# **Appendix A**

Notice of Preparation, Initial Study, and Scoping Comments



#### Notice of Preparation of a Draft Environmental Impact Report and Notice of a Public Scoping Meeting

**Date:** July 1, 2022

To: State Agencies, Responsible Agencies, Local and Public Agencies, and Interested Parties

From/Lead Agency: Town of Apple Valley, Planning Department

Subject: Notice of Preparation of a Draft Environmental Impact Report and Notice of a Public Scoping

Meeting for the Apple Valley 143 Project

This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that the Town of Apple Valley (Town), as lead agency, is commencing preparation of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) to evaluate the potential environmental effects associated with implementation of the Apple Valley 143 Project (Project).

The Town is requesting input from interested individuals, organizations, and agencies regarding the scope and content of the environmental analysis to be included in the upcoming EIR. In accordance with CEQA, the Town requests that agencies provide comments on the environmental issues related to the statutory responsibilities of their particular agency. This NOP contains a description of the Project, its location, and a preliminary determination of the environmental resource topics to be addressed in the EIR.

#### **Project Location**

The approximately 143-acre Project site is located in the northern part of the Town, which is within the Victor Valley Region of San Bernardino County (Figure 1, Project Location). The Project site is located on the northeast quadrant of I-15 and Stoddard Wells Road. The Project site is located south of Johnson Road, approximately 0.25 miles west of Grasshopper Road, north of Stoddard Wells Road, and north of I-15. The Project site consists of Assessor's Parcel Numbers (APNs) 047-221-105, 047-221-106, 047-221-115, 047-222-206, and 047-222-211. Specifically, the Project site is located in Sections 13 and 24, Township 6N, Ranges 3W and 4W, as depicted on the U.S. Geological Survey Apple Valley North and Victorville, California 7.5-minute topographic quadrangle maps. Regional access to the Project site is provided via I-15, immediately adjacent to the northeast of the Project site.

#### **Project Summary**

The Project includes the construction and operation of 3 industrial/warehouse buildings totaling approximately 2,628,000 square feet on approximately 143 acres (Figure 2, Site Plan). Building 1, the southernmost building, would be approximately 615,000 square feet, Building 2, the center building, would be approximately 1,220,000 square feet, and Building 3, the northernmost building, would be approximately 793,000 square feet. The Project would involve associated improvements, including loading docks, truck and vehicle parking, and landscaped areas.

#### Potential Environmental Impacts of the Project

An Initial Study has been prepared to accompany this NOP and to inform the scope and content of the EIR. As discussed in the Initial Study, the EIR will evaluate whether implementation of the Project may potentially result in one or more significant environmental impacts. The potential environmental effects to be addressed in the EIR will include, but may not be limited to, the following:

Aesthetics Geology and Soils Land Use and Planning

Air Quality Greenhouse Gas Emissions Noise

Biological Resources Hazards and Hazardous Materials Public Services
Cultural Resources Hydrology and Water Quality Transportation

Energy Tribal Cultural Resources

**Utilities and Service Systems** 

The EIR will also address all other CEQA-mandated topics, including cumulative impacts and Project alternatives.

#### Public Scoping Comment Period and Meeting

#### **Public Scoping Comment Period**

The Town has established a 30-day public scoping period from **July 1, 2022 through August 1, 2022**. During the scoping period, the Town's intent is to disseminate Project information to the public and solicit comments from agencies, organizations, and interested parties, including nearby residents and business owners, regarding the scope and content of the environmental information to be included in the EIR, including mitigation measures or Project alternatives to reduce potential environmental effects.

During this period, this NOP and the Project's Initial Study may be accessed electronically at the following website:

#### https://www.applevalley.org/services/planning-division/environmental

This NOP and the Project's Initial Study are also available for review in person at Apple Valley Town Hall (Planning Department, 14955 Dale Evans Parkway, Apple Valley, California 92307) and at the San Bernardino County Library (14901 Dale Evans Parkway, Apple Valley, California 92307).

#### **Public Scoping Meeting**

During the 30-day public scoping period, the Town will also hold a public scoping meeting on July 19, 2022, at 5:00 p.m. at Apple Valley Town Hall, 14955 Dale Evans Parkway, Apple Valley, California 92307. The public scoping meeting will provide an additional opportunity to receive and disseminate information, identify potential environmental issues of concern, and discuss the scope of analysis to be included in the EIR. The scoping meeting is not a public hearing, and no decisions on the Project will be made at this meeting. It is an additional opportunity for agencies, organizations, and the public to provide scoping comments in person on what environmental issues should be addressed in the EIR. All public agencies, organizations, and interested parties are encouraged to attend and participate in this meeting.

#### **Scoping Comments**

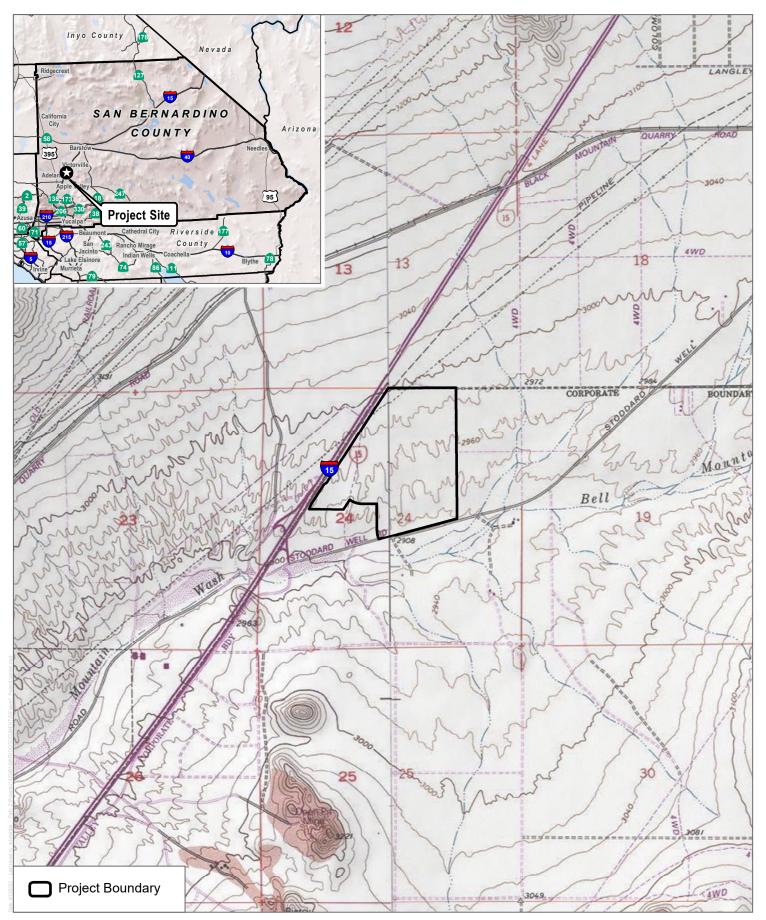
All scoping comments must be received in writing by 5:00 p.m. on August 1, 2022, which marks the end of the 30-day public scoping period. All written comments should indicate an associated contact person for the agency or organization, if applicable, and reference the Project name in the subject line. Pursuant to CEQA, responsible agencies are requested to indicate their statutory responsibilities in connection with the Project when responding. Please mail or email comments and direct any questions to the following contact person:

Daniel Alcayaga, Planning Manager Town of Apple Valley 14955 Dale Evans Parkway Apple Valley, California 92307 Phone: (760) 240-7000 Ext. 7200

Email: dalcayaga@applevalley.org

Attachments:

Figure 1, Project Location Figure 2, Site Plan



SOURCE: USGS 7.5-minute Series Victorville and Apple Valley North Quadrangles

FIGURE 1
Project Location
Apple Valley 143 Project



SOURCE: RGA 2022

FIGURE 2 Site Plan



# **Initial Study**

# **Apple Valley 143 Project**

**JULY 2022** 

Prepared for:

#### **TOWN OF APPLE VALLEY**

14955 Dale Evans Parkway Apple Valley, California 92307 Contact: Daniel Alcayaga, Planning Manager

Prepared by:



38 N. Marengo Avenue Pasadena, California 91101 Contact: Patrick Cruz, Project Manager



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# Acronyms and Abbreviations

Acronym/Abbreviation	Definition
APNs	Assessor's Parcel Numbers
CEQA	California Environmental Quality Act
EIR	environmental impact report
FHSZ	Fire Hazard Severity Zone
Fire District	Apple Valley Fire Protection District
1	Interstate
Town	Town of Apple Valley

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### 1 Introduction

### 1.1 Project Overview

The Town of Apple Valley (Town) received an application from COV Apple Valley LLC (Project Applicant) for the development of the Apple Valley 143 Project (Project). The Project includes the construction and operation of approximately 2,628,000 square feet of industrial/warehouse space on approximately 143 acres of vacant land generally located west of Interstate (I) 15, north of Stoddard Wells Road, and south of Johnson Road. Building 1, the southernmost building, would be approximately 615,000 square feet, Building 2, the center building, would be approximately 1,220,000 square feet, and Building 3, the northernmost building, would be approximately 793,000 square feet. The Project would involve associated improvements, including loading docks, truck and vehicle parking, and landscaped areas.

### 1.2 California Environmental Quality Act Compliance

The California Environmental Quality Act (CEQA) serves as the main framework of environmental law and policy in California. CEQA emphasizes the need for public disclosure and identifying and preventing environmental damage associated with proposed projects. Unless a project is deemed categorically or statutorily exempt, CEQA is applicable to any project that must be approved by a public agency in order to be processed and established. The proposed Project considered herein does not fall under any of the statutory or categorical exemptions listed in the 2022 CEQA Statute and Guidelines (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.); therefore, it must meet CEQA requirements.

The intent of this document is to provide an overview and analysis of the environmental impacts associated with the proposed Project by the Town, acting as the lead agency. The document is accessible to the public, in accordance with CEQA, in order to receive feedback on the Project's potential impacts, as well as the scope of the Project's environmental impact report (EIR) (14 CCR Section 15121[a]).

### 1.3 Availability of the Notice of Preparation and Initial Study

The Initial Study/Notice of Preparation for the Project is being distributed directly to agencies, organizations, and interested groups and persons during the scoping period. The Initial Study/Notice of Preparation is also available for review in person at Apple Valley Town Hall (Planning Department, 14955 Dale Evans Parkway, Apple Valley, California 92307) and at the San Bernardino County Library (14901 Dale Evans Parkway, Apple Valley, California 92307). These documents are also available the Town's website on at https://www.applevalley.org/services/planning-division/environmental.

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# 2 Project Description

### 2.1 Project Location

The approximately 143-acre Project site is located in the northern part of the Town, which is within the Victor Valley Region of San Bernardino County (Figure 1, Project Location). The Project site is located on the northeast quadrant of I-15 and Stoddard Wells Road. The Project site is located south of Johnson Road, approximately 0.25 miles west of Grasshopper Road, north of Stoddard Wells Road, and north of I-15. The Project site consists of Assessor's Parcel Numbers (APNs) 047-221-105, 047-221-106, 047-221-115, 047-222-206, and 047-222-211. Specifically, the Project site is located in Sections 13 and 24, Township 6N, Ranges 3W and 4W, as depicted on the U.S. Geological Survey Apple Valley North and Victorville, California 7.5-minute topographic quadrangle maps. Regional access to the Project site is provided via I-15, immediately adjacent to the northeast of the Project site.

### 2.2 Environmental Setting

#### **Town of Apple Valley**

The Town is approximately 72 square miles in the Victor Valley region of San Bernardino County. The Town is bordered by the City of Victorville to the west, the City of Hesperia to the southwest, and unincorporated County to the north and east.

#### **Existing Project Site**

The approximately 143-acre, irregularly-shaped project site consists of vacant, undeveloped land. The Project site is bordered to the west by I-15, which runs northeast-southwest, and to the southwest by another parcel, which gives the site its roughly trapezoidal shape. According to the Town's General Plan, the land use and zoning designations for the project site are Regional Commercial (C-R) (Town of Apple Valley 2015; Town of Apple Valley 2021) (see Figure 2, Land Use Designations, and Figure 3, Zoning Designations). Additionally, the Project site is located within the Warehouse Distribution Regional Commercial (C-R) Overlay.

#### Surrounding Land Uses

Land uses surrounding the Project site primarily consist of vacant land. Specific land uses located in the immediate vicinity of the Project site include the following:

- North: Johnson Road and vacant land
- East: vacant land and Grasshopper Road
- South: Stoddard Wells Road and a planned travel center
- West: I-15

### 2.3 Project Characteristics

The Project would include construction of three industrial/warehouse buildings and associated improvements on 143 acres of vacant land (see Figure 4, Site Plan). Building 1, the southernmost building, would be approximately

615,000 square feet, Building 2, the center building, would be approximately 1,220,000 square feet, and Building 3, the northernmost building, would be approximately 793,000 square feet. The Project would involve associated improvements, including loading docks, truck and vehicle parking, and landscaped areas.

#### On-Site and Off-Site Improvements

The Project would include improvements along Stoddard Wells Road and Johnson Road, including frontage landscaping and pedestrian improvements. A variety of trees, shrubs, plants, and land covers would be planted within the Project frontage's landscape setback area, as well as within the landscape areas found around the proposed industrial/warehouse buildings and throughout the Project site. The Project would also involve the offsite construction of Outer I-15 Road on the eastern boundary of the Project Site. This would be a public road once constructed.

#### Site Access and Circulation

Access to the Project site would be provided via Outer I-15 Road on the eastern boundary of the project site, as well as a driveway off of Stoddard Wells Road. Paved passenger vehicle parking areas would be provided within areas east of Buildings 1, 2 and 3, while tractor-trailer stalls and loading docks would be surrounding Buildings 1 to the north and south, and surrounding Buildings 2 and 3 to the north, south, and west. In total, the Project would provide approximately 515 loading dock positions, approximately 884 tractor-trailer stalls, roughly 975 passenger vehicle spaces, and approximately 920,000 square feet of landscape area coverage.

#### **Utility Improvements**

Given the vacant, undeveloped nature of the Project site, both wet and dry utilities, including domestic water, sanitary sewer, storm drainage, and electricity, would need to be extended onto the Project site.

#### **Operations**

Tenants for the Project have not been identified and the three industrial warehouse buildings are considered speculative. Business operations would be expected to be conducted within the enclosed buildings, with the exception of ingressing and egressing of trucks and passenger vehicles accessing the site, passenger and truck parking, the loading and unloading of trailers within designated truck courts/loading area, and the internal and external movement of materials around the Project site via forklifts, pallet jacks, yard hostlers, and similar equipment. It is anticipated that the facilities would be operated 24 hours a day, 7 days a week.

