cumulative Impacts</u>

The Environmental Settings section of the DEIR presents a detailed inventory of various projects in the Hollywood area, but Chapter VI (Other CEQA Issues) does not supply a meaningful analysis of cumulative impact. The DEIR analysis is limited to comparing the expected increase in dwelling units for this project to the net increase in dwelling units projected for the city overall.

As expected, the level of regional impact reported in the DEIR is low. This is because one has taken a project that affects a specific location and selected too large an impact area. My work experience in developing protocols for the assessment of critical infrastructure taught me that impact tends to be inversely related to the scope of inquiry (i.e., local, regional, state, and nation). In my view, the proper scope for assessing impact is to compare this project, and all projects in the Hollywood area, to the

projected increases for the Hollywood area. The table below presents a summary of my analysis. Discussion follows.

| Projection    | Dwelling Units     |          | Employment |             |  |
|---------------|--------------------|----------|------------|-------------|--|
|               | Number Percent (b) |          | Number     | Percent (b) |  |
| Cumulative    | 13,848             | <i>'</i> | 25,211     | <b>'</b>    |  |
| SCAG 2027     | 4,125              | 336 %    | 3,667      | 688 %       |  |
| SCAG 2040     | 9,000              | 154 %    | 8,000      | 315 %       |  |
| DHCP 2027     | 11,917             | 116 %    | 10,541     | 239 %       |  |
| DHCP 2040 (a) | 26,000             | 53 %     | 23,000     | 110%        |  |

## Summary of Cumulative Impact to Hollywood Community

a) Projections shown are mid-point values.

b) Compared to projection. Exceedance is percent minus 100.

## E.3.1 Housing

The DEIR estimates the project will result in a net increase of 429 dwelling units in the year 2027. This increase is 10.4 percent of the total projected increase for Hollywood by SCAG and 3.6 percent of the increase projected by DHCP. One could say that this level of impact is minor, but it is 10 to 30 times greater than the 0.35 percent of total increase reported in the DEIR.

## Housing Projections for the Hollywood Community

| Source  | SCAG    | SCAG    | SCAG  | DHCP    | DHCP    | DHCP   |
|---------|---------|---------|-------|---------|---------|--------|
| Year    | 2016    | 2040    | 2027  | 2016    | 2040    | 2027   |
| Housing | 104,000 | 113,000 | 4,125 | 104,000 | 130,000 | 11,917 |

a) All data obtained from the Draft Hollywood Community Plan dated August 2021.

b) Numbers shown for DHCP are mid-point values.

c) Year 2027 projection assumes linear growth from 2016 to 2040.

For the assessment of cumulative impact, the DEIR lists 102 development projects in the area (Table III-1). The listing was compiled in 2018 so some projects may have dropped off the list while others should be added. The listing is conservative in that it does not address the recent change in law which promotes the building of Accessory Dwelling Units.

Table III-1 of the DEIR lists a total of 13,419 dwelling units, or 13,848 units with the inclusion of this project. These 13,848 dwelling units exceed the SCAG projection of 4,125 for 2027 by 236 percent and

the projection of 9,000 for 2040 by 54 percent. The DHCP projection of 11,917 dwelling units for 2027 is exceeded by 19 percent while the 13,848 units are well within the 2040 projection. Since the DCHP is currently being challenged, it is unknown how future projections will change.

## E.3.2 Employment

The DEIR estimates the office option will create 1,818 jobs by year 2027. This increase accounts for 50 percent of the increase projected by SCAG and 17 percent projected by DHCP for the Hollywood area. These increases are 10 to 28 times greater than the 1.8 percent of city-wide increase reported.

## **Employment Projections for the Hollywood Community**

| Source  | SCAG    | SCAG    | SCAG  | DHCP    | DHCP    | DHCP   |
|---------|---------|---------|-------|---------|---------|--------|
| Year    | 2016    | 2040    | 2027  | 2016    | 2040    | 2027   |
| Workers | 101,000 | 119,000 | 3,667 | 104,000 | 127,000 | 10,541 |

a) All data obtained from the Draft Hollywood Community Plan dated August 2021.

b) Numbers shown for DHCP are mid-point values.

c) Year 2027 projection assumes linear growth from 2016 to 2040.

Using the square footage and hotel room data presented in Table III-1 of the DEIR, I have estimated the cumulative number of new employees in the Hollywood community (see Attachment A). Median square footage and hotel room per worker data was obtained from the LADOT VMT Calculator Methodology report (May 2020) and the USEIA Commercial Buildings Energy Consumption Survey (CBECS) website. It is noted that the LADOT data is highly conservative compared to the CBECS data. The reason for this difference is not known.

The cumulative increase in employment in the Hollywood area, including the proposed project, is estimated to be 25,211 workers. This estimate is conservative since support jobs such as delivery drivers, gardeners, etc., are not included. Estimated employment exceeds SCAG projections by 588 percent for 2027 and by 215 percent for 2040. DHCP employment projections are exceeded by 139 percent for 2027 and by 10 percent for 2040.

## E.3.3 Conclusion

Overall, this limited analysis clearly shows that the Hollywood community is being subject to major cumulative impact. The total number of proposed units (as of 2018) and jobs created substantially exceed SCAG projections. Cumulative impacts will only grow larger and worse over time as new projects

are approved and built. Since SCAG projections are used by other city agencies to develop long-range plans, it is likely that the available community infrastructure is lagging to meet demand.

## E.4. Potential Secondary Effects

The discussion of noise mitigation measures should be moved up into the section on noise and not be buried in this section. Please discuss why Mitigation Measure NOI-MM-2 only applies to two of the six historic structures at the site. The text implies this measure will also help mitigate vibration effects on off-site buildings. This mitigation measure (vibration monitoring) should be kept even if the historic structures are temporarily moved off site.

