



## Notice of Preparation of a Draft EIR and Scoping Meeting

**Date:** March 22, 2022  
**To:** Public Agencies and Interested Parties  
**Subject:** Notice of Preparation of a Draft Environmental Impact Report and Scoping Meeting  
**Project Title:** Sierra Business Center (Comprised of the Sierra Industrial Facility & North Fontana Industrial Complex Projects)

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The City of Fontana, as lead agency under the California Environmental Quality Act (CEQA), will prepare an Environmental Impact Report (EIR) for the Sierra Business Center Project (the “Project”) which includes two separate and independent but adjacent projects: the Sierra Industrial Facility and the North Fontana Industrial Complex. In accordance with Section 15082 of the CEQA Guidelines, the City has issued this Notice of Preparation (NOP) to provide responsible agencies, trustee agencies, and other interested parties with information describing the proposed Project and its potential environmental effects.

The purpose of this notice is to:

- 1) serve as the Notice of Preparation of an Environmental Impact Report for the Office of Planning and Research (OPR), Responsible Agencies, public agencies involved in funding or approving the project, and Trustee Agencies responsible for natural resources affected by the project, pursuant to CEQA Guidelines Section 15082;
- 2) advise and solicit comments and suggestions regarding the preparation of the EIR, environmental issues to be addressed in the EIR, and any other related issues, from interested parties, including interested or affected members of the public; and
- 3) advertise a public meeting to solicit comments from public agencies and interested parties regarding the scope of study in the EIR.

### Project Location

#### Sierra Industrial Facility (Shea Project)

The Shea Project Site is located on the east side of Sierra Avenue approximately 700 feet north of Casa Grande Avenue. The approximately 11.1-acre Shea Project Site includes two parcels, including Assessor Parcel Numbers (APNs): 0239-151-09 and -38. Under existing conditions, the Shea Project Site is undeveloped.

#### North Fontana Industrial Complex (Acacia Project)

The Acacia Project Site is located east of Sierra Avenue and south of Duncan Canyon Road. The approximately 19.0-acre Acacia Project Site includes four parcels, including Assessor Parcel Numbers (APNs): 0239-151-19, -25, -26, and -36. Under existing conditions, the Acacia Project Site is undeveloped.

## Project Description

### Sierra Industrial Facility (Shea Project)

The Shea Project provides for the development of the approximately 11.1-acre Project Site with a single commerce center building with a maximum of 199,999 square feet (s.f.), including up to 19,900 s.f. of office space. The structure would be supported by a screened truck yard and trailer storage area along the south side of the structure, vehicular parking areas, drive aisles, and landscaping. The typical height of the building is designed to reach 41.0 feet above finished floor elevation; however, the building would have a varied roofline and the maximum height (including parapets) would extend to 46.0 feet above finished floor elevation. The building would be constructed of tilt-up panels and low-reflective, blue glass. The building's exterior color palette would be comprised of various shades of grey and white. Decorative building elements include panel reveals, mullions, and canopies at office entries. The Project is being developed on a speculative basis and is expected to operate 24 hours per day, 7 days per week. The Project would require a General Plan Amendment and a Zone change, revising the General Plan designation from Multi-Family High Density Residential (R-MFH) to Light Industrial (I-L) and the zoning designation from Multi-Family High Density Residential (R-5) to Light Industrial (M-1). City of Fontana approval would be required of the following entitlements: Master Case No. (MCN) No. 21-090, Design Review Project (DRP) No. 21-034, Tentative Parcel Map (TPM) No. 21-018, General Plan Amendment (GPA) No. 21-004 and Zone Change Application (ZCA) No. 21-006.

### North Fontana Industrial Complex (Acacia Project)

The Acacia Project provides for the development of the approximately 19.0-acre Project Site with two commerce center buildings with a total maximum of 385,043 square feet (s.f.). Building 1 would be 296,297 s.f. and Building 2 would be 88,746 s.f. The structures would be supported by a screened truck yard and trailer storage area along the south side of Building 1 and the west side of Building 2, vehicular parking areas, drive aisles, and landscaping. The typical heights of both Building 1 and Building 2 are designed to reach 40 feet 6 inches above finished floor elevation; however, the buildings would have a varied roofline and the maximum height (including parapets) would extend to 45 feet 6 inches above finished floor elevation. Both buildings would be constructed of tilt-up panels and low-reflective, blue glass. The exterior color palette of the buildings would be comprised of various shades of grey and white. Decorative building elements include panel reveals, mullions, and canopies at office entries. The Project is being developed on a speculative basis and is expected to operate 24 hours per day, 7 days per week. The Project would require a General Plan Amendment and a Zone change, revising the General Plan designation from Multi-Family High Density Residential (R-MFH) and General Commercial (C-G) to Light Industrial (I-L) and the zoning designation from Multi-Family High Density Residential (R-5) and General Commercial (C-2) to Light Industrial (M-1). City of Fontana approval would be required of the following entitlements: Master Case No. (MCN) No. 21-099, Design Review Project (DRP) No. 21-039, Tentative Parcel Map (TPM) No. 21-022, General Plan Amendment (GPA) No. 21-005 and Zone Change Application (ZCA) No. 21-007.

## EIR Scope

CEQA Guidelines Section 15063 grants Lead Agencies the ability to bypass preparation of an Initial Study and proceed with preparation of an EIR in instances where an EIR is clearly required for a project. In this instance, the City of Fontana in its capacity as Lead Agency for the proposed Project has determined that the Project clearly has the potential to result in significant environmental effects and that an EIR shall be prepared that

addresses the following environmental considerations:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The EIR will assess the effects of the Project on the environment, identify potentially significant impacts, identify feasible mitigation measures to reduce or eliminate potentially significant environmental impacts, and discuss potentially feasible alternatives to the Project that may accomplish basic objectives while lessening or eliminating any potentially significant Project-related impacts.

### **Opportunity for Public Review and Comment**

This Notice is available for review on the City's website at: <https://www.fontana.org/2137/Environmental-Documents>.

The City of Fontana would like to receive your input on the scope of the information and analysis to be included in the EIR. Due to time limits, as established by CEQA, your response should be sent at the earliest possible date, but no later than thirty (30) days after publication of this notice. Please submit your comments by 5:00 p.m. on *April 21, 2022* by mail or e-mail to:

Salvador Quintanilla  
City of Fontana  
8353 Sierra Avenue  
Fontana, CA 92335

Phone: (909) 350-6656  
Fax: (909) 350-7676  
Email: [squintanilla@fontana.org](mailto:squintanilla@fontana.org)

Please include the name, phone number, and address of a contact person in your response.

### **Scoping Meeting**

The City of Fontana will hold a public scoping meeting, where agencies, organizations, and members of the public will receive a brief presentation on the Project and will have the opportunity to provide comments on the scope of the information and analysis to be included in the EIR.

The meeting will be held on:

**Date and Time:** *April 6, 2022 at 6:00 p.m.*

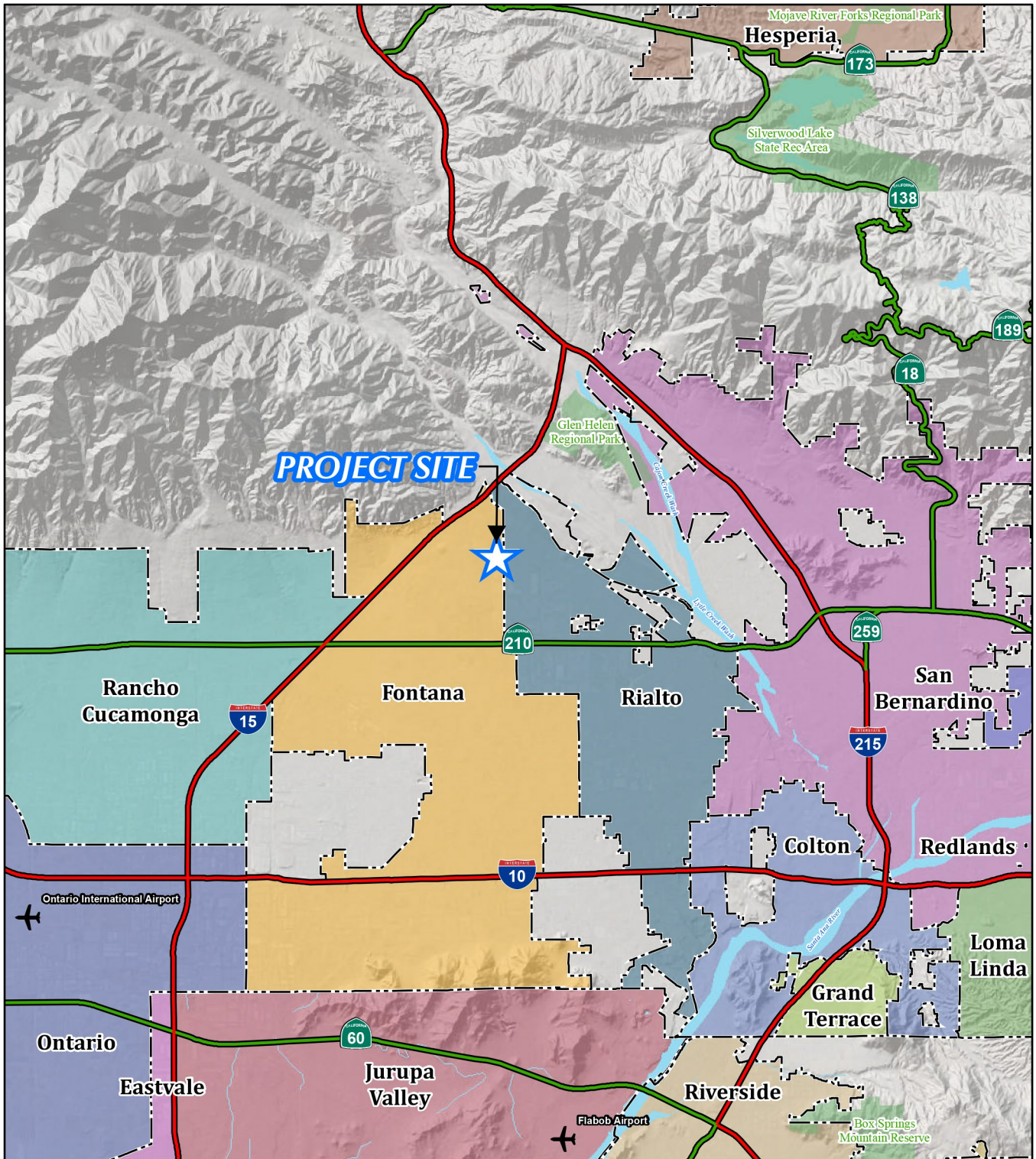
**City of Fontana  
NOTICE OF PREPARATION**

**Place:** Microsoft Teams Virtual Meeting  
Link to join on a computer or mobile app: ([https://teams.microsoft.com/l/meetup-join/19:meeting\\_NDZmOGFjODMtOThlMC00MThLTgzMGETyZFiOWM4YjkzYmZk@thread.v2/0?context=%7B%22Tid%22:%22ff8f3b3d-31f5-45ff-b2d8-933f061858cf%22,%22Oid%22:%22b5dd9a22-6b02-4556-b448-0a97664c2860%22%7D](https://teams.microsoft.com/l/meetup-join/19:meeting_NDZmOGFjODMtOThlMC00MThLTgzMGETyZFiOWM4YjkzYmZk@thread.v2/0?context=%7B%22Tid%22:%22ff8f3b3d-31f5-45ff-b2d8-933f061858cf%22,%22Oid%22:%22b5dd9a22-6b02-4556-b448-0a97664c2860%22%7D)).

Or Dial-In Number: +1 323-673-4554  
Phone Conference ID: 894932416#

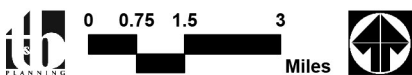
*Attachments:*

- Figure 1 – Regional Map
- Figure 2 – Vicinity Map
- Figure 3 – Shea Project Conceptual Site Plan
- Figure 4 – Acacia Project Conceptual Site Plan

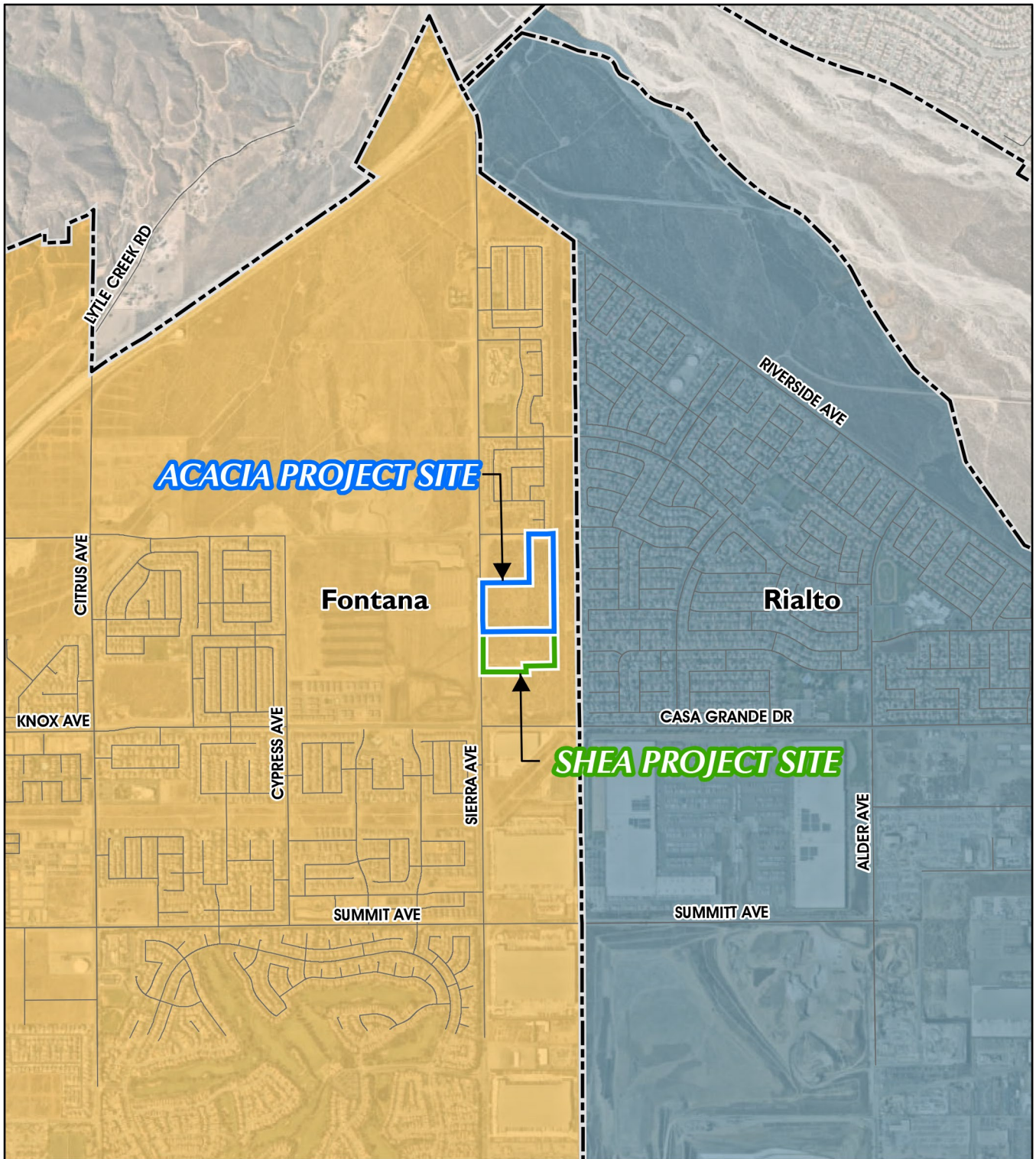


Source(s): ESRI, RCTLMA (2021), SB County (2020)