### 2.4 Project Approvals

At this time, it is anticipated that that the Project would require approval of a conditional use permit and development agreement. This list is preliminary and may not be comprehensive. Subsequent non-discretionary approvals (which would require separate processing through the Town) would include, but may not be limited to, a grading permit, building permits, and occupancy permits.

# 3 Initial Study Checklist

#### 1. Project title:

Apple Valley 143 Project

#### 2. Lead agency name and address:

Town of Apple Valley, Planning Division 14955 Dale Evans Parkway Apple Valley, California 92307

#### 3. Contact person and phone number:

Daniel Alcayaga, Planning Manager Town of Apple Valley 14955 Dale Evans Parkway Apple Valley, California 92307 760-240-7000 ext. 7205

#### 4. Project location:

The approximately 143-acre Project site is located in the northern part of the Town, which is within the Victor Valley Region of San Bernardino County. The Project site is located on the northeast quadrant of I-15 and Stoddard Wells Road. The Project site is located south of Johnson Road, approximately 0.25 miles west of Grasshopper Road, north of Stoddard Wells Road, and north of I-15. The Project site consists of Assessor's Parcel Numbers (APNs) 047-221-105, 047-221-106, 047-221-115, 047-222-206, and 047-222-211. Specifically, the Project site is located in Sections 13 and 24, Township 6N, Ranges 3W and 4W, as depicted on the U.S. Geological Survey Apple Valley North and Victorville, California 7.5-minute topographic quadrangle maps. Regional access to the Project site is provided via I-15, immediately adjacent to the northeast of the Project site.

#### 5. Project sponsor's name and address:

COV Apple Valley LLC 3 Corporate Plaza, Suite 230 Newport Beach, CA 92660

#### 6. General plan designation:

Regional Commercial (C-R) with Warehouse Distribution Regional Commercial (C-R) Overlay

#### 7. Zoning:

Regional Commercial (C-R) with Warehouse Distribution Regional Commercial (C-R) Overlay

8. Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

The Project includes the construction and operation of approximately 2,628,000 square feet of industrial/warehouse space on approximately 143 acres of vacant land generally located west of Interstate (I) 15, north of Stoddard Wells Road, and south of Johnson Road. Building 1, the southernmost building, would be 615,000 square feet, Building 2, the center building, would be 1,220,000 square feet, and Building 3, the northernmost building, would be 793,000 square feet. In total, the Project would provide three buildings totaling in 2,628,000 square feet of industrial/warehouse space and associated improvements, including loading docks, truck and vehicle parking, and landscaped areas.

9. Surrounding land uses and setting (Briefly describe the project's surroundings):

Land uses surrounding the Project site primarily consist of vacant land. Specific land uses located in the immediate vicinity of the Project site include the following:

North: Johnson Road and vacant land

East: vacant land and Grasshopper Road

South: Stoddard Wells Road and planned travel center

■ West: I-15

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

No discretionary approvals from other outside agencies are anticipated at this time.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

In accordance with California Assembly Bill 52 requirements, the Town will initiate Tribal consultation, the results of which will be summarized in the Draft EIR.

#### **Environmental Factors Potentially Affected**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

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

#### Determination

On the	e basis of this initial evaluation:	
	I find that the proposed project COULD NOT have a signific DECLARATION will be prepared.	cant effect on the environment, and a NEGATIVE
	I find that although the proposed project could have a sign be a significant effect in this case because revisions in the project proponent. A MITIGATED NEGATIVE DECLARATION	e project have been made by or agreed to by the
	I find that the proposed project MAY have a significant effect IMPACT REPORT is required.	ct on the environment, and an ENVIRONMENTAL
	I find that the proposed project MAY have a "potentially sign mitigated" impact on the environment, but at least one effer document pursuant to applicable legal standards, and (2 based on the earlier analysis as described on attached significantly required, but it must analyze only the effects that remain to	ct (1) has been adequately analyzed in an earlier 2) has been addressed by mitigation measures heets. An ENVIRONMENTAL IMPACT REPORT is
	I find that although the proposed project could have a sig potentially significant effects (a) have been analyzed ade REPORT or NEGATIVE DECLARATION pursuant to applica mitigated pursuant to that earlier ENVIRONMENTAL IMPACT revisions or mitigation measures that are imposed upon the	quately in an earlier ENVIRONMENTAL IMPACT ble standards, and (b) have been avoided or I REPORT or NEGATIVE DECLARATION, including
Signa	fure	6-29-27 Data
Signa	uie (	Date

#### **Evaluation of Environmental Impacts**

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
  - a. The significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any, to reduce the impact to less than significance

### 3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>I.</u>	<b>AESTHETICS</b> – Except as provided in Public Re	esources Code S	Section 21099, wo	ould the project:	
a)	Have a substantial adverse effect on a scenic vista?	$\boxtimes$			
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

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

Potentially Significant Impact. The Project would include construction of three industrial/warehouse buildings and associated improvements on currently undeveloped, vacant land. In total, the Project would provide three buildings totaling in 2,628,000 square feet of industrial/warehouse space and associated improvements, including loading docks, truck and vehicle parking, and landscaped areas. Due to this proposed increase in on-site development intensity, there is a potential for the Project to affect public views of scenic vistas or otherwise alter the existing visual character or quality of public views, despite the fact that the Project must be designed and constructed in accordance with the design standards set forth in the

Town's Development Code. In addition, implementation of the Project would include the installation of new nighttime lighting, which could potentially adversely affect nighttime views in the area, including drivers on I-15. Such lighting would include lighting for on-site parking and facilities, and light generated by vehicles entering and existing the Project site. Therefore, impacts are potentially significant, and these issues will be analyzed in the Draft EIR.

### 3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. 	AGRICULTURE AND FORESTRY RESOURCES – significant environmental effects, lead agenci Site Assessment Model (1997) prepared by the in assessing impacts on agriculture and farmle including timberland, are significant environmental compiled by the California Department of Forest land, including the Forest and Range Assand forest carbon measurement methodology Resources Board. Would the project:	es may refer to the California Depland. In determinental effects, lestry and Fire Pressessment Proje	the California Agri- ot. Conservation a ning whether impa ad agencies may otection regarding ect and the Forest	cultural Land Event of the second of the state's investigation of the second of the se	aluation and odel to use ources, cion entory of nent project;
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				$\boxtimes$
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				$\boxtimes$
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				$\boxtimes$
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				$\boxtimes$
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or				$\boxtimes$

conversion of forest land to non-forest use?