#### ATTACHMENT A

| Cummulative Employment in the Hollywood Community |                     |            |            |                  |  |  |
|---|---------------------|------------|------------|------------------|--|--|
| Land Use (a)                                      | Area<br>(sq. ft.)   | Rooms      | Factor (b) | Employees        |  |  |
| Commercial  | 65,888              |            | 500        | 131.8            |  |  |
| Commercial  | 92,500              |            | 500        | 185.0            |  |  |
| Commercial  | 95,820              |            | 500        | 191.6            |  |  |
| Commercial  | 1,289               |            | 500        | 2.6              |  |  |
| Commercial<br>Commercial                          | 2,012<br>2,500      |            | 500<br>500 | 4.0<br>5.0       |  |  |
| Commercial  | 2,500               |            | 500        | 5.4              |  |  |
| Commercial  | 3,000               |            | 500        | 6.0              |  |  |
| Commercial  | 4,747               |            | 500        | 9.5              |  |  |
| Commercial  | 5,500               |            | 500        | 11.0             |  |  |
| Commercial  | 12,785              |            | 500        | 25.6             |  |  |
| Commercial  | 19,500<br>24,900    |            | 500<br>500 | 39.0<br>49.8     |  |  |
| Commercial<br>Commercial                          | 24,900              |            | 500        | 49.8             |  |  |
| Commercial  | 33,980              |            | 500        | 68.0             |  |  |
| Commercial  | 35,000              |            | 500        | 70.0             |  |  |
| Community Center                                  | 45,000              |            | 1,800      | 25.0             |  |  |
| Grocery   | 45,432              |            | 250        | 181.7            |  |  |
| Hospital  | 211,992             |            | 556        | 381.3            |  |  |
| Hotel (c)   | 90,000              | 200        | 0.5        | 100.0            |  |  |
| Hotel (c)<br>Hotel (c)                            | 101,250<br>36,000   | 225<br>80  | 0.5        | 112.5<br>40.0    |  |  |
| Hotel (c)   | 81,000              | 180        | 0.5        | 40.0             |  |  |
| Hotel (c)   | 50,400              | 112        | 0.5        | 56.0             |  |  |
| Hotel (c)   | 56,250              | 125        | 0.5        | 62.5             |  |  |
| Hotel (c)   | 90,000              | 200        | 0.5        | 100.0            |  |  |
| Hotel (c)   | 54,900              | 122        | 0.5        | 61.0             |  |  |
| Hotel (c)   | 28,800              | 64         | 0.5        | 32.0             |  |  |
| Hotel (c)   | 51,300<br>99,450    | 114<br>221 | 0.5        | 57.0<br>110.5    |  |  |
| Hotel (c)<br>Hotel (c)                            | 99,450              | 221        | 0.5        | 10.5             |  |  |
| Hotel (c)   | 59,850              | 133        | 0.5        | 66.5             |  |  |
| Hotel (c)   | 95,400              | 212        | 0.5        | 106.0            |  |  |
| Hotel (c)   | 97,200              | 216        | 0.5        | 108.0            |  |  |
| Hotel (c)   | 75,600              | 168        | 0.5        | 84.0             |  |  |
| Hotel (c)   | 41,850              | 93         | 0.5        | 46.5             |  |  |
| Hotel (c)   | 70,200              | 156        | 0.5        | 78.0             |  |  |
| Hotel (c)   | 45,900              | 102        | 0.5        | 51.0             |  |  |
| Hotel (c)<br>Hotel (c)                            | 138,600<br>123,750  | 308<br>275 | 0.5<br>0.5 | 154.0<br>137.5   |  |  |
| Hotel (c)   | 35,100              | 78         | 0.5        | 39.0             |  |  |
| Office  | 2,570               |            | 250        | 10.3             |  |  |
| Office  | 3,580               |            | 250        | 14.3             |  |  |
| Office  | 4,074               |            | 250        | 16.3             |  |  |
| Office  | 7,800               |            | 250        | 31.2             |  |  |
| Office  | 17,040              |            | 250        | 68.2             |  |  |
| Office<br>Office                                  | 30,933<br>38,440    |            | 250<br>250 | 123.7<br>153.8   |  |  |
| Office  | 45.432              |            | 250        | 181.7            |  |  |
| Office  | 53,537              |            | 250        | 214.1            |  |  |
| Office  | 88,750              |            | 250        | 355.0            |  |  |
| Office  | 95,000              |            | 250        | 380.0            |  |  |
| Office  | 100,000             |            | 250        | 400.0            |  |  |
| Office  | 100,386             |            | 250<br>250 | 401.5            |  |  |
| Office  | 100,120             |            | 250<br>250 |                  |  |  |
| Office<br>Office                                  | 114,725<br>126,980  |            | 250        | 458.9<br>507.9   |  |  |
| Office  | 202,400             |            | 250        | 809.6            |  |  |
| Office  | 210,000             |            | 250        | 840.0            |  |  |
| Office  | 241,568             |            | 250        | 966.3            |  |  |
| Office  | 274,000             |            | 250        | 1,096.0          |  |  |
| Office  | 285,719             |            | 250        | 1,142.9          |  |  |
| Office  | 422,610             |            | 250        | 1,690.4          |  |  |
| Office<br>Other                                   | 1,273,600<br>40,927 |            | 250<br>250 | 5,094.4<br>163.7 |  |  |
| Restaurant  | 40,927              |            | 250        | 2.6              |  |  |
| Restaurant  | 1,750               |            | 250        | 7.0              |  |  |
| Restaurant  | 1,885               |            | 250        | 7.5              |  |  |
| Restaurant  | 1,993               |            | 250        | 8.0              |  |  |
| Restaurant  | 2,750               |            | 250        | 11.0             |  |  |
| Restaurant  | 2,800               |            | 250        | 11.2             |  |  |
| Restaurant<br>Restaurant                          | 3,000               |            | 250<br>250 | 12.0             |  |  |
| Restaurant<br>Restaurant                          | 3,200<br>3,270      |            | 250<br>250 | 12.8<br>13.1     |  |  |
| Restaurant  | 3,929               |            | 250        | 15.7             |  |  |
| Restaurant  | 4,000               |            | 250        | 16.0             |  |  |
| Restaurant  | 4,225               |            | 250        | 16.9             |  |  |
| Restaurant  | 4,354               |            | 250        | 17.4             |  |  |
| Restaurant  | 5,000               |            | 250        | 20.0             |  |  |
| Restaurant  | 5,000               |            | 250        | 20.0             |  |  |
| Restaurant  | 5,000               |            | 250        | 20.0             |  |  |

#### ATTACHMENT A

| Cummulative Employment in the Hollywood Community |                      |       |            |                        |  |  |
|---|----------------------|-------|------------|------------------------|--|--|
| Land Use (a)                                      | Area<br>(sq. ft.)    | Rooms | Factor (b) | Employees              |  |  |
| Restaurant  | 5,064                |       | 250        | 20.3                   |  |  |
| Restaurant  | 5,400                |       | 250        | 21.6                   |  |  |
| Restaurant  | 5,979                |       | 250        | 23.9                   |  |  |
| Restaurant  | 6,980                |       | 250        | 27.9                   |  |  |
| Restaurant<br>Restaurant                          | 7,000<br>9,000       |       | 250<br>250 | 28.0<br>36.0           |  |  |
| Restaurant  | 10,000               |       | 250        | 40.0                   |  |  |
| Restaurant  | 10,000               |       | 250        | 40.0                   |  |  |
| Restaurant  | 11,460               |       | 250        | 45.8                   |  |  |
| Restaurant  | 12,000               |       | 250        | 48.0                   |  |  |
| Restaurant  | 12,355               |       | 250        | 49.4                   |  |  |
| Restaurant  | 12,840               |       | 250        | 51.4                   |  |  |
| Restaurant  | 15,000               |       | 250        | 60.0                   |  |  |
| Restaurant  | 15,290               |       | 250        | 61.2                   |  |  |
| Restaurant  | 16,135               |       | 250        | 64.5                   |  |  |
| Restaurant  | 17,607               |       | 250        | 70.4                   |  |  |
| Restaurant  | 20,650               |       | 250        | 82.6                   |  |  |
| Restaurant  | 34,000               |       | 250        | 136.0                  |  |  |
| Restaurant<br>Retail                              | 87,500<br>76,500     |       | 250<br>500 | 350.0<br>153.0         |  |  |
| Retail  | 76,500<br>87,500     |       | 500        | 153.0                  |  |  |
| Retail  | 89,200               |       | 500        | 175.0                  |  |  |
| Retail  | 92,500               |       | 500        | 185.0                  |  |  |
| Retail  | 163,862              |       | 500        | 327.7                  |  |  |
| Retail  | 377,900              |       | 500        | 755.8                  |  |  |
| Retail  | 985                  |       | 500        | 2.0                    |  |  |
| Retail  | 1,900                |       | 500        | 3.8                    |  |  |
| Retail  | 2,750                |       | 500        | 5.5                    |  |  |
| Retail  | 3,117                |       | 500        | 6.2                    |  |  |
| Retail  | 3,350                |       | 500        | 6.7                    |  |  |
| Retail  | 3,580                |       | 500        | 7.2                    |  |  |
| Retail  | 3,700                |       | 500        | 7.4                    |  |  |
| Retail  | 3,739                |       | 500        | 7.5                    |  |  |
| Retail  | 3,760                |       | 500        | 7.5                    |  |  |
| Retail  | 3,929                |       | 500        | 7.9                    |  |  |
| Retail<br>Retail                                  | 4,066 4,700          |       | 500<br>500 | 8.1<br>9.4             |  |  |
| Retail  | 5,000                |       | 500        | 9.4                    |  |  |
| Retail  | 5,546                |       | 500        | 11.1                   |  |  |
| Retail  | 6,250                |       | 500        | 12.5                   |  |  |
| Retail  | 6,634                |       | 500        | 13.3                   |  |  |
| Retail  | 6,634                |       | 500        | 13.3                   |  |  |
| Retail  | 7,700                |       | 500        | 15.4                   |  |  |
| Retail  | 9,000                |       | 500        | 18.0                   |  |  |
| Retail  | 10,000               |       | 500        | 20.0                   |  |  |
| Retail  | 10,370               |       | 500        | 20.7                   |  |  |
| Retail  | 11,020               |       | 500        | 22.0                   |  |  |
| Retail  | 12,000               |       | 500        | 24.0                   |  |  |
| Retail  | 12,000               |       | 500        | 24.0                   |  |  |
| Retail  | 12,030               |       | 500        | 24.1                   |  |  |
| Retail  | 12,160               |       | 500        | 24.3                   |  |  |
| Retail<br>Retail                                  | 13,813               |       | 500<br>500 | 27.6<br>30.0           |  |  |
| Retail  | 15,000<br>15,300     |       | 500        | 30.0                   |  |  |
| Retail  | 16,360               |       | 500        | 30.0                   |  |  |
| Retail  | 20,000               |       | 500        | 40.0                   |  |  |
| Retail  | 20,650               |       | 500        | 41.3                   |  |  |
| Retail  | 26,000               |       | 500        | 52.0                   |  |  |
| Retail  | 30,887               |       | 500        | 61.8                   |  |  |
| Retail  | 32,272               |       | 500        | 64.5                   |  |  |
| Retail  | 36,600               |       | 500        | 73.2                   |  |  |
| Retail  | 37,057               |       | 500        | 74.1                   |  |  |
| Social Services                                   | 50,325               |       | 500        | 100.7                  |  |  |
| Stage   | 21,000               |       | 1,000      | 21.0                   |  |  |
| Studio  | 38,072               |       | 1,000      | 38.1                   |  |  |
| Studio  | 202,400              |       | 1,000      | 202.4                  |  |  |
| Supermarket                                       | 33,500               |       | 250        | 134.0                  |  |  |
| Sub-Total   | 8,267,135<br>475,435 | 3,594 |            | 23,393                 |  |  |
| 1360 Vine (d)<br>Total                            | 475,435<br>8,742,570 |       |            | 1,818<br><b>25,211</b> |  |  |

a) Table III-1 of the Vine 1360 DEIR
b) Workers per sq/ft or per room. Most factors are from LADOT VMT Methodology
c) Hotel area based on 450 sq ft per room
d) Office option excluding bungalows

Michael Callahan mshawnme@hotmail.com July 24, 2022

Rey Fukuda City of Los Angeles Department of City Planning 221 N. Figueroa Street, Suite 1350 Los Angeles, CA 90012-2639 (213) 847-3686 rey.fukuda@lacity.org

Re: Case Number ENV-2016-3778-EIR

Attached are my comments regarding the Draft Environmental Impact Report (DEIR) for the proposed large-scale development project at 1360 N Vine Steet in Hollywood.