Figure 1



Regional Map

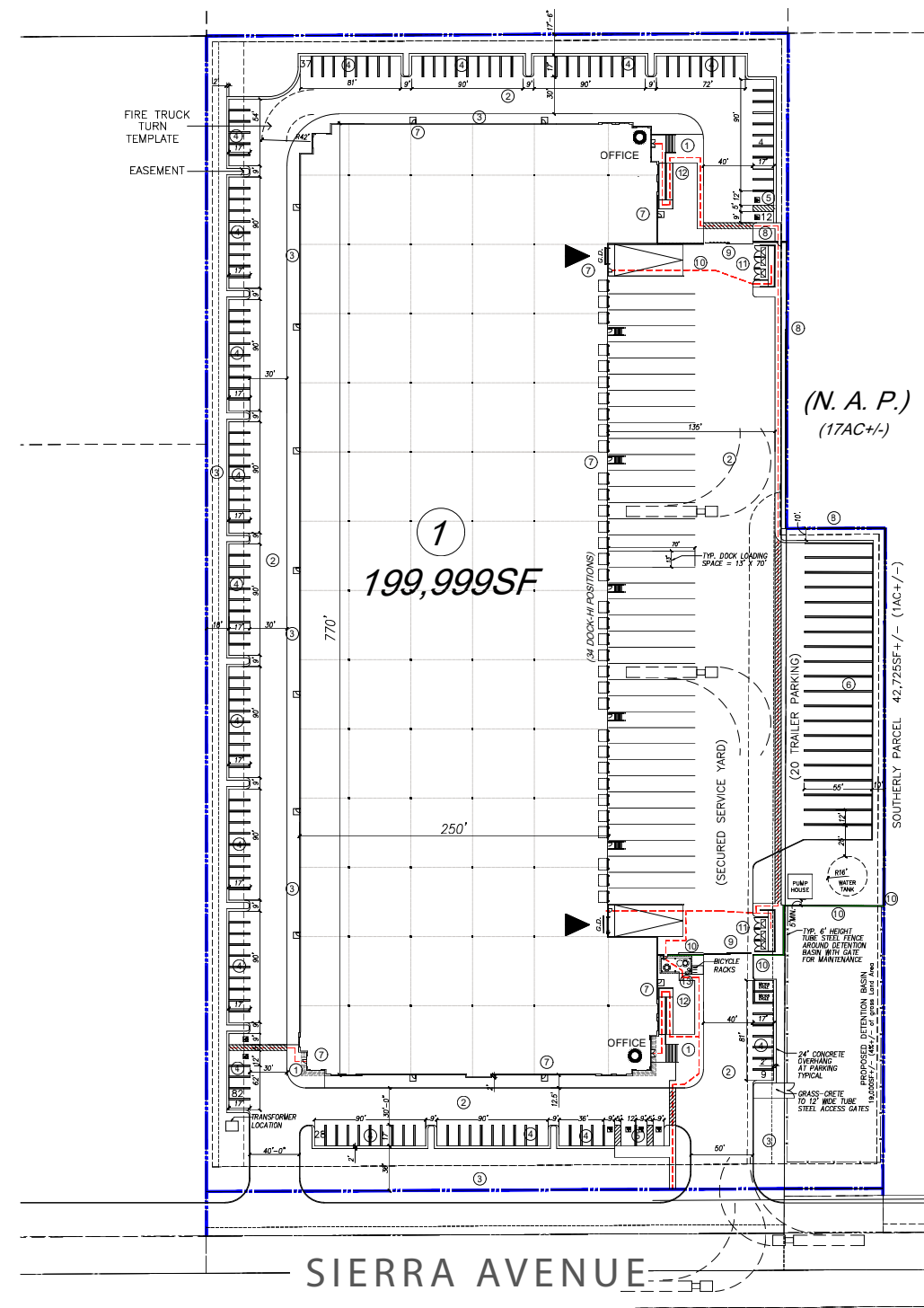


Source(s): ESRI, SB County (2020)

Figure 2



Vicinity Map



**KEY NOTES: #**

- ① PEDESTRIAN PAVING (SEE CIVIL & LANDSCAPE)
- ② CONCRETE VEHICULAR PAVING (SEE CIVIL)
- ③ LANDSCAPE AREA (SEE LANDSCAPE)
- ④ PER CITY STD. PARKING STALL 9'X19'
- ⑤ A.D.A. PARKING 9' X '\_' & 12' X '\_' (STATE STD.)
- ⑥ TRAILER PARKING 12' X 55'
- ⑦ ACCESS DOOR OR EMERGENCY ACCESS DOOR
- ⑧ STEEL TUBULAR FENCE (8' HEIGHT)
- ⑨ AUTOMATIC ROLLING GATE (12' HEIGHT)
- ⑩ CONCRETE SCREEN WALL (14' HEIGHT)
- ⑪ TRASH ENCLOSURE (ADA COMPLIANT)
- ⑫ ADA RAMP (AS REQUIRED)
- ⑬ OUTDOOR BREAK AREA FOR EMPLOYEES

**GRAPHIC LEGEND:**

- = OFFICE ENTRY
- G.D. = GRADE DOOR (14'X14')
- [Symbol] = A.D.A. ACCESSIBLE PRKG.
- [Symbol] = PROPERTY LINE (SEE CIVIL)
- [Symbol] = DOCK DOOR & LEVELER
- [Symbol] = CANOPY OR OVERHANG
- [Symbol] = CENTERLINE OR GRID LINE
- [Symbol] = EASEMENT (SEE CIVIL)
- [Symbol] = TRASH ENCLOSURE W/ SOLID ROOF A.D.A. ACCESSIBLE
- [Symbol] = WB-67' TRACTOR TRAILER
- [Symbol] = ADA PATH OF TRAVEL
- [Symbol] = 12' X 55' TRAILER PARKING

**SHEET DESCRIPTION:**

- A1 CONCEPTUAL MASTER PLAN
- A2 CONCEPTUAL FLOOR PLAN
- A3 CONCEPTUAL ELEVATIONS
- A4 NOT USED
- A5 COLORED CONCEPTUAL ELEVATIONS
- A6 COLOR AND MATERIAL BOARD
- A7 CONCEPTUAL SIGHT LINE SECTION
- A8 CONCEPTUAL WALL AND FENCE PLAN
- A9 DEFERRED AT THIS TIME (3D RENDERINGS)
- C1 CONCEPTUAL GRADING PLAN
- C2 CONCEPTUAL UTILITY PLAN
- L1 LANDSCAPE PLAN
- P1 LIGHTING CUT SHEETS
- P2 SITE PHOTOMETRIC PLAN

**PROJECT TEAM:**

**ARCHITECT**  
 AO ARCHITECTS  
 144 NORTH ORANGE STREET  
 ORANGE, CALIFORNIA 92866  
 CONTACT: DAN MACDAVID  
 714-639-9860 - PRINCIPAL  
 OR STEPHEN PRZYBYLOWSKI  
 714-417-1122 - SENIOR DESIGNER

**LANDSCAPE ARCHITECT**  
 SCOTT PETERSON LANDSCAPE ARCHITECT  
 2883 VIA RANCHEROS WAY  
 FALLBROOK, CA 92028  
 OFFICE: 760-842 8993

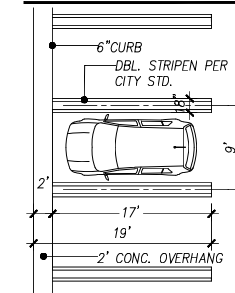
**CIVIL ENGINEER**  
 THIENES ENGINEERING, INC.  
 14349 FIRESTONE BLVD.  
 LA MIRADA, CA 90638  
 CONTACT: MATT KIM  
 (714) 521-4811 ext.265  
 Matthew@thieneseng.com

**OWNER**  
 SHEA PROPERTIES  
 130 VANTIS, SUITE 200  
 ALISO VIEJO, CALIFORNIA 92656

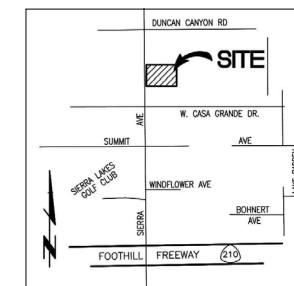
**CONTACTS:** STEVE PERALES  
 JASON KORENGOLD

**LIGHTING:**  
 PACIFIC ELECTRICAL ENGINEERING INC.  
 8171 E. KAISER BLVD.  
 ANAHEIM, CA 92808  
 CONTACT: REED STONEBURNER, PE  
 (TEL)714-685-7766 (CELL)714-920-1411

**STANDARD PARKING: 1' = 10'**



**VICINITY MAP: NOT TO SCALE**



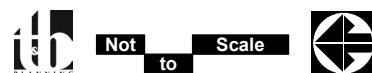
SITE DATA TABLE												
BUILDING	LAND AREA AC	LAND AREA SF	FAR %	BLDG. FOOT PRINT	BLDG. MEZZ.	BLDG. S.F.	OFFICE S.F.	WAREHOUSE S.F.	OFFICE PARKING	WAREHOUSE PRKG.	PARKING REQ.	PARKING PROV.
1	11.05AC+/-	481,342+/-	42.1%	199,999	~	199,999	* up to 19.9k	188,000	~	20+10+32 *	62	168
LANDSCAPE AREA: 84,006 SF (17.45+/-)											(.84/1000)	

\* ONE PARKING SPACE IS REQUIRED FOR EACH 1,000 SQUARE FEET OF GROSS FLOOR AREA FOR THE INITIAL 20,000 SQUARE FEET, ONE PARKING SPACE IS REQUIRED FOR EACH 2,000 SQUARE FEET OF ADDITIONAL GROSS FLOOR AREA FOR THE NEXT 20,000 SQUARE FEET, AND ONE PARKING SPACE IS REQUIRED FOR EACH 5,000 SQUARE FEET OF ADDITIONAL GROSS FLOOR AREA OVER 40,000 SQUARE FEET - FONTANA ZONING ARTICLE XI §30-685

NO ADDITIONAL PARKING SPACES ARE REQUIRED FOR THE OFFICE AREA, IF OFFICE AREA IS LESS THAN TEN PERCENT OF TOTAL BUILDING SQUARE FOOTAGE. - FONTANA ZONING ARTICLE XI §30-685

Source(s): AO (03-16-2022)

Figure 3



**PROJECT DATA**

SITE AREA	BLDG. 1	BLDG. 2
Square Feet	621,599	205,194
Acres	14.27	4.71
<b>BUILDING AREA</b>		
Office	8,000	2,500
Mezzanine	8,000	2,500
Warehouse	280,297	83,748
TOTAL	296,297	88,748
<b>COVERAGE</b>		
	47.67%	43.25%
<b>CLEAR HEIGHT</b>		
<b>AUTO PARKING REQUIRED</b>		
Office 1/250 s.f.	64	20
Whse: 1st 20K @ 1/1,000 s.f.	20	20
Whse: 2nd 20K @ 1/2,000 s.f.	10	10
Whse: Over 40K @ 1/5,000 s.f.	49	9
TOTAL	143	59
Motorcycle: 3 per 100 required spaces	3	3
<b>AUTO PARKING PROVIDED</b>		
Standard auto stalls (9'x19')	188	54
ADA Van Parking (12' x 19')	2	1
ADA Parking (9' x 19')	5	2
Future Standard Clean Air stall (9'x19')	5	2
Future Van Accessible EV stall (12'x19')	1	1
Future Standard Accessible EV stall (9'x19')	1	0
Future Standard EV stall (9'x19')	12	3
TOTAL	214	63
Motorcycle	3	3
<b>TRAILER PARKING REQUIRED</b>		
1/5,000 s.f. GFA	60	18
<b>TRAILER PARKING PROVIDED</b>		
Standard (10' x 53' - includes 9' overhang)	60	18
<b>MAXIMUM FLOOR AREA RATIO</b>		
F.A.R. - 1.0		
<b>BUILDING SETBACKS</b>		
Front - 20'		
West side (abutting residential) - 45'		
East side - 0'		
Rear - 0'		
<b>MAXIMUM BUILDING HEIGHT</b>		
Height - 60'		
<b>LANDSCAPE REQUIRED</b>		
15% not including building		
<b>LANDSCAPE PROVIDED</b>		
In percentage	18%	19%
In s.f.	59,864	21,950
<b>ZONING ORDINANCE FOR CITY</b>		
Zoning Designation - Commercial (C2)		

**VICINITY MAP**



**PROJECT INFORMATION**

<b>Owner/Applicant</b> ACACIA REAL ESTATE 301 NEWPORT CENTER DRIVE NEWPORT BEACH, CA 92660 TEL: (949) 860-8888 CONTACT: DAVID FITTMAN	<b>Applicant's Representative</b> HPA, INC. 3801 BARBER AVENUE - SUITE 100 IRVINE, CA 92612 PHONE: (949) 862-2173 FAX: (949) 863-0811 CONTACT: WENDY PARK
<b>Project Address</b> SEC SIERRA & DUNCAN CANYON FONTANA, CA	<b>Zoning</b> M-1
<b>Code Analysis</b> 2019 CALIFORNIA BUILDING CODE 2019 CALIFORNIA PLUMBING CODE 2019 CALIFORNIA MECHANICAL CODE 2019 CALIFORNIA ELECTRICAL CODE 2019 CALIFORNIA FIRE CODE 2019 CALIFORNIA ENERGY CODE 2019 CALIFORNIA GREEN BUILDING STANDARDS	<b>File Number</b> 180
<b>Assessors Parcel Number</b> 0255-011-24-0-000 0255-011-25-0-000 0255-011-06-0-000	<b>Construction Type</b> CONCRETE TILT-UP BUILDING BUILDING OCCUPANCY: S-1/B CONSTRUCTION TYPE: II-B ESFR SYSTEM

**SITE PLAN GENERAL NOTES**

- THE SITE PLAN BASED ON THE SOILS REPORT PREPARED BY: T80
- IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE.
- ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
- SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES.
- THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.
- SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
- PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING. SEE "C" DRAWINGS.
- CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.
- SEE "C" DRAWINGS FOR FINISH GRADE ELEVATIONS.
- CONCRETE SURFACES TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 14' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4" FINISH TO BE A MEDIUM BROOM FINISH U.N.O.
- PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.
- CONSTRUCTION DOCUMENTS PERTAINING TO THE LANDSCAPE AND IRRIGATION OF THE ENTIRE PROJECT SITE SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND APPROVED BY PUBLIC FACILITIES DEVELOPMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
- PRIOR TO FINAL CITY INSPECTION, THE LANDSCAPE ARCHITECT SHALL SUBMIT A CERTIFICATE OF COMPLETION TO PUBLIC FACILITIES DEVELOPMENT.
- ALL LANDSCAPE AND IRRIGATION DESIGNS SHALL MEET CURRENT CITY STANDARDS AS LISTED IN GUIDELINES OR AS DETERMINED FROM PUBLIC FACILITIES DEVELOPMENT.
- ALL VERTICAL MOUNDING POLES OF CHAIN LINK FENCING SHALL BE CAPPED.
- LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB.

**LEGAL DESCRIPTION**

PARCEL 1:  
THE NORTH [ ] OF THE SOUTH [ ] OF THE NORTHWEST [ ] OF THE NORTHWEST [ ] OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 5 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2:  
THE SOUTH [ ] OF THE SOUTH [ ] OF THE NORTHWEST [ ] OF THE NORTHWEST [ ] OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 5 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM ALL WATER AND WATER RIGHTS IN AND UNDER SAID LAND OR ANY PART THEREOF, AS RESERVED IN A DEED RECORDED SEPTEMBER 22, 1986 IN BOOK 8700, PAGE 178, OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM ANY PORTION THEREOF LYING WITHIN SIERRA AVENUE.

PARCEL 3:  
THE EAST [ ] OF THE NORTHWEST [ ] OF THE NORTHWEST [ ] OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 5 WEST, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO GOVERNMENT SURVEY.

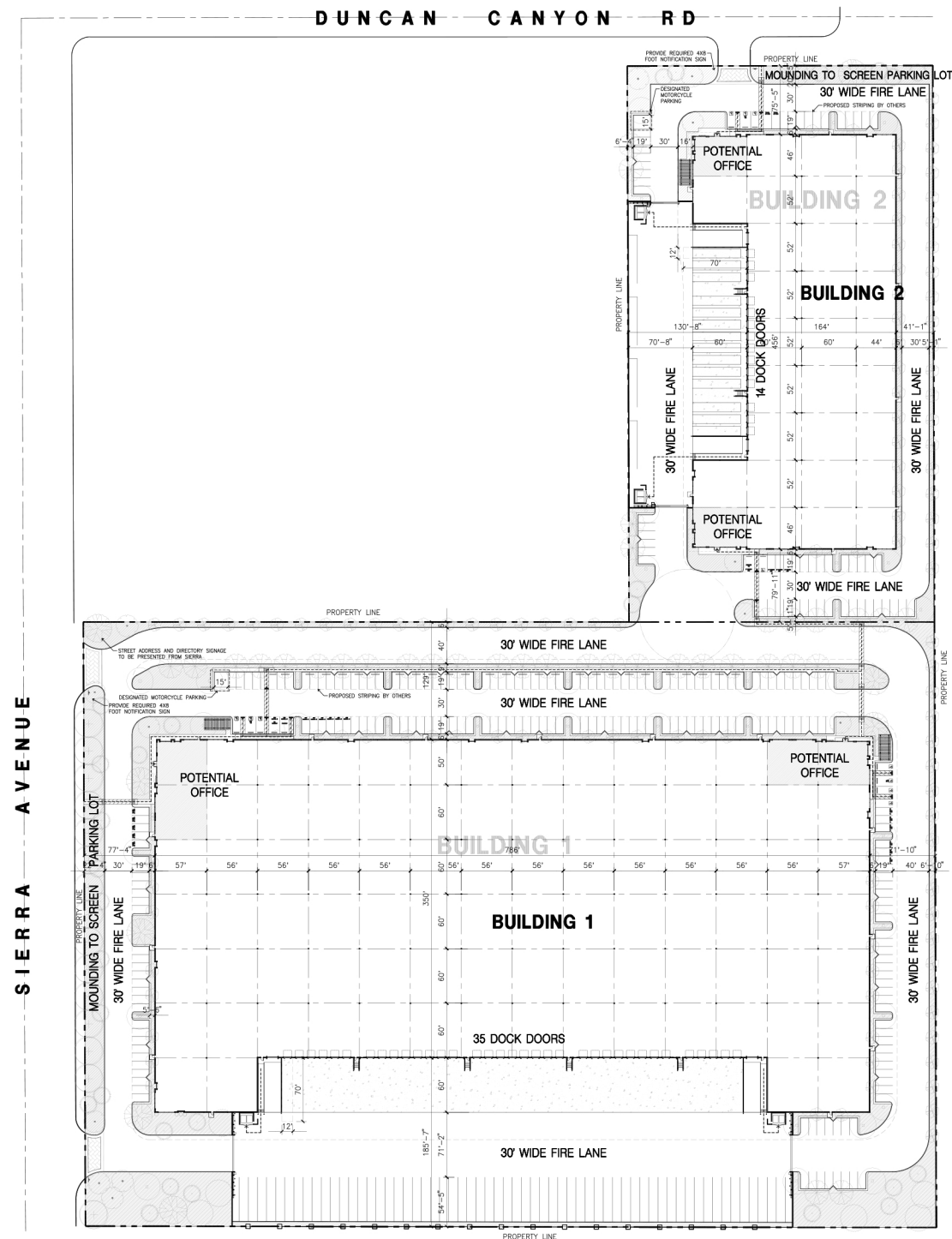
EXCEPTING THEREFROM THE EASTERLY 130 FEET, AS CONVEYED TO SOUTHERN CALIFORNIA Edison CO., BY DEED RECORDED OCTOBER 8, 1914 IN BOOK 8833, PAGE 113, OFFICIAL RECORDS.