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. According to the California Department of Conservation's California Important Farmland Finder, the Project site contains grazing land (CDOC 2016). Grazing land is described as land on which the existing vegetation is suited to the grazing of livestock. Grazing land does not include land designated or previously designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (collectively "Important Farmland"). Therefore, no impacts would occur, and no further analysis is proposed for the Draft EIR.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. According to the Town's General Plan EIR, the Project site is not located on or adjacent to any lands under a Williamson Act contract (Town of Apple Valley 2009a). In addition, the Project site and surrounding area are not zoned for agricultural uses, but instead for Regional Commercial uses (Town of Apple Valley 2021). As such, implementation of the Project would not conflict with existing zoning for agricultural use or land under a Williamson Act contract. Therefore, no impacts would occur, and no further analysis is proposed for the Draft EIR.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. According to the Town's Zoning Map, the Project site is not located on or adjacent to forestland, timberland, or timberland zoned timberland production (Town of Apple Valley 2021). Therefore, no impacts would occur, and no further analysis is proposed for the Draft EIR.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project site is not located on or adjacent to forestland. No private timberlands or public lands with forests are located in the Town. Therefore, no impact would occur, and no further analysis is proposed for the Draft EIR.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The Project site is not located on or adjacent to any parcels identified as Important Farmland or forestland (CDOC 2016). In addition, the Project would not involve changes to the existing environment that would result in the indirect conversion of Important Farmland or forestland located away from the Project site. Therefore, no impacts would occur, and no further analysis is proposed for the Draft EIR.

### 3.3 Air Quality

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	AIR QUALITY – Where available, the significan management district or air pollution control d determinations. Would the project:		• • • •	•	у
a)	Conflict with or obstruct implementation of the applicable air quality plan?	$\boxtimes$			
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
c)	Expose sensitive receptors to substantial pollutant concentrations?	$\boxtimes$			
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

- a) Would the project conflict with or obstruct implementation of the applicable air quality plan?
- b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- c) Would the project expose sensitive receptors to substantial pollutant concentrations?
- d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Potentially Significant Impact. Project construction and operations would involve activities that would generate both short-term and long-term criteria pollutant and other emissions. Further air quality analysis is required to determine whether the Project could potentially result in any adverse effects related to air quality. Therefore, these issues will be analyzed in the Draft EIR.

## 3.4 Biological Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	BIOLOGICAL RESOURCES - Would the project	•			
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	$\boxtimes$			
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

- a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on candidate, sensitive, or special-status species; sensitive natural communities; migratory wildlife corridors; and protected trees. Further biological resources analysis is required to determine whether the Project could potentially result in any adverse effects related to biological resources. Therefore, these issues will be analyzed further in the Draft EIR.

### 3.5 Cultural Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
٧.	<b>CULTURAL RESOURCES</b> – Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	$\boxtimes$			
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	$\boxtimes$			
c)	Disturb any human remains, including those interred outside of formal cemeteries?	$\boxtimes$			

- a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?
- b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on currently unrecorded, unknown historical, archaeological, or Tribal cultural resources. Further cultural resources analysis is required to determine whether the Project could potentially result in any adverse effects related to cultural resources. Therefore, these issues will be analyzed further in the Draft EIR.

### 3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact		
VI. Energy – Would the project:						
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?						
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	$\boxtimes$					

- a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Potentially Significant Impact. Project construction and operations would involve activities that would require the use of energy, including electricity and petroleum. Further energy usage analysis is required to determine whether the Project could potentially result in any adverse effects related to energy consumption. Therefore, these issues will be analyzed in the Draft EIR.

## 3.7 Geology and Soils

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
_	GEOLOGY AND SOILS - Would the project:	T	<u> </u>	T	
a) 	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii) Strong seismic ground shaking?			$\boxtimes$	
	iii) Seismic-related ground failure, including liquefaction?				
	iv) Landslides?				$\boxtimes$
b)	Result in substantial soil erosion or the loss of topsoil?			$\boxtimes$	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				$\boxtimes$
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	$\boxtimes$			

- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The Alquist–Priolo Earthquake Zoning Act (Alquist–Priolo Act) requires the delineation of fault zones along active faults in California. The purpose of the Alquist–Priolo Act is to regulate development on or near active fault traces to reduce hazards associated with fault rupture. The Alquist–Priolo Earthquake Fault Zones are the regulatory zones that include surface traces of active faults. According to the California Department of Conservation, the Project site is not located in an Alquist–Priolo Earthquake Fault Zone (CDOC 2015). Thus, the potential for surface rupture is low on the Project site. Therefore, no impacts would occur, and this issue will not be evaluated further in the Draff EIR.

#### ii) Strong seismic ground shaking?

Less-Than-Significant Impact. Similar to other areas located in seismically active Southern California, the Town is susceptible to strong ground shaking during an earthquake. However, the Project site is not located within an Alquist-Priolo Earthquake Fault Zone, and the site would not be affected by ground shaking more than any other area in this seismic region. Pursuant to Title 8, Buildings and Construction, of the Apple Valley Municipal Code, the Project's geotechnical report will be subject to review and approval by Town staff prior to issuance of a grading permit. Compliance with the recommendations of the geotechnical report is mandated by Section 8.12.010 of the Apple Valley Municipal Code, and compliance is subject to inspection by the Town Building Official. With implementation of the recommendations of the Project's geotechnical report, impacts associated with strong seismic ground shaking would be less than significant, and no further analysis will be conducted in the Draft EIR.

#### iii) Seismic-related ground failure, including liquefaction?

Less-Than-Significant Impact. Soil liquefaction is a seismically induced form of ground failure that has been a major cause of earthquake damage in Southern California. Liquefaction is a process by which water-saturated granular soils transform from a solid to a liquid state because of a sudden shock or strain such as an earthquake. According to Exhibit III-11 of the Town's General Plan EIR (Town of Apple Valley 2009a), the Project site is not within an area of the Town that has the potential for liquefaction. Therefore, impacts associated with potential seismic-related ground failure, including liquefaction, would be less than significant, and no further analysis will be conducted in the Draft EIR.

#### iv) Landslides?

No Impact. According to Exhibit III-11 of the Town's General Plan EIR (Town of Apple Valley 2009a), the Project site is not located in an area identified as susceptible to slope instability. The Project site is relatively flat and is not located adjacent to any potentially unstable topographical feature such as a hillside or riverbank. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

#### b) Would the project result in substantial soil erosion or the loss of topsoil?

Less-Than-Significant Impact. The Project would involve earthwork and other construction activities that would disturb surface soils and temporarily leave exposed soil on the ground's surface. Common causes of soil erosion from construction sites include stormwater, wind, and soil being tracked off site by vehicles. To help curb erosion, Project construction activities must comply with all applicable federal, state, and local regulations for erosion control. The Project would be required to comply with standard regulations, including South Coast Air Quality Management District Rules 402 and 403, which would reduce construction erosion impacts. Rule 402 requires that dust suppression techniques be implemented to prevent dust and soil erosion from creating a nuisance off site (SCAQMD 1976). Rule 403 requires that fugitive dust be controlled with best available control measures so that it does not remain visible in the atmosphere beyond the property line of the emissions source (SCAOMD 2005).