Overall, the presentation is very difficult to follow because the applicant has submitted two DEIRs (one for residential use, one for office and commercial use) combined and intermingled into one report. Key modeling assumptions are buried deep in the calculation worksheets and are not summarized in an easy to find table. Major issues of concern include:

- No effort is made to assess, either quantitatively or qualitatively, the potential impact of air toxic emissions. Reliance on a 30-year-old SCAQMD document is not a valid excuse for ignoring this issue. The applicant should be required to conduct an air toxic assessment.
- The assessment of project impact to the City of Los Angeles is too broad in scope and does not represent project impact on the Hollywood community. My calculations show that impact to the community is 10 to 30 times greater than the impact reported in the DEIR.
- No effort is made to assess cumulative impacts. My calculations show that the proposed projects for the Hollywood area exceed SCAG housing and employment projections by 236 percent and 588 percent, respectively for the year 2027. Even by 2040, SCAG projections are exceeded by 154 percent and 315 percent, respectively. Impact to the community is significant and will only worsen as new projects are proposed and developed.

Please see attached comments for specific issues regarding the assessment of Air Quality (Section IV\_A and Appendix B), Project Alternative (Section V), and Other CEQA Considerations (Section VI).

Thank you for your time and consideration.

Respectfully,

Michael Callahan, PE

# DRAFT EIR COMMENTS 1360 N VINE ST PROJECT

Case Number ENV-2016-3778-EIR Los Angeles Council District 13 Hollywood Community Plan Area Date Submitted: 15 July 2022 Date Revised: 23 July 2022

> Michael Callahan, PE mshawnme@hotmail.com

#### 1. GENERAL COMMENTS

While the Draft Environmental Impact Report (DEIR) initially appears to be comprehensive, I find it lacks a clear presentation and analysis of the data. One is forced to dig through hundreds of repetitive pages of boiler plate text and calculation worksheets to find key modeling assumptions. Major sections of the DEIR do not supply a clear introduction and the lack of summary tables makes it difficult for the reader to follow the discussion.

The level of analysis is lacking. No effort is made to assess, either quantitatively or qualitatively, the potential impact of air toxic emissions. Reliance on a 30-year-old document is not a valid excuse for ignoring this issue. Little effort is made to assess cumulative impacts and the selected area of impact is too broad to supply meaning, Impacts are made to appear trivial by expanding the impact area far beyond the local area. My assessment of impacts to the Hollywood area shows that cumulative impacts are substantial, and that the area is already over-built.

The DEIR is overly complex and hard to follow because the applicant has not submitted a well-defined project. One would assume that a developer looking to invest money in a project of this size would already know specifically what they wanted to build. The applicant should be instructed to select one design (residential or office) and revise the DEIR accordingly.

## 2. SECTION IV\_A – AIR QUALITY

#### 2.1 <u>Air Toxics</u>

The Draft EIR is inadequate in its assessment of potential impacts due to air toxics. In fact, the DEIR dismisses this topic completely. In addressing air toxics, it is important to note:

- The products of diesel fuel combustion (i.e., acrolein, benzene, etc.) are of major concern. The DEIR ignores these impacts by stating that long-term impacts would not result given the construction schedule of 38 months and that SCAQMD CEQA guidance does not require a health risk assessment for short-term construction emissions.
- The SCAQMD CEQA guidance document was issued in April 1993 with slight revision in November of that year. No updates have been issued to date and copies are not available

online for review. It is my belief that the field of environmental toxicology has advanced in the last 30 years and that it is a disservice to the public to not even attempt an assessment.

- It is clearly recognized by others that young children can suffer long-term health effects from short-term exposure to toxins. In general, children are more vulnerable than adults to air pollutants because they have higher inhalation rates, narrower airways, and less mature immune systems.
- Other air agencies in the state of California do recognize the potential adverse and serious health impacts due to short-term exposure from construction emissions and require the potential impacts to be assessed.

I strongly urge the report authors to conduct a "look-up" level health risk assessment as a minimum attempt in addressing the issue of air toxics. I call your attention to the Bay Area AQMD report "Screening Tables for Air Toxics Evaluation During Construction," May 2010. This document clearly supplies a means of assessing the impacts of short-term exposures.

## 3. APPENDIX B – AIR QUALITY

Project air emissions were estimated by Eyestone Environmental, LLC using the SCAQMD recommended model CalEEMod (Version 2016.3.2). CalEEMod uses various canned models to estimate emissions for different construction and operating phases of the project. The model supplies a default set of data if site-specific data is not available.

It is difficult to assess the air emission estimate section because major modeling assumptions are buried deep in the calculation worksheets. The text supplies a general description of the method used but does not show where in the worksheets the calculations can be found. Some worksheets may be improperly formatted, with information cut off on the left side. Other worksheets are blank forms that present no data of use. The overall presentation and format make it difficult to review.

Air emissions for construction and operation were modeled for winter conditions only. Discussion should be provided as to how emissions are affected by seasonal variation. Many of the emission factors and calculation methods employed are sensitive to seasonal variation. The latest version of CalEEMod (Version 2022.1) now considers seasonality in the presentation of summer and winter outputs. Seasonality can result in considerable differences in maximum daily summer and winter

results. Since the threshold criteria for significant impact is based on maximum daily emissions, regardless of season, it is highly important that all maximum emissions be reported.

CalEEMod Version 2022.1 has been revised to also include climate risk and health and equity analysis. Many of the defaults and underlying calculations for emissions quantification have been updated and refined such as traffic analysis zone-specific vehicle trip data and electricity intensity factors forecasted through 2050. Reporting features have been expanded to include customizable reports. This is something solely lacking in the current work where major assumptions are buried deep in repetitive tables. The project applicant should update the modeling to show the impact of seasonality and to use the best factors/methodology available. Their basis for using Version 2016.3.2 no longer applies.

#### 3.1 <u>Construction Schedule</u>

The report should provide the reader with a clear description of construction activity. Attention should be paid to the major differences between the assumed schedule and the default schedule provided within CalEEMod. The modeled schedule is 50 percent longer in duration than the default schedule as shown in the table below.

| <b>Construction Emissions - Residential Option</b> |                   |                   |                      |  |  |  |  |
|--|-------------------|-------------------|----------------------|--|--|--|--|
| Phase  | Days<br>(default) | Days<br>(modeled) | NOx<br>(max lbs/day) |  |  |  |  |
| 1. Demolition                                      | 20                | 54                | 17.74                |  |  |  |  |
| 2. Grading   | 30                | 168               | 51.61                |  |  |  |  |
| 3. Mat Foundation                                  | 300               | 4                 | 55.15                |  |  |  |  |
| 4. Foundation                                      | 10                | 131               | 34.59                |  |  |  |  |
| 5. Building Construction                           | 300               | 635               | 25.02                |  |  |  |  |
| 6. Architectural Coating                           | 20                | 87                |                      |  |  |  |  |
| 7. Paving  | 20                | 27                | 9.51                 |  |  |  |  |
| Total  | 700               | 1106              |                      |  |  |  |  |

Why is the grading phase taken to be more than 5 times longer than the default value? Why is the modeled mat foundation phase only 1 percent of the default value? Major differences between the modeled and default construction schedule are not explained in the text. Overall, it appears that a major portion of high emission activity (grading and mat foundation) is shifted into foundation and building construction (two lower emission activities). Reasons for the differences may be valid, but the reader has no way of knowing that the reasons are justified because they are not defined.