**SITE PLAN KEYNOTES**

- HEAVY BROOM FINISH CONCRETE PAVEMENT.
- ASPHALT CONCRETE (AC) PAVING.
- CONCRETE WALKWAY, MEDIUM BROOM FINISH.
- DRIVEWAY APRONS TO BE CONSTRUCTED.
- 5" x 8" x 4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAIN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY AS REQ. BY CITY INSPECTOR.
- APPROXIMATE LOCATION OF TRANSFORMER. CONTRACTOR TO VERIFY WITH S.C.E.
- PROVIDE 8' HIGH METAL GATES W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY.
- CONCRETE DAMB W/ 4" HIGH CONCRETE WALL.
- EXTERIOR BIKE RACK TYPICAL.
- CONCRETE TILT-UP SCREEN WALL AT VARIOUS HEIGHT. SEE A1.0F.
- EXTERIOR CONCRETE STAR.
- CONCRETE CURB. SEE CIVIL DRAWINGS.
- LANDSCAPE. ALL LANDSCAPE AREAS INDICATED BY SHADING.
- PRE-CAST CONCRETE WHEEL STOP.
- CONCRETE FILLED GUARD POST 3/4 DIA. U.N.O. 42" H.
- TRASH ENCLOSURE PER CITY STANDARD.
- ACCESSIBLE ENTRY SIGN.
- ACCESSIBLE PARKING STALL SIGN.
- TRUNCATED DOME.
- APPROXIMATE LOCATION OF FIRE HYDRANT.
- 8' H METAL FENCE.
- ADD SIGN "TRUCK PROHIBITED".
- PROPOSED BREAK AREA.

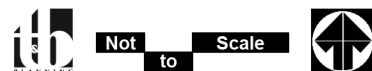
**SITE LEGEND**

CONCRETE PAVING. SEE "C" DRWG'S FOR THICKNESS.	ACCESSIBLE PARKING STALL (8' X 19') IF ACCESSIBLE.
STANDARD PARKING STALL (9' X 19').	ACCESSIBLE PARKING STALL (12' X 19') IF ACCESSIBLE.
LANDSCAPED AREA.	30' WIDE FIRELANE.
PATH OF TRAVEL.	



Source(s): HPA (02-16-2022)

Figure 4





P: (626) 381-9248  
F: (626) 389-5414  
E: [info@mitschtsailaw.com](mailto:info@mitschtsailaw.com)



**Mitchell M. Tsai**  
Attorney At Law

139 South Hudson Avenue  
Suite 200  
Pasadena, California 91101

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**VIA E-MAIL**

April 6, 2022

Salvador Quintanilla  
City of Fontana  
8353 Sierra Avenue  
Fontana, CA 92335  
Em: [squintanilla@fontana.org](mailto:squintanilla@fontana.org)

RE: The City of Fontana Sierra Business Center Project.

Dear Salvador Quintanilla,

On behalf of the Southwest Regional Council of Carpenters (“**SWRCC**” or “**Southwest Carpenters**”), my Office is submitting these comments on the City of Fontana’s (“**City**” or “**Lead Agency**”) Notice of Preparation of a Draft Environmental Impact Report (“**NOE**”) for the Sierra Business Center Project (“**Project**”).

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 live, work and recreate in the City and surrounding communities and would be directly affected by the Project’s environmental impacts.

The Southwest Carpenters expressly reserves 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. 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 incorporates by reference all comments raising issues regarding the environmental impact report (“**EIR**”) submitted prior to certification of the EIR for

the Project. *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 requests 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 the Applicant to provide additional 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-the-job 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.

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 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>

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 requiring 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

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<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* <https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf>

<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* <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10>

<sup>3</sup> City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* [https://www.hayward-ca.gov/sites/default/files/documents/General\\_Plan\\_FINAL.pdf](https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf).

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:

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

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

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

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

<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* <http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf>.

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 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. 14 California Code of Regulations (“**CCR**” or “**CEQA Guidelines**”) § 15002(a)(1).<sup>8</sup> “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 self-government.’ [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.” *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal. App. 4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

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 Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553; *Laurel Heights Improvement Ass’n v.*

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<sup>8</sup> The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 150000 et seq, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given “great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous.” *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

*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 where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns” specified in CEQA section 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 considered. 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 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).

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

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 requires 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>9</sup>

SWRCC recommends that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. SWRCC requests 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 SWRCC's experience with safe construction site work practices, SWRCC recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

**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.

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<sup>9</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 <https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx>.

- 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.

### **Planning**

- 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>10</sup>

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 Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

SWRCC has also developed a rigorous Infection Control Risk Assessment (“**ICRA**”) training program to ensure it delivers a workforce that understands how to identify and

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<sup>10</sup> See also The Center for Construction Research and Training, North America’s Building Trades Unions (April 27 2020) NABTU and CPWR COVID-19 Standards for U.S. Construction Sites, available at [https://www.cpwr.com/sites/default/files/NABTU\\_CPWR\\_Standards\\_COVID-19.pdf](https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf); Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at [https://dpw.lacounty.gov/building-and-safety/docs/pw\\_guidelines-construction-sites.pdf](https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf).

control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.<sup>11</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.

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

Sincerely,



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Mitchell M. Tsai

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).

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<sup>11</sup> For details concerning SWRCC's ICRA training program, see <https://icrahealthcare.com/>.

**EXHIBIT A**



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

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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**

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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>

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<sup>1</sup> “California Emissions Estimator Model.” CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

<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](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):

$$\text{“VMT}_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$$

Where:

$n$  = Number of land uses being modeled.”<sup>5</sup>

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

$$\text{“Emissions}_{\text{pollutant}} = \text{VMT} * \text{EF}_{\text{running,pollutant}}$$

Where:

$\text{Emissions}_{\text{pollutant}}$  = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

$\text{EF}_{\text{running,pollutant}}$  = 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

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<sup>4</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](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 14-15.

<sup>5</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](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 23.

<sup>6</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](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6), p. 15.

<sup>7</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](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 34.

<sup>8</sup> CalEEMod User Guide, available at: <http://www.caleemod.com/>, 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 *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. 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
<b>Average</b>	<b>16.47</b>	<b>11.17</b>
<b>Minimum</b>	<b>10.80</b>	<b>10.80</b>
<b>Maximum</b>	<b>19.80</b>	<b>14.70</b>
<b>Range</b>	<b>9.00</b>	<b>3.90</b>

<sup>9</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](http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4), p. 34.

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

<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](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: [http://www.aqmd.gov/docs/default-source/caleemod/05\\_appendix-d2016-3-2.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4), p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8- miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7- miles, 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).

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

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>14</sup> “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: [http://www.aqmd.gov/docs/default-source/caleemod/05\\_appendix-d2016-3-2.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4), 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,

A handwritten signature in blue ink that reads "Matt Hagemann".

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

A handwritten signature in blue ink that reads "Paul Rosenfeld".

Paul E. Rosenfeld, Ph.D.



## Attachment A

<b>Location Type</b>	<b>Location Name</b>	<b>Rural H-W (miles)</b>	<b>Urban H-W (miles)</b>
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	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	Riverside-Salton	14.6	11
County	Riverside-South	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
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

<b>Worker Trip Length by Air Basin</b>		
<b>Air Basin</b>	<b>Rural (miles)</b>	<b>Urban (miles)</b>
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
<b>Average</b>	<b>16.47</b>	<b>11.17</b>
<b>Minimum</b>	<b>10.80</b>	<b>10.80</b>
<b>Maximum</b>	<b>19.80</b>	<b>14.70</b>
<b>Range</b>	<b>9.00</b>	<b>3.90</b>

## 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**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

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

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

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

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**

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

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-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	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
<b>Maximum</b>	<b>4.1619</b>	<b>4.1142</b>	<b>6.1625</b>	<b>0.0189</b>	<b>1.3058</b>	<b>0.1201</b>	<b>1.4259</b>	<b>0.3460</b>	<b>0.1128</b>	<b>0.4588</b>	<b>0.0000</b>	<b>1,721.6826</b>	<b>1,721.6826</b>	<b>0.1294</b>	<b>0.0000</b>	<b>1,724.9187</b>



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

**2.1 Overall Construction**

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-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	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
<b>Maximum</b>	<b>4.1619</b>	<b>4.1142</b>	<b>6.1625</b>	<b>0.0189</b>	<b>1.3058</b>	<b>0.1201</b>	<b>1.4259</b>	<b>0.3460</b>	<b>0.1128</b>	<b>0.4588</b>	<b>0.0000</b>	<b>1,721.6823</b>	<b>1,721.6823</b>	<b>0.1294</b>	<b>0.0000</b>	<b>1,724.9183</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4103	1.4103
2	12-1-2021	2-28-2022	1.3613	1.3613
3	3-1-2022	5-31-2022	1.1985	1.1985
4	6-1-2022	8-31-2022	1.1921	1.1921
5	9-1-2022	11-30-2022	1.1918	1.1918
6	12-1-2022	2-28-2023	1.0774	1.0774
7	3-1-2023	5-31-2023	1.0320	1.0320
8	6-1-2023	8-31-2023	1.0260	1.0260

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

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 PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
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
<b>Total</b>	<b>6.8692</b>	<b>9.5223</b>	<b>30.3407</b>	<b>0.0914</b>	<b>7.7979</b>	<b>0.2260</b>	<b>8.0240</b>	<b>2.0895</b>	<b>0.2219</b>	<b>2.3114</b>	<b>236.9712</b>	<b>12,294.1807</b>	<b>12,531.1519</b>	<b>15.7904</b>	<b>0.1260</b>	<b>12,963.4751</b>

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

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
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
<b>Total</b>	<b>6.8692</b>	<b>9.5223</b>	<b>30.3407</b>	<b>0.0914</b>	<b>7.7979</b>	<b>0.2260</b>	<b>8.0240</b>	<b>2.0895</b>	<b>0.2219</b>	<b>2.3114</b>	<b>236.9712</b>	<b>12,294.1807</b>	<b>12,531.1519</b>	<b>15.7904</b>	<b>0.1260</b>	<b>12,963.4751</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days 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**

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

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
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**

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	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**

**Unmitigated Construction On-Site**

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

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

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

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

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

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

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

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

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



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

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

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

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

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

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

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

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

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

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

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

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

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

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

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

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

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

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

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

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

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

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

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
<b>Total</b>	<b>0.2158</b>	<b>1.9754</b>	<b>2.0700</b>	<b>3.4100e-003</b>		<b>0.1023</b>	<b>0.1023</b>		<b>0.0963</b>	<b>0.0963</b>	<b>0.0000</b>	<b>293.1324</b>	<b>293.1324</b>	<b>0.0702</b>	<b>0.0000</b>	<b>294.8881</b>

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

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-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-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
<b>Total</b>	<b>0.4616</b>	<b>2.0027</b>	<b>3.9885</b>	<b>0.0152</b>	<b>1.2243</b>	<b>0.0121</b>	<b>1.2363</b>	<b>0.3278</b>	<b>0.0112</b>	<b>0.3390</b>	<b>0.0000</b>	<b>1,408.7952</b>	<b>1,408.7952</b>	<b>0.0530</b>	<b>0.0000</b>	<b>1,410.1208</b>

**Mitigated Construction On-Site**

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

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

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-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-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
<b>Total</b>	<b>0.4616</b>	<b>2.0027</b>	<b>3.9885</b>	<b>0.0152</b>	<b>1.2243</b>	<b>0.0121</b>	<b>1.2363</b>	<b>0.3278</b>	<b>0.0112</b>	<b>0.3390</b>	<b>0.0000</b>	<b>1,408.7952</b>	<b>1,408.7952</b>	<b>0.0530</b>	<b>0.0000</b>	<b>1,410.1208</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

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



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

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-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-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
<b>Total</b>	<b>0.4135</b>	<b>1.5218</b>	<b>3.5707</b>	<b>0.0144</b>	<b>1.1953</b>	<b>9.8700e-003</b>	<b>1.2051</b>	<b>0.3200</b>	<b>9.1400e-003</b>	<b>0.3292</b>	<b>0.0000</b>	<b>1,327.3369</b>	<b>1,327.3369</b>	<b>0.0462</b>	<b>0.0000</b>	<b>1,328.4916</b>

**Mitigated Construction On-Site**

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

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

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-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-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
<b>Total</b>	<b>0.4135</b>	<b>1.5218</b>	<b>3.5707</b>	<b>0.0144</b>	<b>1.1953</b>	<b>9.8700e-003</b>	<b>1.2051</b>	<b>0.3200</b>	<b>9.1400e-003</b>	<b>0.3292</b>	<b>0.0000</b>	<b>1,327.3369</b>	<b>1,327.3369</b>	<b>0.0462</b>	<b>0.0000</b>	<b>1,328.4916</b>

**3.6 Paving - 2023**

**Unmitigated Construction On-Site**

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

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

**3.6 Paving - 2023**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

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

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

**3.6 Paving - 2023**

**Mitigated Construction Off-Site**

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

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

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

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

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
<b>Total</b>	<b>5.9000e-004</b>	<b>4.1000e-004</b>	<b>4.9200e-003</b>	<b>2.0000e-005</b>	<b>1.8100e-003</b>	<b>1.0000e-005</b>	<b>1.8200e-003</b>	<b>4.8000e-004</b>	<b>1.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.4697</b>	<b>1.4697</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.4706</b>

**Mitigated Construction On-Site**

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

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

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
<b>Total</b>	<b>5.9000e-004</b>	<b>4.1000e-004</b>	<b>4.9200e-003</b>	<b>2.0000e-005</b>	<b>1.8100e-003</b>	<b>1.0000e-005</b>	<b>1.8200e-003</b>	<b>4.8000e-004</b>	<b>1.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.4697</b>	<b>1.4697</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.4706</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	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-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
<b>Total</b>	<b>4.1404</b>	<b>0.0213</b>	<b>0.0317</b>	<b>5.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>4.4745</b>

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	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-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
<b>Total</b>	<b>4.1404</b>	<b>0.0213</b>	<b>0.0317</b>	<b>5.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>4.4745</b>

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

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**



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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	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
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

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

Land Use	Miles			Trip %			Trip Purpose %		
	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 Restaurant)	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 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

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
<b>Total</b>		<b>0.1398</b>	<b>1.2312</b>	<b>0.7770</b>	<b>7.6200e-003</b>		<b>0.0966</b>	<b>0.0966</b>		<b>0.0966</b>	<b>0.0966</b>	<b>0.0000</b>	<b>1,383.4268</b>	<b>1,383.4268</b>	<b>0.0265</b>	<b>0.0254</b>	<b>1,391.6478</b>

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
<b>Total</b>		<b>0.1398</b>	<b>1.2312</b>	<b>0.7770</b>	<b>7.6200e-003</b>		<b>0.0966</b>	<b>0.0966</b>		<b>0.0966</b>	<b>0.0966</b>	<b>0.0000</b>	<b>1,383.4268</b>	<b>1,383.4268</b>	<b>0.0265</b>	<b>0.0254</b>	<b>1,391.6478</b>

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

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
<b>Total</b>		<b>2,512.6465</b>	<b>0.1037</b>	<b>0.0215</b>	<b>2,521.6356</b>

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

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
<b>Total</b>		<b>2,512.6465</b>	<b>0.1037</b>	<b>0.0215</b>	<b>2,521.6356</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

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



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

**6.2 Area by SubCategory**

**Mitigated**

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

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

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

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
<b>Total</b>		<b>585.8052</b>	<b>3.0183</b>	<b>0.0755</b>	<b>683.7567</b>

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

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
<b>Total</b>		<b>585.8052</b>	<b>3.0183</b>	<b>0.0755</b>	<b>683.7567</b>

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

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
Unmitigated	207.8079	12.2811	0.0000	514.8354

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

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
<b>Total</b>		<b>207.8079</b>	<b>12.2811</b>	<b>0.0000</b>	<b>514.8354</b>

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

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
<b>Total</b>		<b>207.8079</b>	<b>12.2811</b>	<b>0.0000</b>	<b>514.8354</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number
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**11.0 Vegetation**

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

**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**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

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

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

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

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

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

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
<b>Maximum</b>	<b>237.1630</b>	<b>46.4588</b>	<b>49.5629</b>	<b>0.1517</b>	<b>18.2675</b>	<b>2.0461</b>	<b>20.3135</b>	<b>9.9840</b>	<b>1.8824</b>	<b>11.8664</b>	<b>0.0000</b>	<b>15,251.5674</b>	<b>15,251.5674</b>	<b>1.9503</b>	<b>0.0000</b>	<b>15,278.5288</b>



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

**2.2 Overall Operational**

**Unmitigated Operational**

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

**Mitigated Operational**

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

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	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

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

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



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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	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**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