Since Project construction activities would disturb 1 or more acres, the Project must adhere to the provisions of the National Pollutant Discharge Elimination System Construction General Permit. Construction activities subject to this permit include clearing, grading, and ground disturbances such as stockpiling and excavating. The Construction General Permit requires implementation of a stormwater pollution prevention plan, which would include construction features for the Project (i.e., best management practices) designed to prevent erosion and protect the quality of stormwater runoff. Sediment-control best management practices may include stabilized construction entrances, straw wattles on earthen embankments, sediment filters on existing inlets, or the equivalent. Therefore, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

Once developed, the Project site would include buildings, paved surfaces, and other on-site improvements that would stabilize and help retain on-site soils. The remaining portions of the Project site containing pervious surfaces would primarily consist of landscape areas. These landscape areas would include a mix of trees, shrubs, plants, and groundcover that would help retain on-site soils while preventing wind and water erosion from occurring. Therefore, operational impacts related to soil erosion would be less than significant. No further analysis will be conducted in the Draft EIR.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less-Than-Significant Impact. As discussed previously, the potential for the Project to result in or be affected by landslides and liquefaction is low, and these issues are not anticipated at the Project site. Project activities may occur on geologically unstable soils such as those susceptible to lateral spreading, subsidence, or collapse. Pursuant to Title 8, Buildings and Construction, of the Apple Valley Municipal Code, the Project's geotechnical report will be subject to review and approval by Town staff prior to issuance of a grading permit. Compliance with the recommendations of the geotechnical report is mandated by Section 8.12.010 of the Apple Valley Municipal Code, and compliance is subject to inspection by the Town Building Official. With implementation of the recommendations of the Project's geotechnical report, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less-Than-Significant Impact. Expansive soils are characterized by their potential shrink/swell behavior. Shrink/swell is the change in volume (expansion and contraction) that occurs in certain fine-grained clay sediments from the cycle of wetting and drying. Clay minerals are known to expand with changes in moisture content. The higher the percentage of expansive minerals present in near-surface soils, the higher the potential for substantial expansion.

Alluvial fan sediments, composed primarily of granular soils, underlie the low-lying areas of the Town and the expansion potential ranges from very low to moderately low. Additionally, the U.S. Department of Agriculture's Web Soil Survey does not identify the Project site or surrounding area as containing clay soils, which are typically expansive (USDA 2022). Therefore, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project would connect to the Town's municipal sewer lines. The Project would not require septic tanks or alternative wastewater disposal systems. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Potentially Significant Impact. According to the Town's General Plan EIR, the Town has potential for paleontological finds (Town of Apple Valley 2009a). As such, development and construction activities associated with the project have the potential to unearth potentially significant paleontological resources. Therefore, impacts would be potentially significant, and further analysis is proposed in the Draft EIR.

### 3.8 Greenhouse Gas Emissions

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII.	VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
direc	erate greenhouse gas emissions, either ctly or indirectly, that may have a ificant impact on the environment?	$\boxtimes$			
regu	flict with an applicable plan, policy or llation adopted for the purpose of ucing the emissions of greenhouse es?				

- a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Potentially Significant Impact. Project construction and operations would involve activities that would generate both short-term and long-term greenhouse gas emissions. Further greenhouse gas analysis is required to determine whether the Project could potentially result in any adverse effects related to greenhouse gases. Therefore, these issues will be analyzed in the Draft EIR.

# 3.9 Hazards and Hazardous Materials

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	HAZARDS AND HAZARDOUS MATERIALS - Wo	ould the project:			
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	$\boxtimes$			
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				$\boxtimes$
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				$\boxtimes$
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either direct or indirectly, to a significant risk of loss, injury or death involving wildland fires?	ly 🖂			

- a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Potentially Significant Impact. Development of the Project would result in the construction of three industrial/warehouse buildings and associated improvements on currently undeveloped, vacant land. Project implementation could potentially result in impacts related to hazardous materials and wildland fire. Therefore, these issues will be analyzed in the Draft EIR.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. There are no schools within a three-mile radius of the Project site. As such, the closest school is located well outside of a 0.25-mile radius around the Project site. Therefore, no impacts would occur, and this issue will not be evaluated further in the Draft EIR.

d) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Hazardous Waste and Substances Sites List (Cortese List) is a planning document providing information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous materials release information for the Cortese List (CalEPA 2022). A review of Cortese List online data resources does not identify hazardous materials or waste sites on the Project site or immediately surrounding area (DTSC 2022; SWRCB 2022). Therefore, no impacts would occur, and this issue will not be evaluated further in the Draft EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The nearest operational public-use airport to the Project site is the Southern California Logistics Airport, which is located approximately 6.2 miles to the west. According to the Comprehensive Land Use Plan, the Project site is not located within a runway protection zone or safety zone area, which would have potential safety and noise impacts (San Bernardino County 2008). Therefore, impacts would not occur, and this issue will not be evaluated further in the Draft EIR.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less-Than-Significant Impact. Construction activities that may temporarily restrict vehicular traffic would be required to implement appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Typical Town requirements include prior notification of any land or road closures with sufficient signage before and during any closures, flag crews with radio communication when necessary to coordinate traffic flow, etc. The Project developer would be required to comply with these requirements, which would maintain emergency access and allow for evacuation if needed during construction activities.

The Town's General Plan designates Central Road, State Highway 18, and Bear Valley Road as evacuation routes. The Project does not propose any changes to the geometry of these roadways, and moreover, the Project's truck trips would not be directed towards these roads (as they would be directed towards I-15). Thus it follows that these roadways' ability to serve as emergency evacuation routes would not be compromised. As a result, the Project would not significantly affect emergency response or evacuation activities. Therefore, impacts would be less than significant, and this issue will not be evaluated further in the Draft EIR.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Potentially Significant Impact. Development of the Project would result in the construction of three industrial/warehouse buildings and associated improvements on currently undeveloped, vacant land. Project implementation could potentially result in impacts related to hazardous materials and wildland fire. Therefore, these issues will be analyzed in the Draft EIR.

# 3.10 Hydrology and Water Quality

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Χ.	HYDROLOGY AND WATER QUALITY - Would th	ne project:			
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	<ul> <li>result in substantial erosion or siltation on- or off-site;</li> </ul>				
	<ul> <li>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;</li> </ul>				
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv) impede or redirect flood flows?				
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			$\boxtimes$	
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	$\boxtimes$			

- a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
- b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - i) Result in substantial erosion or siltation on- or off-site?
  - ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?
  - iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
  - iv) Impede or redirect flood flows?

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on existing drainage patterns, which could subsequently impact surface water and groundwater quality, as well as both on-site and local hydrology. Therefore, these issues will be analyzed in the Draft EIR.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

Less-Than-Significant Impact. The Project would not be susceptible to flood hazards, tsunami, or seiche. Seiche is generally associated with oscillation of enclosed bodies of water (e.g., reservoirs, lakes) typically caused by ground shaking associated with a seismic event; however, the Project site is not located near an enclosed body of water. Flooding from tsunami conditions is not expected, since the Project site is located approximately 60 miles from the Pacific Ocean.

In addition, the Federal Emergency Management Agency Flood Map Service Center identifies the Project site as Zone D, which is classified as an area of undetermined flood hazard (FEMA 2008). As such, the Project would not risk release of pollutants due to inundation. Therefore, impacts associated with seiche, tsunami, or flooding would be less than significant, and this issue will not be evaluated further in the Draft EIR.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on existing drainage patterns, which could subsequently impact surface water and groundwater quality, as well as both on-site and local hydrology. Therefore, these issues will be analyzed in the Draft EIR.

# 3.11 Land Use and Planning

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	LAND USE AND PLANNING - Would the project	ot:			
a)	Physically divide an established community?				
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

## a) Would the project physically divide an established community?

No Impact. The physical division of an established community typically refers to the construction of a linear feature (e.g., a major highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community or between a community and outlying area.

Under the existing condition, the Project site is vacant land and is not used as a connection between established communities. Instead, connectivity within the area surrounding the Project site is facilitated via local roadways. As such, the Project would not impede movement within the Project area, within an established community, or from one established community to another. Therefore, no impacts would occur, and this issue will not be evaluated further in the Draft EIR.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Potentially Significant Impact. While the Project would be consistent with the General Plan and Zoning Code, further analysis is required to determine if the Project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, these issues will be analyzed in the Draft EIR.