The overall schedule of 1,106 days (compared to 700 days), and the assumption of a purely linear schedule, contributes to the under-reporting of potential emissions. My construction experience has been that regardless of the days modelled, the contractor will experience long delays followed by a sudden rush to complete their activity as fast as practical. This will often result in a doubling up of equipment and crews, and even switching to double shifts. Multiple construction phases can occur simultaneously on large projects. Unless easy to monitor and enforceable limits are set by permit, the modeled emissions do not represent reasonably expected maximum emissions.

In addition, the assumption of a purely linear schedule, with each phase following the next, minimizes peak emissions. Simultaneous activity may occur at a large construction site with different portions of the site undergoing different phases of construction. The CalEEMod model easily handles such complex activity. Eyestone Environmental was quick to call out that the reported NOx emissions of 89.75 pounds per day during construction was due to simultaneous activity and they posted a special notice that the result was due to a model "error." Based on Eyestone's claim of model error, all of the emission results based on CalEEMod Version 2016.3.2 are suspect. Eyestone should be directed to fix their model inputs and recalculate emissions using the latest version.

## 3.2 Off-Road Equipment

A major generator of criteria pollutants during construction is the operation of off-road diesel-fuel equipment. Emissions are related to the size, load factor, usage, and number of equipment items present on site. Questions and comments about off-road equipment follows:

- The number of equipment items shown in the calculation worksheets appear to be low. Large projects of this size often employ multiple crews throughout construction with each crew having access to their own set of construction equipment.
- The air emission tables for construction do not account for an electric generator set. A gen-set is included in the estimation of energy usage in Appendix E, but it does not appear in the air emission section.
- The energy modeling assumption of 2 hours per day usage for the gen-set appears to be low. What safeguards will be taken to limit generator use to no more than 2 hours per day?
- No entries are shown for portable light generators. While it is assumed that all work will be conducted during daylight hours, some amount of lighting will likely be needed for subsurface work and for work in building interiors.

- Will the construction site be lit at night for security? If so, are there plans to use the existing electric grid, or will portable light generators be employed?
- To ensure modeled emissions are not exceeded, what controls will be in place to limit the amount of equipment brought on site? What will prevent the construction contractor from renting and using more equipment than modeled? What will prevent the contractor from adopting a ten-hour or 12-hour workday, or running two shifts to accelerate the schedule?
- Will the SCAQMD impose a Construction Monitoring Plan to require the daily tracking and reporting of equipment usage and fuel consumption? Such plans have been required by the SCAQMD at some industrial facilities during construction.

#### 3.3 On-Road Equipment

How does the construction emission model account for diesel emissions from on-road haulage and cement trucks? I did not see any estimate of cubic yards of soil extracted and cement poured and how that relates to the number of trucks needed. Though these on-road trucks are mobile sources subject to CARB authority, these emission sources should be included in the emission estimate while operating at the site. Cement trucks can remain idling for long periods of time while waiting on-site to unload.

#### 3.4 Fugitive Dust

The report states that the modeling of fugitive dust emissions follows AP-42 Section 11.9 Western Coal Operations. This section may not be proper for the modeling of fugitive dust emissions given the physical differences between soil and coal. It is suggested that AP-42 Chapter 13.2.2 Heavy Construction Operations be reviewed and incorporated (note: some of the emission factors in Section 13.2.2 default to Section 11.9, but not all).

AP-42 Chapter 11.9 supplies PM emission factors in terms of pounds per VMT for off-road travel and pounds per ton for stockpiling and haulage. Have the calculations accounted for dust generation during the loading of soil into haul trucks? What is the PM control efficiency for watering during this activity?

A statement is made in the DEIR that watering will be conducted 3 times a day. I assume this relates to the control of dust emissions from access roads and pathways. How much water will be sprayed to control dust while loading soil into the haul trucks. How much water will be used for the truck and tire wash? Has all of this water use been accounted for in Section IV\_F Water?

#### 3.5 Greenhouse Gas Emissions

Greenhouse gas emissions are estimated in the DEIR by calculating energy usage via the CalEEMod model and then applying a carbon intensity (CI) factor for the build out year. The CI factors used for modeling are reportedly from SB100, Renewable Portfolio Standards. These factors appear to be highly optimistic, and they underestimate GHG emissions.

According to the City of Los Angeles publication "L.A.'s Green New Deal Annual Report, 2021-2022," the LADWP generated about 13 million MWh of electric power and emitted 7 million MT of CO2 equivalent in the year 2020 (page 16). This is equivalent to a CI factor of 1,187 lbs/MWh compared to a CI factor of 733 lbs/MWh used in the DEIR.

Clearly, the DEIR CI factor underestimates potential GHG emissions for the year 2020. A conservative modeling approach would assume a straight-line interpolation between 1,187 lbs/MWh for 2020 (given) and 0 lbs/MWh for 2045. These two datapoints result in a CI factor of 950 lbs/MWh for the build out year 2025. Thus, GHG emissions reported in the DEIR are under-estimated by 35 percent.

#### 3.6 <u>Wastewater Treatment</u>

The CalEEMod model bases annual emissions related to water supply, treatment, and distribution on the number of land use units of a given type. It is unclear how the CalEEMod land use types compare to the proposed project.

Will the proposed project include one or more HVAC cooling towers? If yes, the water demand for this equipment should be addressed. The same goes for blowdown and the periodic discharge of biocides and corrosion inhibitors.

The office option includes eight (8) subterranean levels of parking with the lowest level at 83 feet below ground surface. Since the historic high groundwater level is at 45 feet bgs, it seems doubtful that water seepage into the structure can be prevented by passive means only. An active pump discharge system will likely be required. Note that Appendix H – Soils Letter clearly states that active dewatering will be needed to protect the foundation. This is another disconnect in the DEIR between sections.

## 4. SECTION V – ALTERNATIVES

The DEIR is plagued by an analysis of excessive options and alternatives. The failure of the applicant to clearly define and limit project scope to that of a residential project or an office project adds complexity.

It should not fall on the public to have to read excessive repetitive text that lacks the benefit of a clear presentation.

Overall, the number of alternatives and options analyzed appears to be excessive. Options about reduced density do not add to the understanding of potential impacts. What is the basis for the 25 percent reduction? Meaningful project alternatives include Alternative 1 (No Project/No Build) and Alternative 3 (Development in Accordance with Existing Zoning). Why does Alternative 3 for the office option require the splitting out of a fourth alternative? The logic is unclear and not reported.

I also question the inclusion of the alternatives to reduce significant noise and vibration impacts by extending the schedule or by reducing equipment usage. These are not project alternatives but are potential mitigation measures. The discussion of these measures would be better presented under Chapter VI Other CEQA – Noise.

#### 5. SECTION VI – OTHER CEQA CONSIDERATIONS

#### 5.1 On Site Construction Noise

The text mentions mitigation measure NOI-MM-1 without supplying a description of the measure. How will this measure be implemented? Is it a movable or fixed mitigation measure? How will compliance be monitored and insured? The reader should not have to search through an extensive document to find out what is being discussed.

The text does not address other practical mitigation measures to control noise and vibration. One major activity associated with noise and vibration is the placement of pilings. What type of equipment will be used for this activity: pile driver or rotary drilling? Rotary drilling versus impact driving should be looked at as a potential mitigation measure.

Objectionable noise is also created by diesel powered construction equipment such as back-hoes, front end loaders, etc. No mention is made as to the use of electric equipment. Electric equipment tends to be quieter and avoids air emissions associated with diesel ICE. Electric construction equipment is rapidly entering the market and its use should be promoted, where possible.

The on-site construction equipment monitoring plan should include routine noise monitoring at the fence-line. When noise levels exceed a pre-set limit, measures should be taken to reduce equipment

usage. The equipment brought onsite should be periodically checked for excessive noise per the manufacturer's performance data.

## 5.2 Energy Consumption

The DEIR routinely compares overall utility demand to the supply and infrastructure service capability of the LADWP. Utility demands should be compared to local utility demands, not the overall city. Has the LADWP verified that the electric grid that serves the area can manage the increased demand? To what extent will the added load increase the potential for brownouts or service interruption? Assessing the local impact should also be performed for other utilities such as water and wastewater.

## 5.3 <u>Cumulative Impacts</u>

The Environmental Settings section of the DEIR presents a detailed inventory of various projects in the Hollywood area, but Chapter VI (Other CEQA Issues) does not supply a meaningful analysis of cumulative impact. The DEIR analysis is limited to comparing the expected increase in dwelling units for this project to the net increase in dwelling units projected for the city overall.