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

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
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-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
<b>Total</b>	<b>0.1916</b>	<b>4.1394</b>	<b>1.5644</b>	<b>0.0136</b>	<b>0.4346</b>	<b>0.0139</b>	<b>0.4485</b>	<b>0.1176</b>	<b>0.0133</b>	<b>0.1309</b>		<b>1,463.0568</b>	<b>1,463.0568</b>	<b>0.0927</b>		<b>1,465.3750</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

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

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
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-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
<b>Total</b>	<b>0.1916</b>	<b>4.1394</b>	<b>1.5644</b>	<b>0.0136</b>	<b>0.4346</b>	<b>0.0139</b>	<b>0.4485</b>	<b>0.1176</b>	<b>0.0133</b>	<b>0.1309</b>		<b>1,463.0568</b>	<b>1,463.0568</b>	<b>0.0927</b>		<b>1,465.3750</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

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

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
<b>Total</b>	<b>0.0772</b>	<b>0.0530</b>	<b>0.7250</b>	<b>2.0600e-003</b>	<b>0.2012</b>	<b>1.6300e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.5000e-003</b>	<b>0.0549</b>		<b>204.9786</b>	<b>204.9786</b>	<b>6.0400e-003</b>		<b>205.1296</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

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

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
<b>Total</b>	<b>0.0772</b>	<b>0.0530</b>	<b>0.7250</b>	<b>2.0600e-003</b>	<b>0.2012</b>	<b>1.6300e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.5000e-003</b>	<b>0.0549</b>		<b>204.9786</b>	<b>204.9786</b>	<b>6.0400e-003</b>		<b>205.1296</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

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

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

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

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

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

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

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

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
<b>Total</b>	<b>0.0803</b>	<b>0.0532</b>	<b>0.7432</b>	<b>2.2100e-003</b>	<b>0.2236</b>	<b>1.7500e-003</b>	<b>0.2253</b>	<b>0.0593</b>	<b>1.6100e-003</b>	<b>0.0609</b>		<b>219.7425</b>	<b>219.7425</b>	<b>6.0600e-003</b>		<b>219.8941</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>



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

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
<b>Total</b>	<b>0.0803</b>	<b>0.0532</b>	<b>0.7432</b>	<b>2.2100e-003</b>	<b>0.2236</b>	<b>1.7500e-003</b>	<b>0.2253</b>	<b>0.0593</b>	<b>1.6100e-003</b>	<b>0.0609</b>		<b>219.7425</b>	<b>219.7425</b>	<b>6.0600e-003</b>		<b>219.8941</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

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

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 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 7	8,800.685 7	0.2429		8,806.758 2
<b>Total</b>	<b>3.6242</b>	<b>15.3350</b>	<b>33.1995</b>	<b>0.1247</b>	<b>9.8688</b>	<b>0.0949</b>	<b>9.9637</b>	<b>2.6381</b>	<b>0.0883</b>	<b>2.7263</b>		<b>12,697.23 39</b>	<b>12,697.23 39</b>	<b>0.4665</b>		<b>12,708.89 66</b>

**Mitigated Construction On-Site**

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

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

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 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 7	8,800.685 7	0.2429		8,806.758 2
<b>Total</b>	<b>3.6242</b>	<b>15.3350</b>	<b>33.1995</b>	<b>0.1247</b>	<b>9.8688</b>	<b>0.0949</b>	<b>9.9637</b>	<b>2.6381</b>	<b>0.0883</b>	<b>2.7263</b>		<b>12,697.23 39</b>	<b>12,697.23 39</b>	<b>0.4665</b>		<b>12,708.89 66</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

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

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

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 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 8	8,478.440 8	0.2190		8,483.916 0
<b>Total</b>	<b>3.3229</b>	<b>11.9468</b>	<b>30.5127</b>	<b>0.1203</b>	<b>9.8688</b>	<b>0.0797</b>	<b>9.9485</b>	<b>2.6381</b>	<b>0.0738</b>	<b>2.7118</b>		<b>12,252.31 70</b>	<b>12,252.31 70</b>	<b>0.4172</b>		<b>12,262.74 60</b>

**Mitigated Construction On-Site**

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

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

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 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 8	8,478.440 8	0.2190		8,483.916 0
<b>Total</b>	<b>3.3229</b>	<b>11.9468</b>	<b>30.5127</b>	<b>0.1203</b>	<b>9.8688</b>	<b>0.0797</b>	<b>9.9485</b>	<b>2.6381</b>	<b>0.0738</b>	<b>2.7118</b>		<b>12,252.31 70</b>	<b>12,252.31 70</b>	<b>0.4172</b>		<b>12,262.74 60</b>

**3.6 Paving - 2023**

**Unmitigated Construction On-Site**

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

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

**3.6 Paving - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
<b>Total</b>	<b>0.0566</b>	<b>0.0361</b>	<b>0.5133</b>	<b>1.5900e-003</b>	<b>0.1677</b>	<b>1.2800e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1700e-003</b>	<b>0.0456</b>		<b>158.7723</b>	<b>158.7723</b>	<b>4.1000e-003</b>		<b>158.8748</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

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

**3.6 Paving - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
<b>Total</b>	<b>0.0566</b>	<b>0.0361</b>	<b>0.5133</b>	<b>1.5900e-003</b>	<b>0.1677</b>	<b>1.2800e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1700e-003</b>	<b>0.0456</b>		<b>158.7723</b>	<b>158.7723</b>	<b>4.1000e-003</b>		<b>158.8748</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

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

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
<b>Total</b>	<b>0.0535</b>	<b>0.0329</b>	<b>0.4785</b>	<b>1.5400e-003</b>	<b>0.1677</b>	<b>1.2600e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1600e-003</b>	<b>0.0456</b>		<b>153.8517</b>	<b>153.8517</b>	<b>3.7600e-003</b>		<b>153.9458</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>



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

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
<b>Total</b>	<b>0.0535</b>	<b>0.0329</b>	<b>0.4785</b>	<b>1.5400e-003</b>	<b>0.1677</b>	<b>1.2600e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1600e-003</b>	<b>0.0456</b>		<b>153.8517</b>	<b>153.8517</b>	<b>3.7600e-003</b>		<b>153.9458</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
<b>Total</b>	<b>0.5707</b>	<b>0.3513</b>	<b>5.1044</b>	<b>0.0165</b>	<b>1.7884</b>	<b>0.0134</b>	<b>1.8018</b>	<b>0.4743</b>	<b>0.0123</b>	<b>0.4866</b>		<b>1,641.085 2</b>	<b>1,641.085 2</b>	<b>0.0401</b>		<b>1,642.088 6</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

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

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
<b>Total</b>	<b>0.5707</b>	<b>0.3513</b>	<b>5.1044</b>	<b>0.0165</b>	<b>1.7884</b>	<b>0.0134</b>	<b>1.8018</b>	<b>0.4743</b>	<b>0.0123</b>	<b>0.4866</b>		<b>1,641.085 2</b>	<b>1,641.085 2</b>	<b>0.0401</b>		<b>1,642.088 6</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 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 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	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
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

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

Land Use	Miles			Trip %			Trip Purpose %		
	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 Restaurant)	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 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

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

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

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**



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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer 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	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

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

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer 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	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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

**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**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

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

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

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

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

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

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	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	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
<b>Maximum</b>	<b>237.2328</b>	<b>46.4651</b>	<b>47.3319</b>	<b>0.1455</b>	<b>18.2675</b>	<b>2.0461</b>	<b>20.3135</b>	<b>9.9840</b>	<b>1.8824</b>	<b>11.8664</b>	<b>0.0000</b>	<b>14,630.3099</b>	<b>14,630.3099</b>	<b>1.9499</b>	<b>0.0000</b>	<b>14,657.2663</b>





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

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
<b>Total</b>	<b>40.7912</b>	<b>67.7872</b>	<b>202.7424</b>	<b>0.6043</b>	<b>45.9592</b>	<b>2.4640</b>	<b>48.4231</b>	<b>12.2950</b>	<b>2.4399</b>	<b>14.7349</b>	<b>0.0000</b>	<b>74,422.3787</b>	<b>74,422.3787</b>	<b>2.8429</b>	<b>0.4832</b>	<b>74,637.4417</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
<b>Total</b>	<b>40.7912</b>	<b>67.7872</b>	<b>202.7424</b>	<b>0.6043</b>	<b>45.9592</b>	<b>2.4640</b>	<b>48.4231</b>	<b>12.2950</b>	<b>2.4399</b>	<b>14.7349</b>	<b>0.0000</b>	<b>74,422.3787</b>	<b>74,422.3787</b>	<b>2.8429</b>	<b>0.4832</b>	<b>74,637.4417</b>

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	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

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

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

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	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**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

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

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
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-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
<b>Total</b>	<b>0.2019</b>	<b>4.1943</b>	<b>1.5706</b>	<b>0.0133</b>	<b>0.4346</b>	<b>0.0141</b>	<b>0.4487</b>	<b>0.1176</b>	<b>0.0135</b>	<b>0.1311</b>		<b>1,430.6932</b>	<b>1,430.6932</b>	<b>0.0955</b>		<b>1,433.0812</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

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

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
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-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
<b>Total</b>	<b>0.2019</b>	<b>4.1943</b>	<b>1.5706</b>	<b>0.0133</b>	<b>0.4346</b>	<b>0.0141</b>	<b>0.4487</b>	<b>0.1176</b>	<b>0.0135</b>	<b>0.1311</b>		<b>1,430.6932</b>	<b>1,430.6932</b>	<b>0.0955</b>		<b>1,433.0812</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

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

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
<b>Total</b>	<b>0.0858</b>	<b>0.0587</b>	<b>0.6629</b>	<b>1.9400e-003</b>	<b>0.2012</b>	<b>1.6300e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.5000e-003</b>	<b>0.0549</b>		<b>193.0052</b>	<b>193.0052</b>	<b>5.6800e-003</b>		<b>193.1472</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

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

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
<b>Total</b>	<b>0.0858</b>	<b>0.0587</b>	<b>0.6629</b>	<b>1.9400e-003</b>	<b>0.2012</b>	<b>1.6300e-003</b>	<b>0.2028</b>	<b>0.0534</b>	<b>1.5000e-003</b>	<b>0.0549</b>		<b>193.0052</b>	<b>193.0052</b>	<b>5.6800e-003</b>		<b>193.1472</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>



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

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

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

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

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

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

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

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

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

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

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

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

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

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
<b>Total</b>	<b>4.0156</b>	<b>15.5266</b>	<b>30.9685</b>	<b>0.1186</b>	<b>9.8688</b>	<b>0.0957</b>	<b>9.9645</b>	<b>2.6381</b>	<b>0.0891</b>	<b>2.7271</b>		<b>12,075.9763</b>	<b>12,075.9763</b>	<b>0.4663</b>		<b>12,087.6341</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

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

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
<b>Total</b>	<b>4.0156</b>	<b>15.5266</b>	<b>30.9685</b>	<b>0.1186</b>	<b>9.8688</b>	<b>0.0957</b>	<b>9.9645</b>	<b>2.6381</b>	<b>0.0891</b>	<b>2.7271</b>		<b>12,075.9763</b>	<b>12,075.9763</b>	<b>0.4663</b>		<b>12,087.6341</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

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

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
<b>Total</b>	<b>3.6978</b>	<b>12.1065</b>	<b>28.3496</b>	<b>0.1144</b>	<b>9.8688</b>	<b>0.0803</b>	<b>9.9491</b>	<b>2.6381</b>	<b>0.0743</b>	<b>2.7124</b>		<b>11,655.1325</b>	<b>11,655.1325</b>	<b>0.4151</b>		<b>11,665.5099</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

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

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
<b>Total</b>	<b>3.6978</b>	<b>12.1065</b>	<b>28.3496</b>	<b>0.1144</b>	<b>9.8688</b>	<b>0.0803</b>	<b>9.9491</b>	<b>2.6381</b>	<b>0.0743</b>	<b>2.7124</b>		<b>11,655.1325</b>	<b>11,655.1325</b>	<b>0.4151</b>		<b>11,665.5099</b>

**3.6 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>



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

**3.6 Paving - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
<b>Total</b>	<b>0.0633</b>	<b>0.0400</b>	<b>0.4677</b>	<b>1.5000e-003</b>	<b>0.1677</b>	<b>1.2800e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1700e-003</b>	<b>0.0456</b>		<b>149.5081</b>	<b>149.5081</b>	<b>3.8500e-003</b>		<b>149.6043</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

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

**3.6 Paving - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
<b>Total</b>	<b>0.0633</b>	<b>0.0400</b>	<b>0.4677</b>	<b>1.5000e-003</b>	<b>0.1677</b>	<b>1.2800e-003</b>	<b>0.1689</b>	<b>0.0445</b>	<b>1.1700e-003</b>	<b>0.0456</b>		<b>149.5081</b>	<b>149.5081</b>	<b>3.8500e-003</b>		<b>149.6043</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

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

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

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

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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		1,545.2860	1,545.2860	0.0376		1,546.2262
<b>Total</b>	<b>0.6406</b>	<b>0.3886</b>	<b>4.6439</b>	<b>0.0155</b>	<b>1.7884</b>	<b>0.0134</b>	<b>1.8018</b>	<b>0.4743</b>	<b>0.0123</b>	<b>0.4866</b>		<b>1,545.2860</b>	<b>1,545.2860</b>	<b>0.0376</b>		<b>1,546.2262</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

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

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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		1,545.2860	1,545.2860	0.0376		1,546.2262
<b>Total</b>	<b>0.6406</b>	<b>0.3886</b>	<b>4.6439</b>	<b>0.0155</b>	<b>1.7884</b>	<b>0.0134</b>	<b>1.8018</b>	<b>0.4743</b>	<b>0.0123</b>	<b>0.4866</b>		<b>1,545.2860</b>	<b>1,545.2860</b>	<b>0.0376</b>		<b>1,546.2262</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	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
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

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

Land Use	Miles			Trip %			Trip Purpose %		
	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 Restaurant)	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 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



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

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

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer 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	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

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

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer 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	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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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**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

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

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

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

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-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	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
<b>Maximum</b>	<b>4.1592</b>	<b>4.0240</b>	<b>5.1546</b>	<b>0.0155</b>	<b>0.9509</b>	<b>0.1175</b>	<b>1.0683</b>	<b>0.2518</b>	<b>0.1103</b>	<b>0.3621</b>	<b>0.0000</b>	<b>1,418.6554</b>	<b>1,418.6554</b>	<b>0.1215</b>	<b>0.0000</b>	<b>1,421.6925</b>

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

**2.1 Overall Construction**

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-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	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
<b>Maximum</b>	<b>4.1592</b>	<b>4.0240</b>	<b>5.1546</b>	<b>0.0155</b>	<b>0.9509</b>	<b>0.1175</b>	<b>1.0683</b>	<b>0.2518</b>	<b>0.1103</b>	<b>0.3621</b>	<b>0.0000</b>	<b>1,418.6550</b>	<b>1,418.6550</b>	<b>0.1215</b>	<b>0.0000</b>	<b>1,421.6921</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4091	1.4091
2	12-1-2021	2-28-2022	1.3329	1.3329
3	3-1-2022	5-31-2022	1.1499	1.1499
4	6-1-2022	8-31-2022	1.1457	1.1457
5	9-1-2022	11-30-2022	1.1415	1.1415
6	12-1-2022	2-28-2023	1.0278	1.0278
7	3-1-2023	5-31-2023	0.9868	0.9868
8	6-1-2023	8-31-2023	0.9831	0.9831

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

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 PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
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
<b>Total</b>	<b>6.8692</b>	<b>9.5223</b>	<b>30.3407</b>	<b>0.0914</b>	<b>7.7979</b>	<b>0.2260</b>	<b>8.0240</b>	<b>2.0895</b>	<b>0.2219</b>	<b>2.3114</b>	<b>236.9712</b>	<b>12,294.1807</b>	<b>12,531.1519</b>	<b>15.7904</b>	<b>0.1260</b>	<b>12,963.4751</b>

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

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
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
<b>Total</b>	<b>6.8692</b>	<b>9.5223</b>	<b>30.3407</b>	<b>0.0914</b>	<b>7.7979</b>	<b>0.2260</b>	<b>8.0240</b>	<b>2.0895</b>	<b>0.2219</b>	<b>2.3114</b>	<b>236.9712</b>	<b>12,294.1807</b>	<b>12,531.1519</b>	<b>15.7904</b>	<b>0.1260</b>	<b>12,963.4751</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days 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**

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

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
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

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	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	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
<b>Total</b>	<b>0.0475</b>	<b>0.4716</b>	<b>0.3235</b>	<b>5.8000e-004</b>	<b>0.0496</b>	<b>0.0233</b>	<b>0.0729</b>	<b>7.5100e-003</b>	<b>0.0216</b>	<b>0.0291</b>	<b>0.0000</b>	<b>51.0012</b>	<b>51.0012</b>	<b>0.0144</b>	<b>0.0000</b>	<b>51.3601</b>



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

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

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

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

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

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

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

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

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

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

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

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

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

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

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

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

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

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

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

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

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

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

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

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

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

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
<b>Total</b>	<b>2.1000e-004</b>	<b>1.5000e-004</b>	<b>1.7400e-003</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4587</b>	<b>0.4587</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4590</b>

**Mitigated Construction On-Site**

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

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

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
<b>Total</b>	<b>2.1000e-004</b>	<b>1.5000e-004</b>	<b>1.7400e-003</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4587</b>	<b>0.4587</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4590</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
<b>Total</b>	<b>0.2158</b>	<b>1.9754</b>	<b>2.0700</b>	<b>3.4100e-003</b>		<b>0.1023</b>	<b>0.1023</b>		<b>0.0963</b>	<b>0.0963</b>	<b>0.0000</b>	<b>293.1324</b>	<b>293.1324</b>	<b>0.0702</b>	<b>0.0000</b>	<b>294.8881</b>