## 3.12 Mineral Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII.	MINERAL RESOURCES – Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

- a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. According to the Energy and Mineral Resources Element in the Town's General Plan, mineral resources such as sand, gravel, and stone have been identified within the Town (Town of Apple Valley 2009b). According to Figure III-8 in the Town's General Plan, the Project site is not within an area that has been identified to contain mineral resources (Town of Apple Valley 2009b). Additionally, the Project would be located within an area that is not zoned for mineral resource extraction operations, and thus, such activities cannot currently occur on the Project site. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

# 3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE - Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b) Generation of excessive groundborne vibration or groundborne noise levels?	$\boxtimes$			

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

- a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?
- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Potentially Significant Impact. Project construction and operations would involve activities that would generate both short-term and long-term noise. Further noise analysis is required to determine whether the Project could potentially result in any adverse effects related to increased noise levels. Therefore, these issues will be analyzed in the Draft EIR.

# 3.14 Population and Housing

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV	<b>/. POPULATION AND HOUSING</b> - Would the proj	ect:			
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less-Than-Significant Impact. The Project would require a temporary construction workforce and a permanent operational workforce, both of which could potentially induce population growth in the Project area. The temporary workforce would be needed to construct the warehouse buildings and associated improvements. The number of construction workers needed during any given period would largely depend on the specific stage of construction, but would likely range from a dozen to several dozen workers on a daily basis. These short-term positions are anticipated to be filled primarily by construction workers who reside in the Project site's vicinity; therefore, construction of the Project would not generate a permanent increase in population within the Project area.

Because the future tenants are not known yet, the number of jobs that the Project would generate cannot be precisely determined. Thus, for purposes of analyses, employment estimates were calculated using average employment density factors reported by Southern California Association of Governments (SCAG). SCAG reports that for every 1,195 square feet of warehouse space in San Bernardino County, the average numbers of jobs supported is one employee (SCAG 2001). The Project would include 2,628,000 square feet of industrial/warehouses space, excluding associated improvements. As such, the estimated number of employees required for operation would be approximately 2,200.

According to the 2010 U.S. Census, the population of the Town was approximately 69,136 residents. According to the Town's General Plan, upon build-out, the Town could support a population of 185,858 residents (Town of Apple Valley 2009b). As such, the Project-related increase of approximately 2,200 employees would represent a nominal percentage of the Town's projected future population upon General Plan build-out.<sup>1</sup>

In addition, data provided by the California Employment Development Department in February 2022 found that the unemployment rate for San Bernardino County is at 5%, which is similar to the state average (5.4%) (EDD 2022). As such, the Project's temporary and permanent employment requirements could likely be met by the Town's existing labor force without people needing to relocate into the Project region, and the Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans. Therefore, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project site is currently vacant and contains no housing or other residential uses. Given that no residential uses are located on site, it follows that the site does not support a residential population. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

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Note that this represents a conservative approach, as this finding assumes that all future employees will have relocated to the Town as a result of the Project from outside of the Town, and that no future employees are already residents of the Town.

## 3.15 Public Services

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact		
XV.	PUBLIC SERVICES						
a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:						
	Fire protection?	$\boxtimes$					
	Police protection?	$\boxtimes$					
	Schools?				$\boxtimes$		
	Parks?				$\boxtimes$		
	Other public facilities?				$\boxtimes$		

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

## Fire protection?

Potentially Significant Impact. The Project could result in an increase in calls for service to the Project site that may result in the need for new fire protection facilities. Further analysis is required to determine whether the Project could potentially result in adverse environmental impacts associated with the construction of new fire protection facilities. Therefore, this issue will be analyzed in the Draft EIR.

#### Police protection?

Potentially Significant Impact. The Project could result in an increase in calls for service to the Project site that may result in the need for new police protection facilities. Further analysis is required to determine whether the Project could potentially result in adverse environmental impacts associated with the construction of new police protection facilities. Therefore, this issue will be analyzed in the Draft EIR.

#### Schools?

No Impact. As previously discussed, the Project would not directly or indirectly induce unplanned population growth in the Town. Although the Project would require employees to construct and operate the Project, these short-term and long-term employees would likely already reside within the broader Project area. As such, it is not anticipated that many people would relocate to the Town as a result of the Project, and an increase in school-age children requiring public education is not expected to occur as a result.

Similar to other development projects in the Town, the Project would be subject to Senate Bill 50, which requires payment of mandatory impact fees to offset any impact to school services or facilities. The provisions of Senate Bill 50 are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other state or local laws (Government Code Section 65996). In accordance with Senate Bill 50, the Project Applicant would pay its fair share of impact fees based on the Project's square footage per Government Code Section 65995(h). These impact fees are required of most residential, commercial, and industrial development projects in the Town. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

#### Parks?

No Impact. The Project would construct three industrial/warehouse buildings in the Town. The Project does not propose any residential uses and would not directly or indirectly induce unplanned population growth in the Town. As such, the Project would not increase the use of existing neighborhood parks or regional parks in the Town and surrounding area. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

### Other public facilities?

No Impact. Given industrial nature of the Project and the lack of population growth that would result from the Project, it is unlikely that the Project would increase the use of libraries and other public facilities. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

# 3.16 Recreation

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
ΧV	I. RECREATION				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				$\boxtimes$
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				$\boxtimes$

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. The Project would construct three industrial/warehouse building and associated improvements. The Project does not propose any residential uses and would not directly or indirectly result in a substantial and unplanned increase in population growth within the Project area. As such, the Project would not increase the use of existing neighborhood parks or regional parks in the Town and surrounding area. In addition, as an industrial use, the Project does not propose recreational facilities or require the construction or expansion of recreational facilities. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

# 3.17 Transportation

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV	II. TRANSPORTATION - Would the project:				
a)	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?				
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	$\boxtimes$			
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d)	Result in inadequate emergency access?	$\boxtimes$			

- a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
- c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- d) Would the project result in inadequate emergency access?

Potentially Significant Impact. Project operations would involve industrial/warehouse activities that would generate truck and passenger vehicle traffic that may conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, or otherwise result

in both localized and broader transportation impacts. Further traffic impact analysis is required to determine whether the Project could potentially result in any adverse effects related the local and regional circulation system. Therefore, these issues will be analyzed in the Draft EIR.

# 3.18 Tribal Cultural Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII.	. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
 	Listed or eligible for listing in the California Register of Historical Resources, or in a ocal register of historical resources as defined in Public Resources Code section 5020.1(k), or				
i S ( ( 5 3	A resource determined by the lead agency, n its discretion and supported by substantial evidence, to be significant oursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on currently unrecorded, unknown, historical, archaeological, or Tribal cultural resources. Further cultural

resources analysis is required to determine whether the Project could potentially result in any adverse effects related to cultural resources. Therefore, these issues will be analyzed further in the Draft EIR.