As expected, the level of regional impact reported in the DEIR is low. This is because one has taken a project that affects a specific location and selected too large an impact area. My work experience in developing protocols for the assessment of critical infrastructure taught me that impact tends to be inversely related to the scope of inquiry (i.e., local, regional, state, and nation). In my view, the proper scope for assessing impact is to compare this project, and all projects in the Hollywood area, to the projected increases for the Hollywood area. The table below presents a summary of my analysis. Discussion follows.

| Projection    | Dwelling Units |             | Employment |             |
|---------------|----------------|-------------|------------|-------------|
|               | Number         | Percent (b) | Number     | Percent (b) |
| Cumulative    | 13,848         | <i>'</i>    | 25,211     | <i>'</i>    |
| SCAG 2027     | 4,125          | 336 %       | 3,667      | 688 %       |
| SCAG 2040     | 9,000          | 154 %       | 8,000      | 315 %       |
| DHCP 2027     | 11,917         | 116 %       | 10,541     | 239 %       |
| DHCP 2040 (a) | 26,000         | 53 %        | 23,000     | 110%        |

Summary of Cumulative Impact to Hollywood Community

a) Projections shown are mid-point values.

b) Compared to projection. Exceedance is percent minus 100.

## 5.3.1 Housing

The DEIR estimates the project will result in a net increase of 429 dwelling units in the year 2027. This increase is 10.4 percent of the total projected increase for Hollywood by SCAG and 3.6 percent of the increase projected by DHCP. One could say that this level of impact is minor, but it is 10 to 30 times greater than the 0.35 percent of total increase reported in the DEIR.

| Source  | SCAG    | SCAG    | SCAG  | DHCP    | DHCP    | DHCP   |
|---------|---------|---------|-------|---------|---------|--------|
| Year    | 2016    | 2040    | 2027  | 2016    | 2040    | 2027   |
| Housing | 104,000 | 113,000 | 4,125 | 104,000 | 130,000 | 11,917 |

## Housing Projections for the Hollywood Community

a) All data obtained from the Draft Hollywood Community Plan dated August 2021.

b) Numbers shown for DHCP are mid-point values.

c) Year 2027 projection assumes linear growth from 2016 to 2040.

For the assessment of cumulative impact, the DEIR lists 102 development projects in the area (Table III-1). The listing was compiled in 2018 so some projects may have dropped off the list while others should be added. The listing is conservative in that it does not address the recent change in law which promotes the building of Accessory Dwelling Units.

Table III-1 of the DEIR lists a total of 13,419 dwelling units, or 13,848 units with the inclusion of this project. These 13,848 dwelling units exceed the SCAG projection of 4,125 for 2027 by 236 percent and the projection of 9,000 for 2040 by 54 percent. The DHCP projection of 11,917 dwelling units for 2027 is exceeded by 19 percent while the 13,848 units are well within the 2040 projection. Since the DCHP is currently being challenged, it is unknown how future projections will change.

## 5.3.2 Employment

The DEIR estimates the office option will create 1,818 jobs by year 2027. This increase accounts for 50 percent of the increase projected by SCAG and 17 percent projected by DHCP for the Hollywood area. These increases are 10 to 28 times greater than the 1.8 percent of city-wide increase reported.

Using the square footage and hotel room data presented in Table III-1 of the DEIR, I have estimated the cumulative number of new employees in the Hollywood community (see Attachment A). Median square footage and hotel room per worker data was obtained from the LADOT VMT Calculator Methodology report (May 2020) and the USEIA Commercial Buildings Energy Consumption Survey (CBECS) website. It

is noted that the LADOT data is highly conservative compared to the CBECS data. The reason for this difference is not known.

| Source  | SCAG    | SCAG    | SCAG  | DHCP    | DHCP    | DHCP   |
|---------|---------|---------|-------|---------|---------|--------|
| Year    | 2016    | 2040    | 2027  | 2016    | 2040    | 2027   |
| Workers | 101,000 | 119,000 | 3,667 | 104,000 | 127,000 | 10,541 |

## **Employment Projections for the Hollywood Community**

a) All data obtained from the Draft Hollywood Community Plan dated August 2021.

b) Numbers shown for DHCP are mid-point values.

c) Year 2027 projection assumes linear growth from 2016 to 2040.

The cumulative increase in employment in the Hollywood area, including the proposed project, is estimated to be 25,211 workers. This estimate is conservative since support jobs such as delivery drivers, gardeners, etc., are not included. Estimated employment exceeds SCAG projections by 588 percent for 2027 and by 215 percent for 2040. DHCP employment projections are exceeded by 139 percent for 2027 and by 10 percent for 2040.

## 5.3.3 Conclusion

Overall, this limited analysis clearly shows that the Hollywood community is being subject to major cumulative impact. The total number of proposed units (as of 2018) and jobs created substantially exceed SCAG projections. Cumulative impacts will only grow larger and worse over time as new projects are approved and built. Since SCAG projections are used by other city agencies to develop long-range plans, it is likely that the available community infrastructure is lagging to meet demand.

## 5.4. Potential Secondary Effects

The discussion of noise mitigation measures should be moved up into the section on noise and not be buried in this section. Please discuss why Mitigation Measure NOI-MM-2 only applies to two of the six historic structures at the site. The text implies this measure will also help mitigate vibration effects on off-site buildings. This mitigation measure (vibration monitoring) should be kept even if the historic structures are temporarily moved off site.

#### ATTACHMENT A

| Cummulative Employment in the Hollywood Community |                     |            |            |                  |  |  |
|---|---------------------|------------|------------|------------------|--|--|
| Land Use (a)                                      | Area<br>(sq. ft.)   | Rooms      | Factor (b) | Employees        |  |  |
| Commercial  | 65,888              |            | 500        | 131.8            |  |  |
| Commercial  | 92,500              |            | 500        | 185.0            |  |  |
| Commercial  | 95,820              |            | 500        | 191.6            |  |  |
| Commercial  | 1,289               |            | 500        | 2.6              |  |  |
| Commercial<br>Commercial                          | 2,012<br>2,500      |            | 500<br>500 | 4.0<br>5.0       |  |  |
| Commercial  | 2,500               |            | 500        | 5.4              |  |  |
| Commercial  | 3,000               |            | 500        | 6.0              |  |  |
| Commercial  | 4,747               |            | 500        | 9.5              |  |  |
| Commercial  | 5,500               |            | 500        | 11.0             |  |  |
| Commercial  | 12,785              |            | 500        | 25.6             |  |  |
| Commercial  | 19,500<br>24,900    |            | 500<br>500 | 39.0<br>49.8     |  |  |
| Commercial<br>Commercial                          | 24,900              |            | 500        | 49.8             |  |  |
| Commercial  | 33,980              |            | 500        | 68.0             |  |  |
| Commercial  | 35,000              |            | 500        | 70.0             |  |  |
| Community Center                                  | 45,000              |            | 1,800      | 25.0             |  |  |
| Grocery   | 45,432              |            | 250        | 181.7            |  |  |
| Hospital  | 211,992             |            | 556        | 381.3            |  |  |
| Hotel (c)   | 90,000              | 200        | 0.5        | 100.0            |  |  |
| Hotel (c)<br>Hotel (c)                            | 101,250<br>36,000   | 225<br>80  | 0.5        | 112.5<br>40.0    |  |  |
| Hotel (c)   | 81,000              | 180        | 0.5        | 40.0             |  |  |
| Hotel (c)   | 50,400              | 112        | 0.5        | 56.0             |  |  |
| Hotel (c)   | 56,250              | 125        | 0.5        | 62.5             |  |  |
| Hotel (c)   | 90,000              | 200        | 0.5        | 100.0            |  |  |
| Hotel (c)   | 54,900              | 122        | 0.5        | 61.0             |  |  |
| Hotel (c)   | 28,800              | 64         | 0.5        | 32.0             |  |  |
| Hotel (c)   | 51,300<br>99,450    | 114<br>221 | 0.5        | 57.0<br>110.5    |  |  |
| Hotel (c)<br>Hotel (c)                            | 99,450              | 221        | 0.5        | 10.5             |  |  |
| Hotel (c)   | 59,850              | 133        | 0.5        | 66.5             |  |  |
| Hotel (c)   | 95,400              | 212        | 0.5        | 106.0            |  |  |
| Hotel (c)   | 97,200              | 216        | 0.5        | 108.0            |  |  |
| Hotel (c)   | 75,600              | 168        | 0.5        | 84.0             |  |  |
| Hotel (c)   | 41,850              | 93         | 0.5        | 46.5             |  |  |
| Hotel (c)   | 70,200              | 156        | 0.5        | 78.0             |  |  |
| Hotel (c)   | 45,900              | 102        | 0.5        | 51.0             |  |  |
| Hotel (c)<br>Hotel (c)                            | 138,600<br>123,750  | 308<br>275 | 0.5<br>0.5 | 154.0<br>137.5   |  |  |
| Hotel (c)   | 35,100              | 78         | 0.5        | 39.0             |  |  |
| Office  | 2,570               |            | 250        | 10.3             |  |  |
| Office  | 3,580               |            | 250        | 14.3             |  |  |
| Office  | 4,074               |            | 250        | 16.3             |  |  |
| Office  | 7,800               |            | 250        | 31.2             |  |  |
| Office  | 17,040              |            | 250        | 68.2             |  |  |
| Office<br>Office                                  | 30,933<br>38,440    |            | 250<br>250 | 123.7<br>153.8   |  |  |
| Office  | 45.432              |            | 250        | 181.7            |  |  |
| Office  | 53,537              |            | 250        | 214.1            |  |  |
| Office  | 88,750              |            | 250        | 355.0            |  |  |
| Office  | 95,000              |            | 250        | 380.0            |  |  |
| Office  | 100,000             |            | 250        | 400.0            |  |  |
| Office  | 100,386             |            | 250<br>250 | 401.5            |  |  |
| Office  | 100,120             |            | 250<br>250 |                  |  |  |
| Office<br>Office                                  | 114,725<br>126,980  |            | 250        | 458.9<br>507.9   |  |  |
| Office  | 202,400             |            | 250        | 809.6            |  |  |
| Office  | 210,000             |            | 250        | 840.0            |  |  |
| Office  | 241,568             |            | 250        | 966.3            |  |  |
| Office  | 274,000             |            | 250        | 1,096.0          |  |  |
| Office  | 285,719             |            | 250        | 1,142.9          |  |  |
| Office  | 422,610             |            | 250        | 1,690.4          |  |  |
| Office<br>Other                                   | 1,273,600<br>40,927 |            | 250<br>250 | 5,094.4<br>163.7 |  |  |
| Restaurant  | 40,927              |            | 250        | 2.6              |  |  |
| Restaurant  | 1,750               |            | 250        | 7.0              |  |  |
| Restaurant  | 1,885               |            | 250        | 7.5              |  |  |
| Restaurant  | 1,993               |            | 250        | 8.0              |  |  |
| Restaurant  | 2,750               |            | 250        | 11.0             |  |  |
| Restaurant  | 2,800               |            | 250        | 11.2             |  |  |
| Restaurant<br>Restaurant                          | 3,000               |            | 250<br>250 | 12.0             |  |  |
| Restaurant<br>Restaurant                          | 3,200<br>3,270      |            | 250<br>250 | 12.8<br>13.1     |  |  |
| Restaurant  | 3,929               |            | 250        | 15.7             |  |  |
| Restaurant  | 4,000               |            | 250        | 16.0             |  |  |
| Restaurant  | 4,225               |            | 250        | 16.9             |  |  |
| Restaurant  | 4,354               |            | 250        | 17.4             |  |  |
| Restaurant  | 5,000               |            | 250        | 20.0             |  |  |
| Restaurant  | 5,000               |            | 250        | 20.0             |  |  |
| Restaurant  | 5,000               |            | 250        | 20.0             |  |  |