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

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
<b>Total</b>	<b>0.3578</b>	<b>1.9125</b>	<b>2.9812</b>	<b>0.0119</b>	<b>0.8696</b>	<b>9.4100e-003</b>	<b>0.8790</b>	<b>0.2336</b>	<b>8.7800e-003</b>	<b>0.2424</b>	<b>0.0000</b>	<b>1,105.9771</b>	<b>1,105.9771</b>	<b>0.0451</b>	<b>0.0000</b>	<b>1,107.1039</b>

**Mitigated Construction On-Site**

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

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

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
<b>Total</b>	<b>0.3578</b>	<b>1.9125</b>	<b>2.9812</b>	<b>0.0119</b>	<b>0.8696</b>	<b>9.4100e-003</b>	<b>0.8790</b>	<b>0.2336</b>	<b>8.7800e-003</b>	<b>0.2424</b>	<b>0.0000</b>	<b>1,105.9771</b>	<b>1,105.9771</b>	<b>0.0451</b>	<b>0.0000</b>	<b>1,107.1039</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

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

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

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
<b>Total</b>	<b>0.3177</b>	<b>1.4420</b>	<b>2.6646</b>	<b>0.0112</b>	<b>0.8490</b>	<b>7.3700e-003</b>	<b>0.8564</b>	<b>0.2281</b>	<b>6.8500e-003</b>	<b>0.2349</b>	<b>0.0000</b>	<b>1,042.5294</b>	<b>1,042.5294</b>	<b>0.0392</b>	<b>0.0000</b>	<b>1,043.5090</b>

**Mitigated Construction On-Site**

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

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

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
<b>Total</b>	<b>0.3177</b>	<b>1.4420</b>	<b>2.6646</b>	<b>0.0112</b>	<b>0.8490</b>	<b>7.3700e-003</b>	<b>0.8564</b>	<b>0.2281</b>	<b>6.8500e-003</b>	<b>0.2349</b>	<b>0.0000</b>	<b>1,042.5294</b>	<b>1,042.5294</b>	<b>0.0392</b>	<b>0.0000</b>	<b>1,043.5090</b>

**3.6 Paving - 2023**

**Unmitigated Construction On-Site**

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

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

**3.6 Paving - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
<b>Total</b>	<b>2.8000e-004</b>	<b>1.9000e-004</b>	<b>2.2300e-003</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6156</b>	<b>0.6156</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6160</b>

**Mitigated Construction On-Site**

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

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

**3.6 Paving - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
<b>Total</b>	<b>2.8000e-004</b>	<b>1.9000e-004</b>	<b>2.2300e-003</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6156</b>	<b>0.6156</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6160</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

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

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

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

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

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

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	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-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
<b>Total</b>	<b>4.1404</b>	<b>0.0213</b>	<b>0.0317</b>	<b>5.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>4.4745</b>



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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	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-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
<b>Total</b>	<b>4.1404</b>	<b>0.0213</b>	<b>0.0317</b>	<b>5.0000e-005</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>		<b>1.0700e-003</b>	<b>1.0700e-003</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>4.4745</b>

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

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	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
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

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

Land Use	Miles			Trip %			Trip Purpose %		
	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 Restaurant)	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 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

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003			0.0966	0.0966		0.0966	0.0966	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003			0.0966	0.0966		0.0966	0.0966	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
<b>Total</b>		<b>0.1398</b>	<b>1.2312</b>	<b>0.7770</b>	<b>7.6200e-003</b>		<b>0.0966</b>	<b>0.0966</b>		<b>0.0966</b>	<b>0.0966</b>	<b>0.0000</b>	<b>1,383.4268</b>	<b>1,383.4268</b>	<b>0.0265</b>	<b>0.0254</b>	<b>1,391.6478</b>

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
<b>Total</b>		<b>0.1398</b>	<b>1.2312</b>	<b>0.7770</b>	<b>7.6200e-003</b>		<b>0.0966</b>	<b>0.0966</b>		<b>0.0966</b>	<b>0.0966</b>	<b>0.0000</b>	<b>1,383.4268</b>	<b>1,383.4268</b>	<b>0.0265</b>	<b>0.0254</b>	<b>1,391.6478</b>

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

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
<b>Total</b>		<b>2,512.6465</b>	<b>0.1037</b>	<b>0.0215</b>	<b>2,521.6356</b>



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

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
<b>Total</b>		<b>2,512.6465</b>	<b>0.1037</b>	<b>0.0215</b>	<b>2,521.6356</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

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

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

**6.2 Area by SubCategory**

**Mitigated**

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

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

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

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
<b>Total</b>		<b>585.8052</b>	<b>3.0183</b>	<b>0.0755</b>	<b>683.7567</b>

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

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
<b>Total</b>		<b>585.8052</b>	<b>3.0183</b>	<b>0.0755</b>	<b>683.7567</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

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
Unmitigated	207.8079	12.2811	0.0000	514.8354

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

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
<b>Total</b>		<b>207.8079</b>	<b>12.2811</b>	<b>0.0000</b>	<b>514.8354</b>



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

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
<b>Total</b>		<b>207.8079</b>	<b>12.2811</b>	<b>0.0000</b>	<b>514.8354</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number
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**11.0 Vegetation**

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

**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**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

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

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, Summer

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

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

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
<b>Maximum</b>	<b>237.0219</b>	<b>46.4415</b>	<b>40.8776</b>	<b>0.1240</b>	<b>18.2032</b>	<b>2.0456</b>	<b>20.2488</b>	<b>9.9670</b>	<b>1.8820</b>	<b>11.8490</b>	<b>0.0000</b>	<b>12,493.4403</b>	<b>12,493.4403</b>	<b>1.9485</b>	<b>0.0000</b>	<b>12,518.5707</b>



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

**2.2 Overall Operational**

**Unmitigated Operational**

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

**Mitigated Operational**

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



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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	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

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

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**

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	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	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

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

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
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-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
<b>Total</b>	<b>0.1760</b>	<b>4.1265</b>	<b>1.3884</b>	<b>0.0131</b>	<b>0.3810</b>	<b>0.0135</b>	<b>0.3946</b>	<b>0.1034</b>	<b>0.0129</b>	<b>0.1163</b>		<b>1,409.5212</b>	<b>1,409.5212</b>	<b>0.0912</b>		<b>1,411.8015</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

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

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
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-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
<b>Total</b>	<b>0.1760</b>	<b>4.1265</b>	<b>1.3884</b>	<b>0.0131</b>	<b>0.3810</b>	<b>0.0135</b>	<b>0.3946</b>	<b>0.1034</b>	<b>0.0129</b>	<b>0.1163</b>		<b>1,409.5212</b>	<b>1,409.5212</b>	<b>0.0912</b>		<b>1,411.8015</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

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

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
<b>Total</b>	<b>0.0584</b>	<b>0.0375</b>	<b>0.5139</b>	<b>1.4100e-003</b>	<b>0.1369</b>	<b>1.1400e-003</b>	<b>0.1381</b>	<b>0.0363</b>	<b>1.0500e-003</b>	<b>0.0374</b>		<b>140.7359</b>	<b>140.7359</b>	<b>4.2200e-003</b>		<b>140.8414</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

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

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
<b>Total</b>	<b>0.0584</b>	<b>0.0375</b>	<b>0.5139</b>	<b>1.4100e-003</b>	<b>0.1369</b>	<b>1.1400e-003</b>	<b>0.1381</b>	<b>0.0363</b>	<b>1.0500e-003</b>	<b>0.0374</b>		<b>140.7359</b>	<b>140.7359</b>	<b>4.2200e-003</b>		<b>140.8414</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

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

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
<b>Total</b>	<b>0.0649</b>	<b>0.0417</b>	<b>0.5710</b>	<b>1.5700e-003</b>	<b>0.1521</b>	<b>1.2700e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1700e-003</b>	<b>0.0415</b>		<b>156.3732</b>	<b>156.3732</b>	<b>4.6900e-003</b>		<b>156.4904</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>



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

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
<b>Total</b>	<b>0.0649</b>	<b>0.0417</b>	<b>0.5710</b>	<b>1.5700e-003</b>	<b>0.1521</b>	<b>1.2700e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1700e-003</b>	<b>0.0415</b>		<b>156.3732</b>	<b>156.3732</b>	<b>4.6900e-003</b>		<b>156.4904</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

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

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
<b>Total</b>	<b>0.0607</b>	<b>0.0376</b>	<b>0.5263</b>	<b>1.5100e-003</b>	<b>0.1521</b>	<b>1.2300e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1300e-003</b>	<b>0.0415</b>		<b>150.8754</b>	<b>150.8754</b>	<b>4.2400e-003</b>		<b>150.9813</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

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

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
<b>Total</b>	<b>0.0607</b>	<b>0.0376</b>	<b>0.5263</b>	<b>1.5100e-003</b>	<b>0.1521</b>	<b>1.2300e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1300e-003</b>	<b>0.0415</b>		<b>150.8754</b>	<b>150.8754</b>	<b>4.2400e-003</b>		<b>150.9813</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

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

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 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 5	6,042.558 5	0.1697		6,046.800 0
<b>Total</b>	<b>2.8378</b>	<b>14.7106</b>	<b>24.5142</b>	<b>0.0971</b>	<b>7.0087</b>	<b>0.0741</b>	<b>7.0828</b>	<b>1.8799</b>	<b>0.0691</b>	<b>1.9490</b>		<b>9,939.106 7</b>	<b>9,939.106 7</b>	<b>0.3933</b>		<b>9,948.938 4</b>

**Mitigated Construction On-Site**

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

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

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 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 5	6,042.558 5	0.1697		6,046.800 0
<b>Total</b>	<b>2.8378</b>	<b>14.7106</b>	<b>24.5142</b>	<b>0.0971</b>	<b>7.0087</b>	<b>0.0741</b>	<b>7.0828</b>	<b>1.8799</b>	<b>0.0691</b>	<b>1.9490</b>		<b>9,939.106 7</b>	<b>9,939.106 7</b>	<b>0.3933</b>		<b>9,948.938 4</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

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

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

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 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 8	5,821.402 8	0.1529		5,825.225 4
<b>Total</b>	<b>2.5807</b>	<b>11.3809</b>	<b>22.5017</b>	<b>0.0936</b>	<b>7.0088</b>	<b>0.0595</b>	<b>7.0682</b>	<b>1.8799</b>	<b>0.0552</b>	<b>1.9350</b>		<b>9,595.279 0</b>	<b>9,595.279 0</b>	<b>0.3511</b>		<b>9,604.055 4</b>

**Mitigated Construction On-Site**

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

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

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 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 8	5,821.402 8	0.1529		5,825.225 4
<b>Total</b>	<b>2.5807</b>	<b>11.3809</b>	<b>22.5017</b>	<b>0.0936</b>	<b>7.0088</b>	<b>0.0595</b>	<b>7.0682</b>	<b>1.8799</b>	<b>0.0552</b>	<b>1.9350</b>		<b>9,595.279 0</b>	<b>9,595.279 0</b>	<b>0.3511</b>		<b>9,604.055 4</b>

**3.6 Paving - 2023**

**Unmitigated Construction On-Site**

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

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

**3.6 Paving - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
<b>Total</b>	<b>0.0427</b>	<b>0.0255</b>	<b>0.3633</b>	<b>1.0900e-003</b>	<b>0.1141</b>	<b>9.0000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.3000e-004</b>	<b>0.0311</b>		<b>109.0150</b>	<b>109.0150</b>	<b>2.8600e-003</b>		<b>109.0866</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>



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

**3.6 Paving - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
<b>Total</b>	<b>0.0427</b>	<b>0.0255</b>	<b>0.3633</b>	<b>1.0900e-003</b>	<b>0.1141</b>	<b>9.0000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.3000e-004</b>	<b>0.0311</b>		<b>109.0150</b>	<b>109.0150</b>	<b>2.8600e-003</b>		<b>109.0866</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

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

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
<b>Total</b>	<b>0.0403</b>	<b>0.0233</b>	<b>0.3384</b>	<b>1.0600e-003</b>	<b>0.1141</b>	<b>8.8000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.1000e-004</b>	<b>0.0311</b>		<b>105.6336</b>	<b>105.6336</b>	<b>2.6300e-003</b>		<b>105.6992</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

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

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
<b>Total</b>	<b>0.0403</b>	<b>0.0233</b>	<b>0.3384</b>	<b>1.0600e-003</b>	<b>0.1141</b>	<b>8.8000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.1000e-004</b>	<b>0.0311</b>		<b>105.6336</b>	<b>105.6336</b>	<b>2.6300e-003</b>		<b>105.6992</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
<b>Total</b>	<b>0.4296</b>	<b>0.2481</b>	<b>3.6098</b>	<b>0.0113</b>	<b>1.2171</b>	<b>9.4300e-003</b>	<b>1.2266</b>	<b>0.3229</b>	<b>8.6800e-003</b>	<b>0.3315</b>		<b>1,126.7583</b>	<b>1,126.7583</b>	<b>0.0280</b>		<b>1,127.4583</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

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

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
<b>Total</b>	<b>0.4296</b>	<b>0.2481</b>	<b>3.6098</b>	<b>0.0113</b>	<b>1.2171</b>	<b>9.4300e-003</b>	<b>1.2266</b>	<b>0.3229</b>	<b>8.6800e-003</b>	<b>0.3315</b>		<b>1,126.7583</b>	<b>1,126.7583</b>	<b>0.0280</b>		<b>1,127.4583</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 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 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	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
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

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

Land Use	Miles			Trip %			Trip Purpose %		
	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 Restaurant)	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 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

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

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



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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer 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	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

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

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer 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	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

**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
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**10.0 Stationary Equipment**

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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

**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**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2028
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

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

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

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

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
<b>Maximum</b>	<b>237.0656</b>	<b>46.4460</b>	<b>39.6338</b>	<b>0.1195</b>	<b>18.2032</b>	<b>2.0456</b>	<b>20.2488</b>	<b>9.9670</b>	<b>1.8820</b>	<b>11.8490</b>	<b>0.0000</b>	<b>12,035.3440</b>	<b>12,035.3440</b>	<b>1.9482</b>	<b>0.0000</b>	<b>12,060.6013</b>



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

**2.2 Overall Operational**

**Unmitigated Operational**

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

**Mitigated Operational**

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

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	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

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

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

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	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	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

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

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
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-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
<b>Total</b>	<b>0.1835</b>	<b>4.1800</b>	<b>1.4144</b>	<b>0.0128</b>	<b>0.3810</b>	<b>0.0137</b>	<b>0.3948</b>	<b>0.1034</b>	<b>0.0131</b>	<b>0.1165</b>		<b>1,380.3262</b>	<b>1,380.3262</b>	<b>0.0941</b>		<b>1,382.6791</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>	<b>3.3074</b>	<b>1.5513</b>	<b>4.8588</b>	<b>0.5008</b>	<b>1.4411</b>	<b>1.9419</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

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

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
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-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
<b>Total</b>	<b>0.1835</b>	<b>4.1800</b>	<b>1.4144</b>	<b>0.0128</b>	<b>0.3810</b>	<b>0.0137</b>	<b>0.3948</b>	<b>0.1034</b>	<b>0.0131</b>	<b>0.1165</b>		<b>1,380.3262</b>	<b>1,380.3262</b>	<b>0.0941</b>		<b>1,382.6791</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>



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

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
<b>Total</b>	<b>0.0638</b>	<b>0.0415</b>	<b>0.4755</b>	<b>1.3300e-003</b>	<b>0.1369</b>	<b>1.1400e-003</b>	<b>0.1381</b>	<b>0.0363</b>	<b>1.0500e-003</b>	<b>0.0374</b>		<b>132.5649</b>	<b>132.5649</b>	<b>3.9900e-003</b>		<b>132.6646</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

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

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
<b>Total</b>	<b>0.0638</b>	<b>0.0415</b>	<b>0.4755</b>	<b>1.3300e-003</b>	<b>0.1369</b>	<b>1.1400e-003</b>	<b>0.1381</b>	<b>0.0363</b>	<b>1.0500e-003</b>	<b>0.0374</b>		<b>132.5649</b>	<b>132.5649</b>	<b>3.9900e-003</b>		<b>132.6646</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

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

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
<b>Total</b>	<b>0.0709</b>	<b>0.0462</b>	<b>0.5284</b>	<b>1.4800e-003</b>	<b>0.1521</b>	<b>1.2700e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1700e-003</b>	<b>0.0415</b>		<b>147.2943</b>	<b>147.2943</b>	<b>4.4300e-003</b>		<b>147.4051</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

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

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
<b>Total</b>	<b>0.0709</b>	<b>0.0462</b>	<b>0.5284</b>	<b>1.4800e-003</b>	<b>0.1521</b>	<b>1.2700e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1700e-003</b>	<b>0.0415</b>		<b>147.2943</b>	<b>147.2943</b>	<b>4.4300e-003</b>		<b>147.4051</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

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

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
<b>Total</b>	<b>0.0665</b>	<b>0.0416</b>	<b>0.4861</b>	<b>1.4300e-003</b>	<b>0.1521</b>	<b>1.2300e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1300e-003</b>	<b>0.0415</b>		<b>142.1207</b>	<b>142.1207</b>	<b>4.0000e-003</b>		<b>142.2207</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