# 3.19 Utilities and Service Systems

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX	UTILITIES AND SERVICE SYSTEMS - Would th	e project:			
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	$\boxtimes$			

- a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Potentially Significant Impact. Project construction and operations would involve activities that would require the use of energy and would generate the need for domestic water, sanitary sewer, stormwater, and solid waste disposal. Given the vacant, undeveloped nature of the Project site, these, and likely other dry and wet utilities and services would need to be extended onto the Project site. Additionally, the Project would be subject to Senate Bill 610, which requires the preparation of a Water Supply Assessment because the Project involves the development of an industrial project that is greater than 650,000 square feet. Further air quality analysis is required to determine whether the Project could potentially result in any adverse effects related to utilities and services systems and to determine whether the Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Therefore, these issues will be analyzed in the Draft EIR.

# 3.20 Wildfire

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	
XX.	XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?			$\boxtimes$		
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			$\boxtimes$		

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			$\boxtimes$	
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			$\boxtimes$	

# a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less-Than-Significant Impact. Construction activities that may temporarily restrict vehicular traffic would be required to implement appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Typical Town requirements include prior notification of ay land or road closures with sufficient signage before and during any closures, flag crews with radio communication when necessary to coordinate traffic flow, etc. The Project developer would be required to comply with these requirements, which would maintain emergency access and allow for evacuation if needed during construction activities.

The Town's General Plan designates Central Road, State Highway 18, and Bear Valley Road as evacuation routes. The Project does not propose any changes to the geometry of these roadways, and moreover, the Project's truck trips would not be directed towards these roads (as they would be directed towards I-15). Thus it follows that these roadways' ability to serve as emergency evacuation routes would not be compromised. As a result, the Project would not significantly affect emergency response or evacuation activities. Therefore, impacts would be less than significant, and this issue will not be evaluated further in the Draft EIR.

## b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less-Than-Significant Impact. The California Department of Forestry and Fire Protection's (CAL FIRE) Fire Hazard Severity maps have determined that the Project site is not in or near land classified as a Very High Fire Hazard Severity Zone, and impacts associated with wildfire in or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones are not anticipated. The Project site is located in an area that is generally flat, lacking any steep slopes, and characterized as vacant land; these factors are not typically associated with the uncontrolled spread of wildfire. Therefore, impacts associated with the spread of wildfire would be less than significant, and this issue will not be evaluated further in the Draft EIR.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less-Than-Significant Impact. As previously addressed, the Project site is not located within or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones. While the Project does not include the construction of fuel breaks or power lines, the Project would involve the installation of infrastructure, including water, wastewater treatment, and storm drainage facilities. The installation of this infrastructure would be typical of development within the greater Project area and would not require the use of specialized techniques or machinery that would result in temporary or ongoing impacts beyond those impacts discussed within this Initial Study. Any impacts associated with the installation of this infrastructure would be done in compliance with existing regulatory requirements, such as SWPPP requirements, that would reduce potential impacts associated with construction of these facilities to below a level of significance. Therefore, impacts associated with infrastructure exacerbating fire risk would be less than significant, and this issue will not be evaluated further in the Draft EIR.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less-Than-Significant Impact. As discussed above, the Project site is not located within or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones. As discussed in Section 3.7, Geology and Soils, and Section 3.10, Hydrology and Water Quality, the Project would not result in significant risks associated with flooding or landslides, and the Project does not propose the use of fire (such as for a controlled vegetation burn) that would result in post-fire slope instability. Therefore, impacts associated with runoff, post-fire slope instability, or drainage changes would be less than significant, and this issue will not be evaluated further in the Draft EIR.

# 3.21 Mandatory Findings of Significance

VVI MANDATORY FINIDINGS OF GIONIFIGANOS	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below selfsustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Potentially Significant Impact. The Project has the potential to degrade the quality of the environment, reduce the habitat of a plant or wildlife species, cause a plant or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal (see Section 3.4, Biological Resources). In addition, the Project may have the potential to eliminate important examples of California history or prehistory during grading activities due to the potential for unanticipated cultural resources (see Section 3.5, Cultural Resources). Therefore, impacts are considered potentially significant, and this issue will be analyzed in the Draft EIR.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Potentially Significant Impact. The Project could have impacts that are individually limited but cumulatively considerable. The EIR will analyze past, present, and reasonably foreseeable projects in the vicinity of the Project site. Therefore, impacts are considered potentially significant, and this issue will be analyzed in the Draft EIR.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. The Project could have environmental effects that could cause substantial adverse effects on human beings. Therefore, impacts are considered potentially significant, and this issue will be analyzed in the Draft EIR.

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# 4 References and Preparers

# 4.1 References Cited

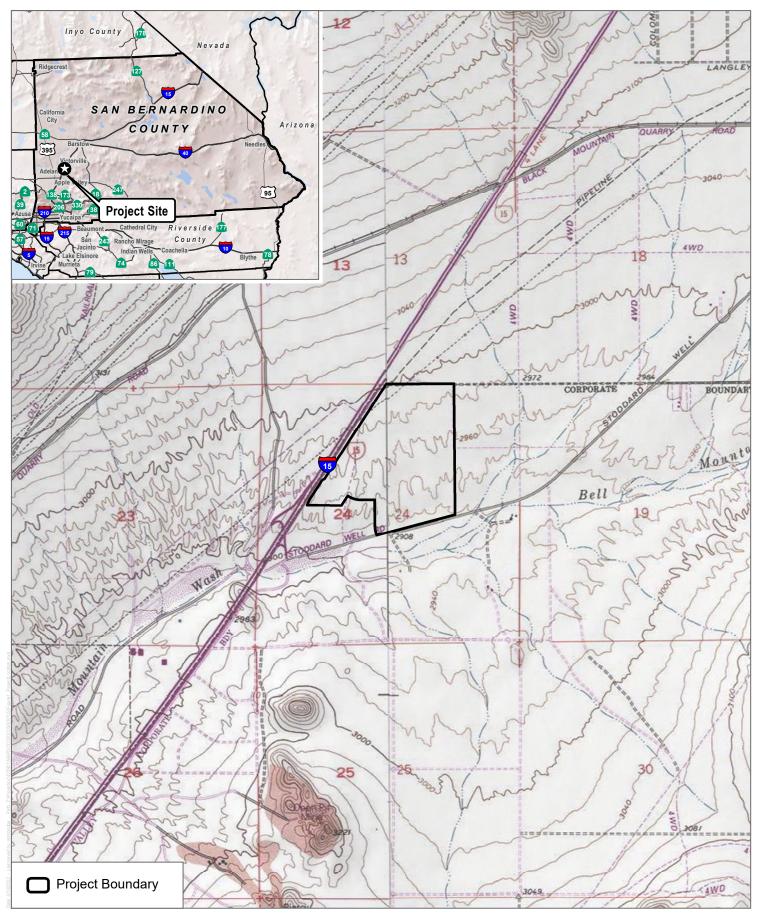
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# 4.2 List of Preparers

### Dudek

Patrick Cruz – Project Manager Hayley Ward – Environmental Planner Rachel Strobridge – GIS Specialist