#### ATTACHMENT A

| Cummulative Employment in the Hollywood Community |                      |       |            |                        |  |  |
|---|----------------------|-------|------------|------------------------|--|--|
| Land Use (a)                                      | Area<br>(sq. ft.)    | Rooms | Factor (b) | Employees              |  |  |
| Restaurant  | 5,064                |       | 250        | 20.3                   |  |  |
| Restaurant  | 5,400                |       | 250        | 21.6                   |  |  |
| Restaurant  | 5,979                |       | 250        | 23.9                   |  |  |
| Restaurant  | 6,980                |       | 250        | 27.9                   |  |  |
| Restaurant<br>Restaurant                          | 7,000<br>9,000       |       | 250<br>250 | 28.0<br>36.0           |  |  |
| Restaurant  | 10,000               |       | 250        | 40.0                   |  |  |
| Restaurant  | 10,000               |       | 250        | 40.0                   |  |  |
| Restaurant  | 11,460               |       | 250        | 45.8                   |  |  |
| Restaurant  | 12,000               |       | 250        | 48.0                   |  |  |
| Restaurant  | 12,355               |       | 250        | 49.4                   |  |  |
| Restaurant  | 12,840               |       | 250        | 51.4                   |  |  |
| Restaurant  | 15,000               |       | 250        | 60.0                   |  |  |
| Restaurant  | 15,290               |       | 250        | 61.2                   |  |  |
| Restaurant  | 16,135               |       | 250        | 64.5                   |  |  |
| Restaurant  | 17,607               |       | 250        | 70.4                   |  |  |
| Restaurant  | 20,650               |       | 250        | 82.6                   |  |  |
| Restaurant  | 34,000               |       | 250        | 136.0                  |  |  |
| Restaurant<br>Retail                              | 87,500<br>76,500     |       | 250<br>500 | 350.0<br>153.0         |  |  |
| Retail  | 76,500<br>87,500     |       | 500        | 153.0                  |  |  |
| Retail  | 89,200               |       | 500        | 175.0                  |  |  |
| Retail  | 92,500               |       | 500        | 185.0                  |  |  |
| Retail  | 163,862              |       | 500        | 327.7                  |  |  |
| Retail  | 377,900              |       | 500        | 755.8                  |  |  |
| Retail  | 985                  |       | 500        | 2.0                    |  |  |
| Retail  | 1,900                |       | 500        | 3.8                    |  |  |
| Retail  | 2,750                |       | 500        | 5.5                    |  |  |
| Retail  | 3,117                |       | 500        | 6.2                    |  |  |
| Retail  | 3,350                |       | 500        | 6.7                    |  |  |
| Retail  | 3,580                |       | 500        | 7.2                    |  |  |
| Retail  | 3,700                |       | 500        | 7.4                    |  |  |
| Retail  | 3,739                |       | 500        | 7.5                    |  |  |
| Retail  | 3,760                |       | 500        | 7.5                    |  |  |
| Retail  | 3,929                |       | 500        | 7.9                    |  |  |
| Retail<br>Retail                                  | 4,066 4,700          |       | 500<br>500 | 8.1<br>9.4             |  |  |
| Retail  | 5,000                |       | 500        | 9.4                    |  |  |
| Retail  | 5,546                |       | 500        | 11.1                   |  |  |
| Retail  | 6,250                |       | 500        | 12.5                   |  |  |
| Retail  | 6,634                |       | 500        | 13.3                   |  |  |
| Retail  | 6,634                |       | 500        | 13.3                   |  |  |
| Retail  | 7,700                |       | 500        | 15.4                   |  |  |
| Retail  | 9,000                |       | 500        | 18.0                   |  |  |
| Retail  | 10,000               |       | 500        | 20.0                   |  |  |
| Retail  | 10,370               |       | 500        | 20.7                   |  |  |
| Retail  | 11,020               |       | 500        | 22.0                   |  |  |
| Retail  | 12,000               |       | 500        | 24.0                   |  |  |
| Retail  | 12,000               |       | 500        | 24.0                   |  |  |
| Retail  | 12,030               |       | 500        | 24.1                   |  |  |
| Retail  | 12,160               |       | 500        | 24.3                   |  |  |
| Retail<br>Retail                                  | 13,813               |       | 500<br>500 | 27.6<br>30.0           |  |  |
| Retail  | 15,000<br>15,300     |       | 500        | 30.0                   |  |  |
| Retail  | 16,360               |       | 500        | 30.0                   |  |  |
| Retail  | 20,000               |       | 500        | 40.0                   |  |  |
| Retail  | 20,650               |       | 500        | 41.3                   |  |  |
| Retail  | 26,000               |       | 500        | 52.0                   |  |  |
| Retail  | 30,887               |       | 500        | 61.8                   |  |  |
| Retail  | 32,272               |       | 500        | 64.5                   |  |  |
| Retail  | 36,600               |       | 500        | 73.2                   |  |  |
| Retail  | 37,057               |       | 500        | 74.1                   |  |  |
| Social Services                                   | 50,325               |       | 500        | 100.7                  |  |  |
| Stage   | 21,000               |       | 1,000      | 21.0                   |  |  |
| Studio  | 38,072               |       | 1,000      | 38.1                   |  |  |
| Studio  | 202,400              |       | 1,000      | 202.4                  |  |  |
| Supermarket                                       | 33,500               |       | 250        | 134.0                  |  |  |
| Sub-Total   | 8,267,135<br>475,435 | 3,594 |            | 23,393                 |  |  |
| 1360 Vine (d)<br>Total                            | 475,435<br>8,742,570 |       |            | 1,818<br><b>25,211</b> |  |  |

a) Table III-1 of the Vine 1360 DEIR
b) Workers per sq/ft or per room. Most factors are from LADOT VMT Methodology
c) Hotel area based on 450 sq ft per room
d) Office option excluding bungalows

Victoria Chang 6235 Afton Place Los Angeles, CA 90028

July 14th, 2022

Rey Fukuda City of Los Angeles, Department of City Planning 221 N Figueroa Street Ste 1350 Los Angeles, CA 90012

Dear Rey Fukuda,

I am a resident and home owner at 6235 Afton Place, Los Angeles CA 90028. I'm writing in regards to ENV-2016-3778-EIR for the project name: 1360 N Vine Street with ONNI Capital LLC as the project applicant. I have read through the DEIR, and wish to submit comments, questions, and mitigation ideas on the project.