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

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
<b>Total</b>	<b>0.0665</b>	<b>0.0416</b>	<b>0.4861</b>	<b>1.4300e-003</b>	<b>0.1521</b>	<b>1.2300e-003</b>	<b>0.1534</b>	<b>0.0404</b>	<b>1.1300e-003</b>	<b>0.0415</b>		<b>142.1207</b>	<b>142.1207</b>	<b>4.0000e-003</b>		<b>142.2207</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

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

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
<b>Total</b>	<b>3.0904</b>	<b>14.8350</b>	<b>23.2704</b>	<b>0.0926</b>	<b>7.0087</b>	<b>0.0749</b>	<b>7.0836</b>	<b>1.8799</b>	<b>0.0699</b>	<b>1.9498</b>		<b>9,481.0104</b>	<b>9,481.0104</b>	<b>0.3984</b>		<b>9,490.9691</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

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

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
<b>Total</b>	<b>3.0904</b>	<b>14.8350</b>	<b>23.2704</b>	<b>0.0926</b>	<b>7.0087</b>	<b>0.0749</b>	<b>7.0836</b>	<b>1.8799</b>	<b>0.0699</b>	<b>1.9498</b>		<b>9,481.0104</b>	<b>9,481.0104</b>	<b>0.3984</b>		<b>9,490.9691</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>



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

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
<b>Total</b>	<b>2.8211</b>	<b>11.4799</b>	<b>21.2591</b>	<b>0.0893</b>	<b>7.0088</b>	<b>0.0601</b>	<b>7.0688</b>	<b>1.8799</b>	<b>0.0557</b>	<b>1.9356</b>		<b>9,155.1981</b>	<b>9,155.1981</b>	<b>0.3538</b>		<b>9,164.0437</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

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

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
<b>Total</b>	<b>2.8211</b>	<b>11.4799</b>	<b>21.2591</b>	<b>0.0893</b>	<b>7.0088</b>	<b>0.0601</b>	<b>7.0688</b>	<b>1.8799</b>	<b>0.0557</b>	<b>1.9356</b>		<b>9,155.1981</b>	<b>9,155.1981</b>	<b>0.3538</b>		<b>9,164.0437</b>

**3.6 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

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

**3.6 Paving - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
<b>Total</b>	<b>0.0469</b>	<b>0.0282</b>	<b>0.3349</b>	<b>1.0300e-003</b>	<b>0.1141</b>	<b>9.0000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.3000e-004</b>	<b>0.0311</b>		<b>102.6928</b>	<b>102.6928</b>	<b>2.7000e-003</b>		<b>102.7603</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0327</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

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

**3.6 Paving - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
<b>Total</b>	<b>0.0469</b>	<b>0.0282</b>	<b>0.3349</b>	<b>1.0300e-003</b>	<b>0.1141</b>	<b>9.0000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.3000e-004</b>	<b>0.0311</b>		<b>102.6928</b>	<b>102.6928</b>	<b>2.7000e-003</b>		<b>102.7603</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

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

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
<b>Total</b>	<b>0.0444</b>	<b>0.0257</b>	<b>0.3114</b>	<b>1.0000e-003</b>	<b>0.1141</b>	<b>8.8000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.1000e-004</b>	<b>0.0311</b>		<b>99.5045</b>	<b>99.5045</b>	<b>2.4700e-003</b>		<b>99.5663</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9882</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

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

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
<b>Total</b>	<b>0.0444</b>	<b>0.0257</b>	<b>0.3114</b>	<b>1.0000e-003</b>	<b>0.1141</b>	<b>8.8000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>8.1000e-004</b>	<b>0.0311</b>		<b>99.5045</b>	<b>99.5045</b>	<b>2.4700e-003</b>		<b>99.5663</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
<b>Total</b>	<b>0.4734</b>	<b>0.2743</b>	<b>3.3220</b>	<b>0.0107</b>	<b>1.2171</b>	<b>9.4300e-003</b>	<b>1.2266</b>	<b>0.3229</b>	<b>8.6800e-003</b>	<b>0.3315</b>		<b>1,061.3818</b>	<b>1,061.3818</b>	<b>0.0264</b>		<b>1,062.0410</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>236.5923</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

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

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
<b>Total</b>	<b>0.4734</b>	<b>0.2743</b>	<b>3.3220</b>	<b>0.0107</b>	<b>1.2171</b>	<b>9.4300e-003</b>	<b>1.2266</b>	<b>0.3229</b>	<b>8.6800e-003</b>	<b>0.3315</b>		<b>1,061.3818</b>	<b>1,061.3818</b>	<b>0.0264</b>		<b>1,062.0410</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**



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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	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
<b>Total</b>	<b>8,050.95</b>	<b>8,164.43</b>	<b>8,057.31</b>	<b>20,552,452</b>	<b>20,552,452</b>

4.3 Trip Type Information

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

Land Use	Miles			Trip %			Trip Purpose %		
	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 Restaurant)	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 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

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

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

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
<b>Total</b>		<b>0.7660</b>	<b>6.7463</b>	<b>4.2573</b>	<b>0.0418</b>		<b>0.5292</b>	<b>0.5292</b>		<b>0.5292</b>	<b>0.5292</b>		<b>8,355.9832</b>	<b>8,355.9832</b>	<b>0.1602</b>	<b>0.1532</b>	<b>8,405.6387</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer 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	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

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

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer 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	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
<b>Total</b>	<b>30.5020</b>	<b>15.0496</b>	<b>88.4430</b>	<b>0.0944</b>		<b>1.5974</b>	<b>1.5974</b>		<b>1.5974</b>	<b>1.5974</b>	<b>0.0000</b>	<b>18,148.5950</b>	<b>18,148.5950</b>	<b>0.4874</b>	<b>0.3300</b>	<b>18,259.1192</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Attachment C

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

**EXHIBIT B**



## ***Paul Rosenfeld, Ph.D.***

*Principal Environmental Chemist*

**Chemical Fate and Transport & Air Dispersion Modeling**

**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

## **Publications:**

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.**, Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermol and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

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Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

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Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

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Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

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Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

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**Rosenfeld, P. E.**, M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

**Rosenfeld, P.E.**, and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

**Rosenfeld P. E.**, J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

**Rosenfeld, P.E.**, and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

**Rosenfeld, P.E.**, and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

**Rosenfeld, P. E.**, Grey, M. A., Sellev, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

**Rosenfeld, P.E.**, Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office, Publications Clearinghouse (MS-6)*, Sacramento, CA Publication #442-02-008.

**Rosenfeld, P.E.**, and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

**Rosenfeld, P.E.**, and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

**Rosenfeld, P.E.**, C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

**Rosenfeld, P.E.**, and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

**Rosenfeld, P.E.**, and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld**. (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

**Rosenfeld, P. E.** (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

**Rosenfeld, P. E.** (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

**Rosenfeld, P. E.** (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

**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). Perfluorooctanoic Acid (PFOA) and Perfluorooctane 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 Florida, 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 2010) 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:**

In the United States District Court For The District of New Jersey

Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.

Case No.: 2:17-cv-01624-ES-SCM

Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division

M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido”  
*Defendant*.

Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237

Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants

Case No.: No. BC615636

Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants

Case No.: No. BC646857

Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado

Bells et al. Plaintiff vs. The 3M Company et al., Defendants

Case: No 1:16-cv-02531-RBJ

Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112<sup>th</sup> Judicial District

Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants

Cause No 1923

Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa

Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants

Cause No C12-01481

Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois

Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants

Case No.: No. 0i9-L-2295

Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles

Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC

Case No.: LC102019 (c/w BC582154)

Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division

Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*

Case Number: 4:16-cv-52-DMB-JVM

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 NO. 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 17<sup>th</sup> 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**



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**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.

### **Hydrogeology:**

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.

### **Teaching:**

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, Colorado.

**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).

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

**Hagemann, M.F.**, 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F.**, 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F.**, 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F.**, 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F.**, 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F.**, 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F.**, and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F.**, 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F.**, 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F.**, and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F.**, Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F.**, Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F.**, 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.F.** and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F.**, 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F.**, 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.



# South Coast Air Quality Management District

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SENT VIA E-MAIL:

[squintanilla@fontana.org](mailto:squintanilla@fontana.org)

Salvador Quintanilla, Associate Planner  
City of Fontana, Planning Department  
8353 Sierra Avenue  
Fontana, California 92335

April 12, 2022

## **Notice of Preparation of a Draft Environmental Impact Report for the Sierra Business Center (Proposed Project)**

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. Our comments are recommendations on the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send a copy of the Draft EIR upon its completion and public release directly to South Coast AQMD as copies of the Draft EIR submitted to the State Clearinghouse are not forwarded. **In addition, please send all appendices and technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all emission calculation spreadsheets, and air quality modeling and health risk assessment input and output files (not PDF files). Any delays in providing all supporting documentation for our review will require additional review time beyond the end of the comment period.**

### **CEQA Air Quality Analysis**

Staff recommends that the Lead Agency use South Coast AQMD's CEQA Air Quality Handbook and website<sup>1</sup> as guidance when preparing the air quality and greenhouse gas analyses. It is also recommended that the Lead Agency use the CalEEMod<sup>2</sup> land use emissions software, which can estimate pollutant emissions from typical land use development and is the only software model maintained by the California Air Pollution Control Officers Association.

South Coast AQMD has developed both regional and localized significance thresholds. South Coast AQMD staff recommends that the Lead Agency quantify criteria pollutant emissions and compare the emissions to South Coast AQMD's CEQA regional pollutant emissions significance thresholds<sup>3</sup> and localized significance thresholds (LSTs)<sup>4</sup> to determine the Proposed Project's air quality impacts. The localized analysis can be conducted by either using the LST screening tables or performing dispersion modeling.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road

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<sup>1</sup> South Coast AQMD's CEQA Handbook and other resources for preparing air quality analyses can be found at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

<sup>2</sup> CalEEMod is available free of charge at: [www.caleemod.com](http://www.caleemod.com).

<sup>3</sup> South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

<sup>4</sup> South Coast AQMD's guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips, and hauling trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers and air pollution control devices), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment<sup>5</sup>.

In the event that implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Draft EIR. The assumptions in the air quality analysis in the EIR will be the basis for evaluating the permit under CEQA and imposing permit conditions and limits. Questions on permits should be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective*<sup>6</sup> is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process with additional guidance on strategies to reduce air pollution exposure near high-volume roadways available in CARB's technical advisory<sup>7</sup>.

South Coast AQMD staff is concerned about potential public health impacts of siting warehouses within close proximity of sensitive land uses, especially in communities that are already heavily affected by the existing warehouse and truck activities. The South Coast AQMD's Multiple Air Toxics Exposure Study (MATES V), completed in August 2021, concluded that the largest contributor to cancer risk from air pollution is diesel particulate matter (DPM) emissions<sup>8</sup>. According to the MATES V Carcinogenic Risk interactive Map, the area surrounding the Proposed Project has an estimated cancer risk over 499 in one million<sup>9</sup>. Operation of warehouses generates and attracts heavy-duty diesel-fueled trucks that emit DPM. When the health impacts from the Proposed Project are added to those existing impacts, residents living in the communities surrounding the Proposed Project will possibly face an even greater exposure to air pollution and bear a disproportionate burden of increasing health risks.

### **Mitigation Measures**

In the event that the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. Several resources to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project include South Coast AQMD's CEQA Air Quality Handbook<sup>1</sup>, South Coast AQMD's Mitigation Monitoring and

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<sup>5</sup> South Coast AQMD's guidance for performing a mobile source health risk assessment can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

<sup>6</sup> CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>.

<sup>7</sup> CARB's technical advisory can be found at: <https://www.arb.ca.gov/ch/landuse.htm>.

<sup>8</sup> South Coast AQMD. August 2021. *Multiple Air Toxics Exposure Study in the South Coast Air Basin V*. Available at: <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>.

<sup>9</sup> South Coast AQMD. MATES V Data Visualization Tool. Accessed at: [MATES Data Visualization \(arcgis.com\)](https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v).



Reporting Plan for the 2016 Air Quality Management Plan<sup>10</sup>, and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy<sup>11</sup>.

Mitigation measures for operational air quality impacts from mobile sources that the Lead Agency should consider in the Draft EIR may include the following:

- Require zero-emissions (ZE) or near-zero emission (NZE) on-road haul trucks such as heavy-duty trucks with natural gas engines that meet the CARB's adopted optional NOx emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible. Given the state's clean truck rules and regulations aiming to accelerate the utilization and market penetration of ZE and NZE trucks such as the Advanced Clean Trucks Rule<sup>12</sup> and the Heavy-Duty Low NOx Omnibus Regulation<sup>13</sup>, ZE and NZE trucks will become increasingly more available to use. The Lead Agency should require a phase-in schedule to incentive the use of these cleaner operating trucks to reduce any significant adverse air quality impacts. South Coast AQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive programs with the Lead Agency. At a minimum, require the use of 2010 model year<sup>14</sup> that meet CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. Include environmental analyses to evaluate and identify sufficient electricity and supportive infrastructures in the Energy and Utilities and Service Systems Sections in the CEQA document, where appropriate. Include the requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards, and make the records available for inspection. The Lead Agency should conduct regular inspections to the maximum extent feasible to ensure compliance.
- Limit the daily number of trucks allowed at the Proposed Project to levels analyzed in the Final CEQA document. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the Proposed Project through CEQA prior to allowing this higher activity level.
- Provide electric vehicle (EV) charging stations or at a minimum, provide the electrical infrastructure and electrical panels should be appropriately sized. Electrical hookups should be provided for truckers to plug in any onboard auxiliary equipment.

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<sup>10</sup> South Coast AQMD's 2016 Air Quality Management Plan can be found at: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf> (starting on page 86).

<sup>11</sup> Southern California Association of Governments' 2020-2045 RTP/SCS can be found at:

[https://www.connectsoocal.org/Documents/PEIR/certified/Exhibit-A\\_ConnectSoCal\\_PEIR.pdf](https://www.connectsoocal.org/Documents/PEIR/certified/Exhibit-A_ConnectSoCal_PEIR.pdf).

<sup>12</sup> CARB. June 25, 2020. *Advanced Clean Trucks Rule*. Accessed at: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>.

<sup>13</sup> CARB has recently passed a variety of new regulations that require new, cleaner heavy-duty truck technology to be sold and used in state. For example, on August 27, 2020, CARB approved the Heavy-Duty Low NOx Omnibus Regulation, which will require all trucks to meet the adopted emission standard of 0.05 g/hp-hr starting with engine model year 2024. Accessed at: <https://ww2.arb.ca.gov/rulemaking/2020/hdomnibuslownox>.

<sup>14</sup> CARB adopted the statewide Truck and Bus Regulation in 2010. The Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. More information on the CARB's Truck and Bus Regulation is available at: <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.

Mitigation measures for operational air quality impacts from other area sources that the Lead Agency should consider in the EIR may include the following:

- Maximize use of solar energy by installing solar energy arrays.
- Use light colored paving and roofing materials.
- Utilize only Energy Star heating, cooling, and lighting devices, and appliances.
- Use of water-based or low VOC cleaning products that go beyond the requirements of South Coast AQMD Rule 1113.

Design considerations for the Proposed Project that the Lead Agency should consider to further reduce air quality and health risk impacts include the following:

- Clearly mark truck routes with trailblazer signs, so that trucks will not travel next to or near sensitive land uses (e.g., residences, schools, day care centers, etc.).
- Design the Proposed Project such that truck entrances and exits are not facing sensitive receptors and trucks will not travel past sensitive land uses to enter or leave the Proposed Project site.
- Design the Proposed Project such that any check-in point for trucks is inside the Proposed Project site to ensure that there are no trucks queuing outside.
- Design the Proposed Project to ensure that truck traffic inside the Proposed Project site is as far away as feasible from sensitive receptors.
- Restrict overnight truck parking in sensitive land uses by providing overnight truck parking inside the Proposed Project site.

On May 7, 2021, South Coast AQMD's Governing Board adopted Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program, and Rule 316 – Fees for Rule 2305. Rules 2305 and 316 are new rules that will reduce regional and local emissions of nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM), including diesel PM. These emission reductions will reduce public health impacts for communities located near warehouses from mobile sources that are associated with warehouse activities. Also, the emission reductions will help the region attain federal and state ambient air quality standards. Rule 2305 applies to owners and operators of warehouses greater than or equal to 100,000 square feet. Under Rule 2305, operators are subject to an annual WAIRE Points Compliance Obligation that is calculated based on the annual number of truck trips to the warehouse. WAIRE Points can be earned by implementing actions in a prescribed menu in Rule 2305, implementing a site-specific custom plan, or paying a mitigation fee. Warehouse owners are only required to submit limited information reports, but they can opt in to earn Points on behalf of their tenants if they so choose because certain actions to reduce emissions may be better achieved at the warehouse development phase, for instance the installation of solar and charging infrastructure. Rule 316 is a companion fee rule for Rule 2305 to allow South Coast AQMD to recover costs associated with Rule 2305 compliance activities. Since the Proposed Project consists of the development of three warehouses totaling 485,042 square feet, the Proposed Project's warehouses owners and operators will be required to comply with Rule 2305 once the warehouses are occupied. Therefore, South Coast AQMD staff recommends that the Lead Agency review South Coast AQMD Rule 2305 to determine the potential WAIRE Points Compliance Obligation for future operators and explore whether additional project requirements and CEQA mitigation measures can be identified and implemented at the Proposed Project that may help future warehouse operators meet their compliance obligation<sup>15</sup>. South Coast AQMD staff is available to answer questions concerning Rule 2305 implementation and compliance by phone or email at (909) 396-3140 or [waire-program@aqmd.gov](mailto:waire-program@aqmd.gov).