The Geo Investigation is from 2016, given that it's 2022 and the project will likely not begin right away, is there a need to get a new investigation? Have the conditions such as the design, location, or elevation changed?

I did not see any reports for Air Quality or Traffic. There should be reports for air quality and potential traffic impacts, so any mitigation measures and monitoring can be put in place. What happens if air quality becomes unhealthy, dangerous for the community? Will air quality tests be done periodically? What implications will the project have on traffic?

Is there a monitoring plan to ensure the processes outlined in "Conclusions & Recommendations" are followed? For example, proper drainage, grading, and waterproofing, and shoring? A few of these are outlined in:

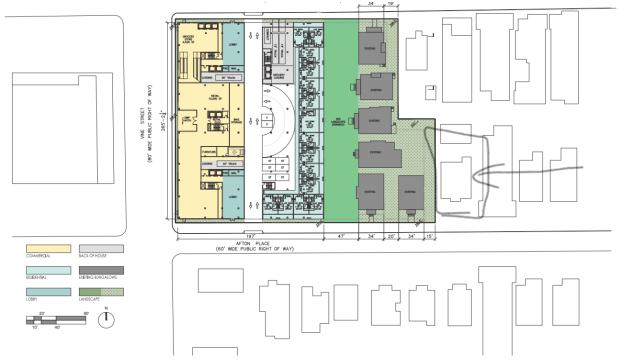
8.1.9 Due to the nature of the proposed design and intent for subterranean levels, waterproofing of subterranean walls and slabs is recommended. Particular care should be taken in the design and installation of waterproofing to avoid moisture problems, or actual water seepage into the structure through any normal shrinkage cracks which may develop in the concrete walls, floor slab, foundations and/or construction joints. The design and inspection of the waterproofing is not the responsibility of the geotechnical engineer. A waterproofing consultant should be retained in order to recommend a product or method, which would provide protection to subterranean walls, floor slabs and foundations."

8.6.1 A preconstruction conference should be held at the site prior to the beginning of grading operations with the owner, contractor, civil engineer and geotechnical engineer in attendance. Special soil handling requirements can be discussed at that time.

8.1.8 Due to the depth of the excavation and the proximity to the property lines, city streets and adjacent offsite structures, excavations will require sloping and/or shoring measures in order to provide a stable excavation. Where shoring is required it is recommended that a soldier pile shoring system be

utilized. In addition, where the proposed excavation will be deeper than and adjacent to an offsite structure, the proposed shoring should be designed to resist the surcharge imposed by the adjacent offsite structure. Recommendations for Temporary Excavations are provided in Section\_8.19 of this report.

My property is right next to the project. What monitoring will there be to make sure drainage and shoring is done properly and does not negatively affect my property? How do I prove the existing condition of my property?



There is a section in the report that says:

8.20.23 Due to the depth of the excavation and proximity to adjacent structures, it is suggested that prior to excavation the existing improvements be inspected to document the present condition. For documentation purposes, photographs should be taken of preconstruction distress conditions and level surveys of adjacent grade and pavement should be considered. During excavation activities, the adjacent structures and pavement should be periodically inspected for signs of distress. In the event that distress or settlement is noted, an investigation should be performed and corrective measures taken so that continued or worsened distress or settlement is mitigated. Documentation and monitoring of the offsite structures and improvements is not the responsibility of the geotechnical engineer.

This project will demolish ~32,000 square feet of commercial and residential space, just a few feet away from homes and residences. If the Onni project area is not properly fenced off and monitored with security cameras, it will be a public nuisance and hazard. We have already experienced some impact from Onni Group's possession of the property. The buildings have been vacant without proper fencing or security. It has created hazards, where people walking by will trip on loose materials, homeless people squat, and it invites criminal activity. It is imperative that we mitigate the hazard and require that Onni Group put up proper fencing around the project and place security cameras in the area. The fence should be placed in a manner where people, kids, pets cannot get into the vacant, hazard ares.

None of the reports mention the expected duration for the project. Is there a timeline?

Was a waterproofing report obtained? (This is mentioned in the Geo report)

Is the subterranean structure going to be extended below a depth of 45 feet?

Who is the Project Shoring engineer? In the report it says one should be obtained.

If there are project violations or issues caused by the project, where can residents go to for recourse?

Thanks for your time and consideration.

Sincerely, Victoria Chang



Rey Fukuda <rey.fukuda@lacity.org>

## ENV-2016-3778-EIR public comment

Julia Finder <juliaisnotlost@gmail.com> To: rey.fukuda@lacity.org Sun, Jul 24, 2022 at 3:24 PM

To Rey Fukuda,

I'd like to make a public comment on project ENV-2016-3778-EIR. I've been a resident of Hollywood for over five years now, and I moved to Afton Place this past fall. In fact, I'm in the lot immediately next to the project. I was initially excited when I heard there were plans to finish the work on the bungalows and rebuild the shops on Vine. However, reading the proposal has me incredibly worried. I am not worried about noise or construction. I knew that was a possibility when I moved in. I am worried about the effects on my community.

First of all, creating office space is a poor development consideration. With the continual shift towards remote and hybrid work spaces, companies do not need more office space and are quickly divesting. Especially with the impending recession, an office building seems like a poor investment for the community.

I like the idea of building more housing. No one can argue that LA has a housing problem. As of 2020, the homeless population was estimated to be around 66,000. Shariff Villanueva estimates that we could currently be as high as 80,000. This doesn't even include the individuals facing impending eviction as the covid moratorium comes to an end.

Housing is important, but it needs to be affordable. LA has one of the highest rent burden levels in the US. With this in mind, only 8% of the proposed units in this plan will be designated for "Very Low Income." According to the project descriptions, the apartments will all be 1 bedroom. If an individual wanted to live there, they'd have to make less than \$41,700 annually. But the average income for a single renter is \$44,000. I make \$60,000. Most places in the country, I should be very comfortable. Here in LA, I am considered low income. If a couple together only makes 50,000 a year, they would not even qualify for the threshold of \$47,650. We cannot fight homelessness by only creating 36 affordable units.

The above concerns have not yet included the gentrification of the area. In this area, we do not lack housing in general, but specifically affordable housing. More and more housing is being put in, but we can't fill the spaces. The below are some of the many active listings as of the time of writing this email.

The Hanover Hollywood is advertising a one bedroom for \$2,719 to \$3,363 a month. Jardine has their 1-bed starting at \$3,850 up to \$7,568. Villa Elaine on Vine has 1-bedrooms at \$1,900 Columbia Square Living on El-Centro is \$3,645 - \$6,180. El Centro Apartments and Bungalows is \$2,725 to \$5,245. 6250 Hollywood Blv's 1 bed is \$4,800. Wallace on Sunset lists \$2,896 - \$3,326. Sunset Vine Tower is \$3,6540 to \$5,350. The DLP Hollywood is anywhere between \$1,971 and \$2,104.

Even the most affordable apartments in this area are out of reach for the average LA renter. This area does not need more high cost apartments. If we have a surplus on high-priced units, shouldn't we be working to make our next projects more affordable? To do that, we need to have more than merely 36 units available to low income families. Even doubling that number leaves 84% of the building (365 units) to be high end. There is no reason we should limit it to only 36.

These plans have also continued to shut down businesses in the area. This specific project is shutting down Los Balcones and El Zarape. A proposal up the street on Vine would shut down Chipotle, Tender Greens, and Off Vine (a community staple for decades). If you drive around the streets in the area, you can't go more than a few yards before you see another empty business space. It is well and good to propose a grocery store or restaurants in the bungalows. However, it's hard to believe those places will be filled. Many businesses weren't able to survive the worst of the pandemic, and very few new places are opening as we continue into a recession. Will this building be offering space to the displaced businesses in the area? Will they be actively pursueing filling these spaces with local businesses? This also begs the question, what price range is in mind for the grocery store? Are they looking to partner with an affordable brand similar to Trader Joe's? Are they looking to bring in something like Sprouts?

If we're fighting to make LA affordable, then we have to start making more sustainable and people-friendly choices when we approve changes to our infrastructure. I ask that you do not accept the proposal as is. A business will come and go.

Many landlords neglect their buildings or inflate prices for their own profit; caring little about the long term effects on the community. But the average renters - who support local restaurants, who walk the streets, who shop in our stores- are the ones who make Hollywood a community. They should always be a top priority. Because when they're not, we lose the thing that makes this area special. Please, do not let this proposal go forward as planned because Hollywood deserves better.

Thank you,

Julia Finder



## 1360 N Vine STreet

**Inara Letdin** <inaraletdin1@gmail.com> To: rey.fukuda@lacity.org Tue, Jul 5, 2022 at 11:49 PM

Rey Fukuda <rey.fukuda@lacity.org>

Hi there,

My father received a notice about the 1360 N Vine structure just a few blocks from where he lives. I see that the building will accommodate 36 units designated for very Low Income. How does one get on the list for this building if one is a low income senior? Is this through the City of West Hollywood? Please advise and provide information.

Thank you

\_\_\_

Inara Letdin

Brooklyn College MFA 2012 Boston University BA 2009 InaraLetdin1@gmail.com www.linkedin.com/in/inaraletdin



Rey Fukuda <rey.fukuda@lacity.org>

## 1360 North Vine

Mar Robbart <marrobbart@yahoo.com> To: "rey.fukuda@lacity.org" <rey.fukuda@lacity.org> Tue, Jul 5, 2022 at 10:10 AM

Dear Rey Fukuda,

Are there plans available for this project? If so, would you please send them?

When is this project anticipated to be ready for approval?

Thank you for your time, I look forward to your reply

Sincerely, Mar Robbart



# WILLIAMS ART CONSERVATION

CONSERVATION OF SCULPTURE AND ARCHITECTURAL MATERIALS

Donna Williams <u>wacincconserve@sbcglobal.net</u> 25 July 2022

Rey Fukuda City of Los Angeles Department of City Planning 221 N. Figueroa Street, Suite 1350 Los Angeles, CA 90012-2639 (213) 847-3686 rey.fukuda@lacity.org

## Re: Case Number ENV-2016-3778-EIR

## GENERAL COMMENTS

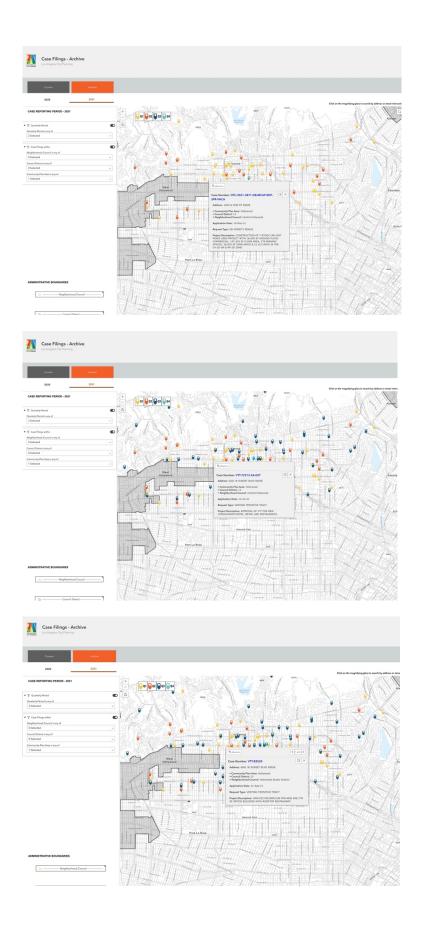
- The proposed project should identify a preferred option. The project analysis is plagued by comingling of project analysis and omissions for each proposed development option.
- Project renderings show three separate structures making it unclear as to what specific building is referenced, i.e., shade and shadow study references a building that is no longer consistently rendered in the project proposal however periodically described.
- The scale of either residential or office option introduce a potential for significant neighborhood traffic congestion and potential loss of much needed street parking for historic multi-family buildings in the historic district.

## III ENVIRONMENTAL SETTING

## **B. RELATED PROJECTS**

- The proposed project relies on a dated (2020) list of surrounding proposed projects. The applicant should include a more current list of projects as found in the City of Los Angeles Case Filing Archive, Los Angeles City Planning. The following projects were listed in 2021 located in the immediate vicinity of the proposed project.
- Reported Cumulative impacts do not accurately account for surrounding projects. In particular, the 1400 Vine Street project located immediately north, the next block, of the proposed project.
- The project identified "less than significant impacts" are based on a value city-wide. Analysis should be performed on impacts to Hollywood.
- An updated list of Case Filings, Los Angeles City Planning should be used to calculate cumulative impact analysis.

6234 Afton Place, Los Angeles, CA 90028 STUDIO 323 462-2346 MOBILE 213 407-0862 wacincconserve@sbcglobal.net



## APPENDIX IS-1 Shadow Study

The Shadow study is performed for only Option A, and it references a building that is no longer consistently rendered in the project proposal however periodically described. New studies for Option A and Option should be performed.

The map should be corrected to show all properties on the south side of the Afton Square Historic District.

## AESTHETICS

Project Impacts as identified in L.A CEQA Thresholds Guide, City of Los Angeles 2006.

Project Impacts

Page D. 3-5

"For example, relocation of a resource whose most significant feature is setting or position on a parcel would be more detrimental than if the key element is the architectural style and structural features."

The proposed project does not adequately describe whether the historic properties will be oriented on the street in their historic configuration. Please clarify.

"If new construction is proposed, give key consideration to compatibility with the massing, size, scale, and architectural features of the historic resource(s). Determine the impacts to the setting and character of the area as well as whether the new construction might indirectly reduce the viability of a district or grouping of historic resources."

Sample Mitigation Measures

Page D.3-6

"Require new construction to be compatible with historic resources on the site and in the vicinity (e.g., mass, height, materials, setback, retention of mature landscaping."

The proposed projects are contemporary glass curtain wall structures that are vastly out of scale with the historic district and bear no material resemblance to the surrounding built environment.

## V. ALTERNATIVES

The proposed Project Alternatives for Option A and B are of by right projects that would conform to an appropriate mitigation measure to reduce impact to Afton Square Historic District.

Residential Option Alternative 3 would mitigate negative environmental cumulative impacts to the historic resources.

Office Option Alternative 3 would mitigate negative environmental cumulative impacts to the historic resources.

## CULTURAL RESOURCES APPENDIX C

Historical Resources Technical Report Prepared by Consulting GPA January 2021

Please identify the building rendered on the right of the report cover page. The rendering on the left mirrors the Office Option B identified in the rest of the proposal, but it is not clear if the pictured building on the right represents the Residential Option A. The rendering on the right is not found anywhere else in the proposed development report while references to an earlier Residential Option are scattered throughout the report. <u>Please clarify.</u>

It is clear from the GPA Report the drawings that were reviewed and attached, do not reflect the most recent version of the associated project for Option A. <u>Is the treatment of the historic bungalows identical for Option A and Option B?</u>

The Historical Resources Technical Report does not study the proposed treatment of the bungalows identified in Residential Option A. The report should be updated to reflect the options they are currently proposing.

Residential Option A - The spatial relationship that characterized the original development of the neighborhood as a residential neighborhood will be substantially diminished, introducing new spatial relationships that no longer reflect the original character of the neighborhood. The proposed change of use to restaurants alters the original residential use and these residences will no longer reflect their original character. Moved properties must still have an orientation, setting, and general environment that are comparable to those of the historic location and that are compatible with the property's significance.

The district boundary is defined by the historic condition and should not be altered. The proposed development straddles and intrudes into the district potentially introducing a new non-contributor into the district. Introducing a new non contributor that is commercial is not compatible with any of the shared planning features represented in the district, as identified under Criteria A. The Historical Resources Technical Report prepared by GPA should address why the proposed reorientation of the bungalows will not have an impact.

The district boundary should be accurately identified and shown in proposed development Options A and B.

Within the Afton Square Historic District, the identified six (6) one-story wood clad bungalows constitute over half of the 12 bungalows of similar type in the district. These building types are represented on the western-most portion of the district and define a unique residential character within the district. Analysis to identify patterns and characteristics within the district should be performed to accurately identify impacts to the historic district.

The proposed project should include a Feasibility Study for the proposed relocation of the bungalows that identifies methods and means of relocation, the relocation address, and a Protection Plan during and after relocation.

Thank you for your time and consideration.

Respectfully,

Delina

Donna Williams

(Electronic submittal)