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<sup>15</sup> South Coast AQMD Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xxiii/r2305.pdf>.

For implementation guidance documents and compliance and reporting tools, please visit South Coast AQMD's WAIRE Program webpage<sup>16</sup>.

South Coast AQMD staff is available to work with the Lead Agency to ensure that air quality, greenhouse gas, and health risk impacts from the Proposed Project are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at [lsun@aqmd.gov](mailto:lsun@aqmd.gov).

Sincerely,

*Lijin Sun*

Lijin Sun

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

LS

SBC220324-01

Control Number

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<sup>16</sup> South Coast AQMD WAIRE Program. Accessed at: <http://www.aqmd.gov/waire>.

# NATIVE AMERICAN HERITAGE COMMISSION

March 24, 2022

Governor's Office of Planning & Research

Mar 25 2022

Salvador Quintanilla  
City of Fontana  
8353 Sierra Avenue  
Fontana, CA 92335

## STATE CLEARINGHOUSE

**Re: 2022030544, Sierra Business Center Project, San Bernardino County**

Dear Mr. Quintanilla:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines §15064.5 (b))). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1))). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**



CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

PARLIAMENTARIAN  
**Russell Attebery**  
Karuk

SECRETARY  
**Sara Dutschke**  
Miwok

COMMISSIONER  
**William Hungary**  
Paiute/White Mountain  
Apache

COMMISSIONER  
**Isaac Bojorquez**  
Ohlone-Costanoan

COMMISSIONER  
**Buffy McQuillen**  
Yokayo Pomo, Yuki,  
Nomlaki

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AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
  - a.** A brief description of the project.
  - b.** The lead agency contact information.
  - c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
  
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subs. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1 (b)).
  - a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
  
- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
  - a.** Alternatives to the project.
  - b.** Recommended mitigation measures.
  - c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).
  
- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:
  - a.** Type of environmental review necessary.
  - b.** Significance of the tribal cultural resources.
  - c.** Significance of the project's impacts on tribal cultural resources.
  - d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
  
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
  
- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
  - a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
    - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i.** Protecting the cultural character and integrity of the resource.
    - ii.** Protecting the traditional use of the resource.
    - iii.** Protecting the confidentiality of the resource.
  - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
  - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf).

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
  
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:  
[Andrew.Green@nahc.ca.gov](mailto:Andrew.Green@nahc.ca.gov).

Sincerely,



Andrew Green  
Cultural Resources Analyst

cc: State Clearinghouse





State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Inland Deserts Region  
3602 Inland Empire Blvd., Suite C-220  
Ontario, CA 91764  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

*GAVIN NEWSOM, Governor*  
*CHARLTON H. BONHAM, Director*



April 18, 2022  
*Sent via email*

Mr. Salvador Quintanilla  
Associate Planner  
City of Fontana  
8353 Sierra Avenue  
Fontana, CA 92335

Subject: Notice of Preparation of a Draft Environmental Impact Report  
Sierra Business Center Project  
State Clearinghouse No. 2022030544

Dear Mr. Quintanilla:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the City of Fontana (City) for the Sierra Business Center Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

### **CDFW ROLE**

CDFW is California's Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

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<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

## **PROJECT DESCRIPTION SUMMARY**

The proposed Project includes a general plan amendment, site plan, rezone, and land division (subdivision, etc.) on two project sites: the Shea Project Site and Acacia Project Site. The Shea Project Site is approximately 11.1 acres and includes two Assessor Parcel Numbers (APNs) 0239-151-09 and 0239-151-39, located on the east side of Sierra Avenue approximately 700 feet north of Casa Grande Avenue, in the City of Fontana, San Bernardino County, California. The Acacia Project Site is approximately 19.0 acres and includes four APNs 0239-151-19, 0239-151-25, 0239-151-26, and 0239-151-36, located east of Sierra Avenue and south of Duncan Canyon Road, in the City of Fontana, San Bernardino County, California. Specific details of the proposed Project include:

1. General Plan Amendment to the General Plan for the following:
  - Shea Project: Revise the General Plan to designate from Multi-Family High Density Residential (R-MFH) to Light Industrial (I-L);
  - Acacia Project: Revise the General Plan to designate from Multi-Family High Density Residential (R-MFH) and General Commercial (C-G) to Light Industrial.
2. Zone Change to the City of Fontana Zoning Map to correspond to the proposed changes on the Land Use Map, as noted above. The zoning classification for the proposed industrial development includes:
  - Shea Project: Multi-Family High Density Residential (R-5) to Light Industrial (M-1);
  - Acacia Project: Multi-Family High Density Residential (R-5) and General Commercial (C-2) to Light Industrial (M-1).
3. Tentative Parcel Map (TPM) to subdivide the two project sites:
  - Shea Project: 11.1 acres of the Project into two parcels, containing a single commerce center building with a maximum of 199,999 square feet (s.f.). The remaining parcel area supports a screened truck yard and trailer

storage area along the south side of the structure, vehicular parking areas, drive aisles, and landscaping.

- Acacia Project: 19.0 acres of the Project into four parcels, containing two commerce center buildings with a total maximum of 385,043 s.f.: Building 1 would be 296,297 s.f. and Building 2 would be 88,746 s.f. The remaining parcel area supports a screened truck yard and trailer storage area along the south side of Building 1 and the west side of Building 2, vehicular parking areas, drive aisles, and landscaping.

## **COMMENTS AND RECOMMENDATIONS**

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

CDFW recommends that the forthcoming DEIR address the following:

### **Assessment of Biological Resources**

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the project, the DEIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats.

The CDFW recommends that the DEIR specifically include:

1. An assessment of the various habitat types located within the project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.
2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project. CDFW's California Natural Diversity Database (CNDDDB) in Sacramento should be contacted at (916) 322-2493 or [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov) to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas

identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed Project.

Please note that CDFW's CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the project site.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

#### Burrowing Owl (*Athene cunicularia*)

The Project site has the potential to provide suitable foraging and/or nesting habitat for burrowing owl. Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in Fish and Game Code section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill."

CDFW recommends that the City of Fontana follow the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012); available for download from CDFW's website:

<https://www.wildlife.ca.gov/conservation/survey-protocols>. The Staff Report on Burrowing Owl Mitigation, specifies three steps for project impact evaluations:

- a. A habitat assessment;
- b. Surveys; and

c. An impact assessment

As stated in the Staff Report on Burrowing Owl Mitigation, the three progressive steps are effective in evaluating whether a project will result in impacts to burrowing owls, and the information gained from the steps will inform any subsequent avoidance, minimization, and mitigation measures. Habitat assessments are conducted to evaluate the likelihood that a site supports burrowing owl. Burrowing owl surveys provide information needed to determine the potential effects of proposed projects and activities on burrowing owls, and to avoid take in accordance with Fish and Game Code sections 86, 3503, and 3503.5. Impact assessments evaluate the extent to which burrowing owls and their habitat may be impacted, directly or indirectly, on and within a reasonable distance of a proposed CEQA project activity or non-CEQA project.

Within the 2012 Staff Report, the minimum habitat replacement recommendation was purposely excluded as it was shown to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area. It hypothesized that mitigation for permanent impacts to nesting, occupied, and satellite burrows and burrowing owl habitat should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present. If mitigation occurs offsite, it should include (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) be sufficiently large acreage with the presence of fossorial mammals. Furthermore, the report noted that suitable mitigation lands should be based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide.

4. A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see <https://www.wildlife.ca.gov/Conservation/Plants>).
5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).
6. A full accounting of all open space and mitigation/conservation lands within and adjacent to the Project.

## **Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources**

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. To ensure that Project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:

1. A discussion of potential impacts from lighting, noise, human activity (e.g., recreation), defensible space, and wildlife-human interactions created by zoning of development projects or other project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

With respect to defensible space: please ensure that the DEIR fully describes and identifies the location, acreage, and composition of defensible space *within* the proposed Project footprint. Please ensure that any graphics and descriptions of defensible space associated with this project comply with San Bernardino County Fire Department (or other applicable agency) regulations/requirements. The City of Fontana, through their planning processes, should be ensuring that defensible space is provided and accounted for *within proposed development areas*, and not transferred to adjacent open space or conservations lands.

2. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).
3. An evaluation of impacts to adjacent open space lands from both the construction of the Project and any long-term operational and maintenance needs.
4. A cumulative effects analysis developed as described under CEQA Guidelines section 15130. Please include all potential direct and indirect Project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

## Alternatives Analysis

CDFW recommends the DEIR describe and analyze a range of reasonable alternatives to the Project that are potentially feasible, would “feasibly attain most of the basic objectives of the Project,” and would avoid or substantially lessen any of the Project’s significant effects (CEQA Guidelines § 15126.6[a]). The alternatives analysis should also evaluate a “no project” alternative (CEQA Guidelines § 15126.6[e]).

## Mitigation Measures for Project Impacts to Biological Resources

The DEIR should identify mitigation measures and alternatives that are appropriate and adequate to avoid or minimize potential impacts, to the extent feasible. The City of Fontana should assess all direct, indirect, and cumulative impacts that are expected to occur as a result of the implementation of the Project and its long-term operation and maintenance. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *Fully Protected Species*: Fully protected species may not be taken or possessed at any time. Project activities described in the DEIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis how appropriate avoidance, minimization, and mitigation measures will reduce indirect impacts to fully protected species.
2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). Riversidean alluvial fan sage scrub and associations within the *Lepidospartum squamatum* Alliance are sensitive plant communities that have the potential to exist onsite. The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts.
3. *California Species of Special Concern (CSSC)*: CSSC status applies to animals generally not listed under the federal Endangered Species Act or the CESA, but which nonetheless are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. CSSCs should be considered during the environmental review process. CSSC that have the potential or have been documented to occur within or adjacent to the

project area, including, but not limited to: burrowing owl, coastal California gnatcatcher, coast horned lizard, Los Angeles pocket mouse, northwestern San Diego pocket mouse, northern harrier, yellow warbler, and yellow-breasted chat.

4. *Mitigation*: CDFW considers adverse project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement, and preservation should be evaluated and discussed in detail. Where habitat preservation is not available onsite, offsite land acquisition, management, and preservation should be evaluated and discussed in detail.

The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

If sensitive species and/or their habitat may be impacted from the Project, CDFW recommends the inclusion of specific mitigation in the DEIR. CEQA Guidelines section 15126.4, subdivision (a)(1)(8) states that formulation of feasible mitigation measures should not be deferred until some future date. The Court of Appeal in *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete (*Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d. 296; *Gentry v. City of Murrieta* (1995) 36 Cal. App. 4th 1359; *Endangered Habitat League, Inc. v. County of Orange* (2005) 131 Cal. App. 4th 777).

CDFW recommends that the DEIR specify mitigation that is roughly proportional to the level of impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). The mitigation should provide long-term conservation value for the suite of species and habitat being impacted by the Project. Furthermore, in order for mitigation measures to be effective, they need to be specific, enforceable, and feasible actions that will improve environmental conditions.

5. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to



develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

6. *Nesting Birds and Migratory Bird Treaty Act*: Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Fish and Game Code sections 3503, 3503.5, and 3513 afford protective measures as follows: Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

CDFW recommends that the DEIR include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: project phasing and timing, monitoring of project-

related noise (where applicable), sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. If pre-construction surveys are proposed in the DEIR, the CDFW recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

7. *Moving out of Harm's Way*: To avoid direct mortality, CDFW recommends that the lead agency condition the DEIR to require that a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety (i.e., CDFW does not recommend relocation to other areas). Furthermore, it should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting project impacts associated with habitat loss.
8. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species as studies have shown that these efforts are experimental in nature and largely unsuccessful.

### **California Endangered Species Act**

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to CESA. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the project. CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats.

CDFW encourages early consultation, as significant modification to the proposed Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. CDFW must comply with CEQA for issuance of a CESA ITP. CDFW therefore recommends that the DEIR addresses all Project impacts to listed species and specify a mitigation monitoring and reporting program that will meet the requirements of CESA.

Based on review of CNDDDB, and/or knowledge of the project site/vicinity/general area, CDFW is aware that the following CESA-listed species have the potential to occur

onsite/have previously been reported onsite: San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*).

### **San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)**

The Project site may contain occupied or suitable habitat for San Bernardino kangaroo rat (SBKR), a state-listed endangered species and other small mammal species of special concern including Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) and northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*). CDFW recommends that the project proponent conducts appropriate analysis (i.e., protocol-level trapping) to determine presence and abundance of SBKR and other sensitive small mammal species on the property, and seeks appropriate authorizations (CESA ITP), if SBKR are found. CDFW also recommends that the CEQA document appropriately identifies potential impacts to sensitive small mammal species and provides for enforceable mitigation to offset any impacts. In addition, mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355).

### **Lake and Streambed Alteration Program**

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or Deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources.

CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife

resources. To submit a Lake or Streambed Alteration notification package, please go to <https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS>.

## **ADDITIONAL COMMENTS AND RECOMMENDATIONS**

To ameliorate the water demands of this Project, CDFW recommends incorporation of water-wise concepts in project landscape design plans. In particular, CDFW recommends xeriscaping with locally native California species, and installing water-efficient and targeted irrigation systems (such as drip irrigation). Local water agencies/districts, and resource conservation districts in your area may be able to provide information on plant nurseries that carry locally native species, and some facilities display drought-tolerant locally native species demonstration gardens (for example the Riverside-Corona Resource Conservation District in Riverside). Information on drought-tolerant landscaping and water-efficient irrigation systems is available on California's Save our Water website: <http://saveourwater.com/what-you-can-do/tips/landscaping/>

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). Information can be submitted online or via completion of the CNDDDB field survey form at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

## **FILING FEES**

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

## **CONCLUSION**

CDFW appreciates the opportunity to comment on the NOP of a DEIR for the Sierra Business Center Project (SCH No. 2022030544) and recommends that the City of

Salvador Quintanilla, Associate Planner  
City of Fontana  
April 18, 2022  
Page 13

Fontana address the CDFW's comments and concerns in the forthcoming DEIR. If you should have any questions pertaining to the comments provided in this letter, please contact Bryant Luu, Fish and Wildlife Scientific Aid, at (909) 538-6096 or at [bryant.luu@wildlife.ca.gov](mailto:bryant.luu@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
DF423498814B441...

for  
Scott Wilson  
Environmental Program Manager

ec: Kim Freeburn, Senior Environmental Scientist, Supervisor  
Inland Deserts Region  
[kim.freeburn@wildlife.ca.gov](mailto:kim.freeburn@wildlife.ca.gov)

Office of Planning and Research, State Clearinghouse, Sacramento  
[state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)

## REFERENCES

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California Vegetation, 2<sup>nd</sup> ed. California Native Plant Society Press, Sacramento, California.  
<http://vegetation.cnps.org/>

CENTER FOR COMMUNITY ACTION AND ENVIRONMENTAL JUSTICE  
“Bringing People Together to Improve Our Social and Natural Environment”

April 21, 2022

Salvador Quintanilla  
City of Fontana  
8353 Sierra Avenue  
Fontana, CA 92335

Submitted via email to [squintanilla@fontana.org](mailto:squintanilla@fontana.org).

**Re: Sierra Business Center Notice of Preparation (SCH #2022030544)**

Dear Mr. Quintanilla,

This letter is to provide comments in response to the Notice of Preparation for the Sierra Business Center (“Project”) which has been proposed there in Fontana. We are not excited by the prospect of yet another set of warehouses and would rather see the development meet the existing zoning. Nevertheless, if it is to move forward, we have a number of concerns that we would like to make sure are addressed as part of the EIR process.

The first issue is for the “Shea project” portion of the overall Project. As described, it would rezone existing residential land for use by the warehouse. However, to comply with SB 330, this would require rezoning elsewhere in the city of the zoned housing capacity (often called an “upzone site”) which is not even identified in the NOP. That is an oversight which must be addressed. This upzone site needs to be identified and the impacts to that location studied as part of the EIR process.

Another issue is for the Air Quality and Greenhouse Gas impacts which will result from the Project. In recent years, many projects in the region do not adequately mitigate any air quality impacts which they created, leaving them out-of-compliance with the South Coast Air Quality Management District’s Air Quality Management Plan. Not fully mitigating those impacts cannot be seen as acceptable. It is vital that suitable mitigation is identified that would **fully mitigate** air quality impacts as well as to ensure that the project is in compliance with the AQMP. This is especially important because as noted in the CalEnviroScreen 4.0 results for the location where the Project would be built, it is already in the top-25% of most-impacted tracts in the state, including for PM<sub>2.5</sub> and ozone.

A third concern is about the addition of truck traffic. Although Transportation is an EIR topic and will certainly be studied, we would like to ensure that the study includes concrete measures to ensure that they remain out of the residential communities which surround the site, both in Fontana as well as the neighboring communities in Rialto. Often, EIRs resort to the equivalent of throwing up their hands and claiming that it is not possible to condition items in other jurisdictions, but that is a poor excuse and we would like to see measures identified regardless of location.

Thank you for providing the time to submit these comments to be addressed as part of the EIR. We remain underwhelmed about the addition of more warehouses, particularly when added into a

CENTER FOR COMMUNITY ACTION AND ENVIRONMENTAL JUSTICE

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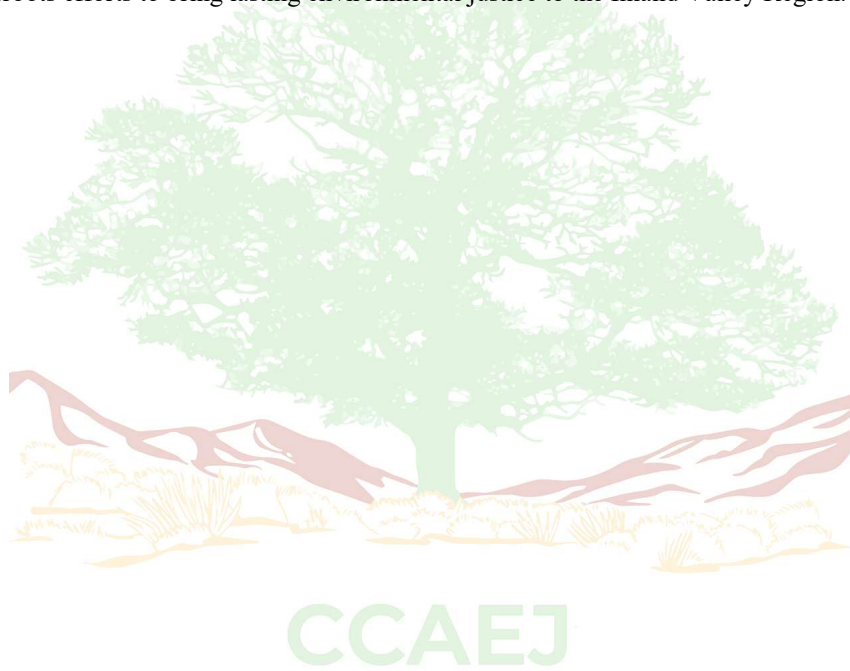
disadvantaged community as is the case with the Project. Nevertheless, if it is moving forward, then we are looking to make sure that the impacts are fully accounted for and mitigated.

Sincerely,

*Ana Gonzalez*

Ana Gonzalez  
Interim Executive Director

*CCA EJ* is a long-standing community based organization with over 40 years of experience advocating for stronger regulations through strategic campaigns and building a base of community power. Most notably, *CCA EJ*'s founder Penny Newman won a landmark federal case against Stringfellow Construction which resulted in the 'Stringfellow Acid Pits' being declared one of the first Superfund sites in the nation. *CCA EJ* prioritizes community voices as we continue our grassroots efforts to bring lasting environmental justice to the Inland Valley Region.



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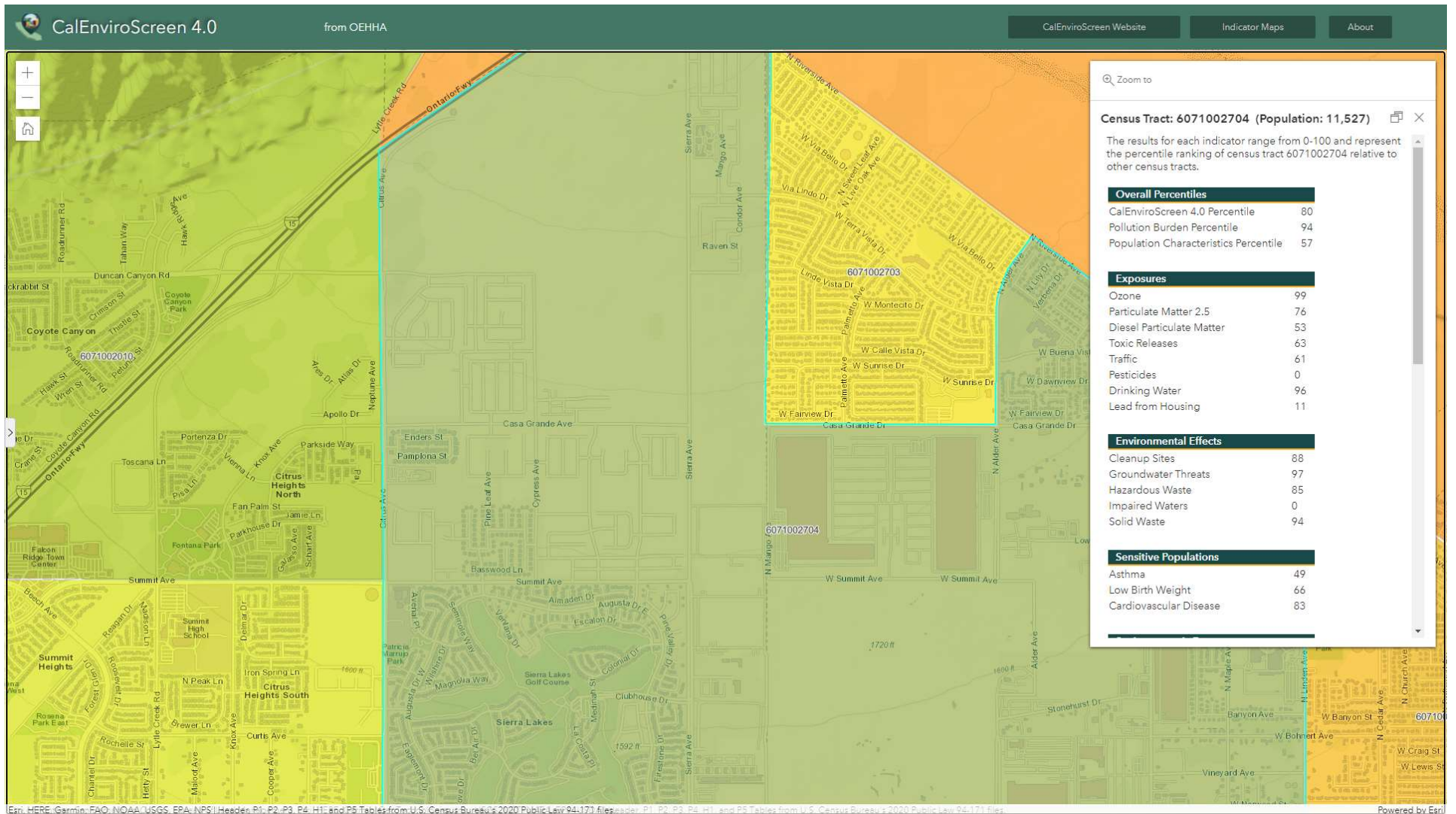


Figure 1: CalEnviroScreen 4.0 results for Census Tract 6071002704 where the proposed Project would be located.

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04/20/2022

**VIA EMAIL ONLY**

Salvador Quintanilla  
City of Fontana  
8353 Sierra Avenue Fontana, CA 92335  
Email: [squintanilla@fontana.org](mailto:squintanilla@fontana.org)

**RE: NOP Comments for Sierra Business Center Project**

Dear Mr. Quintanilla,

On behalf of Californians Allied for a Responsible Economy ("CARE CA") thank you for the opportunity to provide comments on the Notice of Preparation ("NOP") for environmental review of the Sierra Business Center Project (the "Project").

The proposed Project consists of two independent but adjacent projects, the Sierra Industrial facility- a 199,999 square foot commerce center building- and North Fontana Industrial complex- two commerce center buildings with a maximum of 385,043 square feet. The two projects require approval for General Plan Amendment, Zone Change, Design Review, and Tentative Parcel Map.

The NOP identifies the Project's potentially significant impacts under CEQA to include all environmental considerations. CARE CA respectfully requests, under CEQA complete analysis of these impacts, imposition of all feasible mitigation and study of a reasonable range of alternatives to the Project.

**I. Background on CEQA EIRs**

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 Cal. Code Regs. ("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 self-government.'" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.

Second, CEQA requires public agencies to avoid or reduce environmental damage when “feasible” by requiring implementation of “environmentally superior” alternatives and all feasible mitigation measures. Guidelines § 15002(a)(2) and (3); *Citizens of Goleta Valley*, 52 Cal.3d at 564. If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns.” Pub. Res. Code § 21081; Guidelines § 15092(b)(2)(A) and (B).

Although 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 Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal.App.4th 1344, 1355 (quoting *Laurel Heights Improvement Ass’n v. Regents of Univ. of Cal.*, 47 Cal.3d 376, 409 n. 12 (1988)). Substantial evidence in the record must support any foundational assumptions used for the impact analyses in the EIR. *Citizens of Goleta Valley*, 52 Cal.3d at 568 (EIR must contain facts and analysis, not just bare conclusions); *Laurel Heights*, 47 Cal.3d at 392-93 (agency’s conclusions must be supported with substantial evidence).

## **II. General Comments**

i) Air Quality & Public Health: CARE CA has a particular interest in air quality and public health. Estimates of the significance of air quality impacts must be consistent with current epidemiological studies regarding the effects of pollution and various kinds of environmental stress on public health. Therefore, even if the immediate project area has few nearby residences, the DEIR must include a Health Risk Assessment because industrial projects such as the proposed Project, which would be exclusively truck-served and operate 24-hours a day, 365 days a year in day and night shifts, typically result in exposure to toxic air contaminants (TACs) including carbon dioxide emissions caused by storage and material handling processes in warehouses. We must not ignore the unjust consequences of toxic pollution on surrounding communities and workers.

ii) Transportation Analysis: In order to reflect a good faith effort at full disclosure, the transportation analysis must consider all reasonably foreseeable uses for the Project. Since the Project is a “speculative building” with no specific identified tenant, the DEIR analysis should include higher intensity uses. The analysis must also include heavy truck traffic in its VMT analysis.

iii) Unspecified Industrial Use: Since the specific type of warehouse is not specified, the DEIR should also consider and analyze the impacts of construction and operation of cold storage warehouse space and the potential use of transportation refrigeration units (TRUs) during Project operation.

iv) Mitigation measures: Mitigation measures must be effective and enforceable. Every effort must be made to incorporate modern technology in the mitigation measures and MMRP. For example, a requirement that all off-road equipment and trucks using the site during

construction and operations be zero emission, near-zero emissions or alternative-fueled vehicle would both reduce and/or eliminate air pollution impacts and CO2 emissions.

v) Full Disclosure: Provide all sources and referenced materials when the DEIR is made available.

### **III. Conclusion**

Thank you for the opportunity to submit NOP comments. Again, CARE CA respectfully requests under CEQA full analysis of the environmental impacts, feasible mitigation, and reasonable alternatives to the Project.

We look forward to reviewing and commenting on the DEIR.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Modrzejewski", with a long horizontal flourish extending to the right.

Jeff Modrzejewski  
*Executive Director*



# INLAND EMPIRE BIKING ALLIANCE

14 April 2022

City of Fontana  
Attn: Salvador Quintanilla, Associate Planner  
8353 Sierra Avenue  
Fontana, CA 92335

*Submitted via email to [squintanilla@fontana.org](mailto:squintanilla@fontana.org).*

## **Re: Sierra Business Center Notice of Preparation (SCH #2022030544)**

Dear Mr. Quintanilla,

I am writing on behalf of Inland Empire Biking Alliance to respond to the Notice of Preparation for an Environmental Impact Report (EIR) for the proposed Sierra Business Center (“Project”) which has been proposed there in the city. After reviewing the materials made available with the notice, we have several comments about what is proposed that we want to ensure is studied as part of the EIR process.

The first item to be addressed is the accommodation for bicyclists in and around the Project area. It is vital to ensure that bike facilities which meet the guidelines set forth by Caltrans<sup>1</sup> or the FHWA<sup>2</sup> to provide a low-stress environment and that the EIR process will include study of how those appropriate facilities would be provided both adjacent the Project site as well as anywhere else in the transportation network where any traffic study would call for changes.

Additionally, the City’s existing Active Transportation Plan identifies that the Edison right-of-way on the eastern side of the Project sites is slated to provide a Class I path which would eventually connect to several other trails in the city and provide direct access to the site. Thus, the study should identify how the Project would connect to this path as well as ensure that just like any other transportation improvements adjacent the property, that the portion adjacent to the Project will also be constructed as required by Policy 3.A.1 of the Active Transportation Plan.

Finally, it is equally important that the construction itself of the Project does not create additional hazards for bicyclists. Ideally, any existing bike facilities need to be maintained at the same comfort level. If that is not possible, then it is important that contractors at least avoid using “share the road” signage which is popular for construction site usage, but is problematic for bicyclists because it creates

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<sup>1</sup> Flournoy, M. (2020). Contextual guidance for bike facilities. Caltrans. Retrieved from <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/office-of-smart-mobility-and-climate-change/planning-contextual-guidance-memo-03-11-20-a11y.pdf>.

<sup>2</sup> Schultheiss, B., Goodman, D., Blackburn, L., Wood, A., Reed, D., & Elbech, M. (2019). Bikeway selection guide (FHWA-SA-18-077). US Department of Transportation, Federal Highway Administration. Retrieved from [https://safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/docs/fhwasa18077.pdf](https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf).



## INLAND EMPIRE BIKING ALLIANCE

an alternative expectation from motorists. Instead, it would be preferable to see the use of signage such as “bikes may use full lane” that avoid suggesting subservience and leads to harassment or other uncomfortable interactions with motorists.

In summary, we would like to make sure that if the proposed Project is to move forward, then it at least provides improvements to the environment for bicyclists. This includes by providing facilities for bicyclists meeting the most recent research on the topic and including study of doing so as part of the EIR process. Additionally, it is equally important that this is met anywhere else that changes are proposed which would impact bicyclists and any such changes should be studied to ensure that they do not degrade the experience of bicyclists. And finally, that includes during construction.

Thank you for the time and opportunity to submit these comments. If there are any questions, please do not hesitate to reach out for answers.

Sincerely,

Marven E. Norman, Executive Director

**About IEBA** The Inland Empire Biking Alliance is advocating for making the Inland Empire a better place for people from all rolls of life. From the children just learning how to ride to the mountain bikers to those headed back and forth to work, school, or their preferred shopping center and beyond, we speak up to make sure they all have safe and convenient place to ride.

## Kristen Goddard

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**From:** Tracy Zinn  
**Sent:** Wednesday, March 30, 2022 11:43 PM  
**To:** Kristen Goddard  
**Subject:** FW: Sierra Business Center - Comprised Sierra Industrial Facility & North Fontana Industrial Complex

Kristen – Please take charge of filing to our cloud all comments received by Fontana on the NOP. First one is below. Make a sub-folder under the NOP folder called “NOP Public Comments”

PDF any emails  
File any other NOP response communications

Thanks!

**Tracy Zinn**  
*Principal*



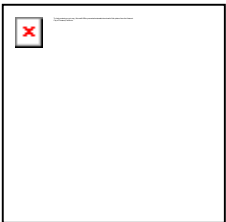
**T&B PLANNING, INC.**  
3200 El Camino Real, Suite 100 Irvine, CA 92602  
Office: 714.505.6360 Ext. 350  
Cell: 714.397.4224  
[tzinn@tbplanning.com](mailto:tzinn@tbplanning.com) | [www.tbplanning.com](http://www.tbplanning.com)  
**Nationally Certified Women's Business Enterprise (WBENC)**

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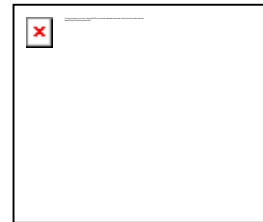
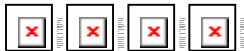
**From:** Salvador Quintanilla <[squintanilla@fontana.org](mailto:squintanilla@fontana.org)>  
**Sent:** Wednesday, March 30, 2022 1:58 PM  
**To:** Tracy Zinn <[tzinn@tbplanning.com](mailto:tzinn@tbplanning.com)>  
**Subject:** FW: Sierra Business Center - Comprised Sierra Industrial Facility & North Fontana Industrial Complex

Tracy,  
FYI - Below is an email that I received from a resident that is in close proximity to the project site.

Thank you,



**Salvador Quintanilla**  
Associate Planner • Planning  
**City of Fontana** • 8353 Sierra Avenue • Fontana, CA 92335  
[squintanilla@fontana.org](mailto:squintanilla@fontana.org) • Office: (909) 350-6656



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**From:** Matthew Dillon <[mwdillon69@yahoo.com](mailto:mwdillon69@yahoo.com)>  
**Sent:** Wednesday, March 23, 2022 6:04 PM  
**To:** Salvador Quintanilla <[squintanilla@fontana.org](mailto:squintanilla@fontana.org)>  
**Subject:** Sierra Business Center - Comprised Sierra Industrial Facility & North Fontana Industrial Complex

CAUTION - EXTERNAL SENDER - THIS EMAIL ORIGINATED OUTSIDE OF THE CITY'S EMAIL SYSTEM  
Do not click links or open attachments unless you recognize the sender and know the content is safe.

Mr. Salvador,

I live at 16959 Raven St, Fontana, CA 92336 with cross streets of Sierra Ave and Duncan Canyon Rd. I just received the proposal for construction in the mail today. I have a couple of questions:

1. Will these structures be more "Eye Sore" Warehouses? (I can see warehouses and a little bit of the Foothills from my Bedroom window)
2. Will these structures be built close to where I live (Sierra Ave & Duncan Canyon Rd)?
3. Besides corporate greed...what is the reason for the construction? Couldn't Fontana bring in more Shops/Restaurants/etc. near where I live instead of having me to drive 3 - 5 miles just to go to a grocery store or decent restaurant?
4. Sierra Ave is becoming congested due to new housing development & warehouses...will this increase the problem?
5. Will there be traffic lights installed in front of these warehouses and Duncan Canyon Rd to allow a better traffic solution?
6. With 24 hour operation of these structures being assured...how will it contribute to the noise level/pollution on Sierra Ave? My housing development is right off Sierra Ave and I hear Everything going up and down Sierra Ave.

Just my 2 cents worth: North Fontana doesn't need to be known as the "INDUSTRIAL" portion of Fontana. Instead it should be known as the Upper Residential area of Fontana.

Concerned Fontana Resident,

Matt