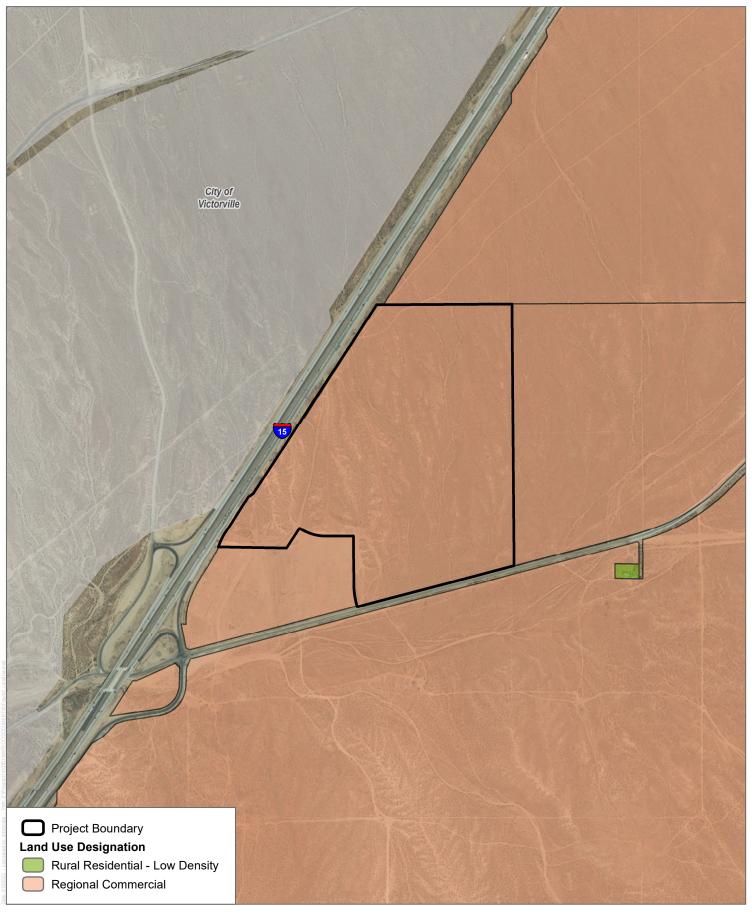
SOURCE: USGS 7.5-minute Series Victorville and Apple Valley North Quadrangles

**DUDEK** 

**Project Location** 

FIGURE 1

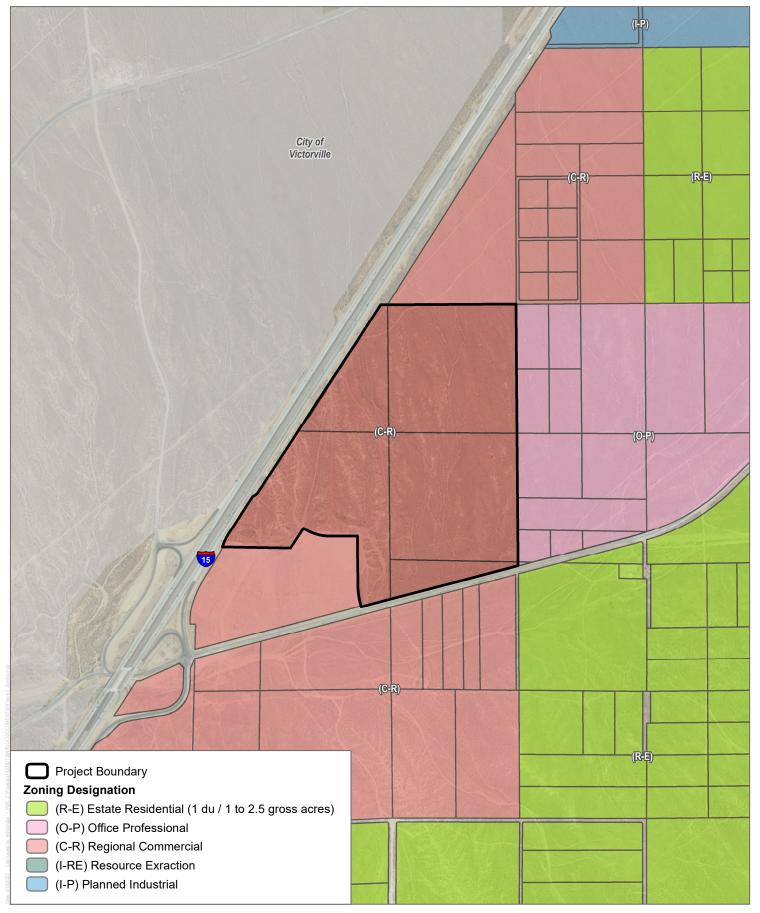
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SOURCE: Bing Maps 2021, San Bernardino County 2012

FIGURE 2
Land Use Designations

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SOURCE: Bing Maps 2021, San Bernardino County 2012

FIGURE 3

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SOURCE: RGA 2022

FIGURE 4 Site Plan INTENTIONALLY LEFT BLANK

# CITY OF VICTORVILLE



#### **DEVELOPMENT DEPARTMENT**

Planning \* Building \* Code Enforcement 14343 Civic Drive P.O. Box 5001 Victorville, CA 92395-5001

> (760) 955-5135 Fax (760) 269-0070

7/21/2021

Planning Manager Attn: Daniel Alcayaga 14955 Dale Evans Parkway Apple Valley, CA 92307

RE: Notice of Preparation of a Draft Environmental Impact Report and Notice of a Public Scoping Meeting for the Apple Valley 143 Project.

To Whom It May Concern:

Please see the following comments, from the City of Victorville, regarding construction and operation of 3 industrial/warehouse buildings totaling approximately 2,628,000 square feet on approximately 143 acres.

- A detailed Traffic Impact Analysis (TIA) will be required according to the latest guidelines established by the San Bernardino County Transportation Authority (SBCTA).
- The TIA shall include detailed analysis, including traffic signal warrants, of all freeway ramps and adjacent local intersections at both of the northerly and southerly interchanges of Stoddard Wells/I-15.
- The TIA shall not assign truck traffic, from the proposed project, on Stoddard Wells and Outer Highway Roads within the boundaries of the City of Victorville since they are not declared as truck routes.

If you have any questions regarding the provided comments, please contact Charlene Johnson at the Planning Division (760) 955-5110.

Sincerely,

Charlene Johnson

Charlens A. Johnson

Secretary



## **United States Department of the Interior**

## U.S. FISH AND WILDLIFE SERVICE

Ecological Services
Palm Springs Fish and Wildlife Office
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262



In Reply Refer to: 2022-0068852

July 29, 2022 Sent Electronically

Daniel Alcayaga, Planning Manager Town of Apple Valley 14955 Dale Evans Parkway Apple Valley, California 92307

Subject: Notice of Preparation of a Draft Environmental Impact Report; Apple Valley 143

Project, Apple Valley, California

Dear Mr. Alcayaga:

This letter is in response to the referenced notice of preparation. The Town of Apple Valley is considering the approval of a conditional use permit and development agreement for the construction and operation of approximately 2,628,000 square feet of industrial/warehouse space on approximately 143 acres of vacant land generally located west of Interstate 15, north of Stoddard Wells Road, and south of Johnson Road. The project would also involve improvements to local roads and the extension of domestic water, sanitary sewer, storm drainage, and electricity onto the project site.

The U.S. Fish and Wildlife Service (Service) is providing these comments under the authorities of the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.), the Migratory Bird Treaty Act (16 U.S.C. 703), and other authorities of the Department of the Interior.

### **Desert Tortoise**

The proposed project lies within the range of the federally threatened desert tortoise (*Gopherus agassizii*). We agree with the Town of Apple Valley's assessment that the applicant should conduct field surveys for special-status plant and animal species, including the desert tortoise. The Service recommends that the applicant follow our <u>survey protocol</u><sup>1</sup>. If the applicant would like to deviate from this protocol, we request that they contact us to discuss changes in the methodology. Surveys should include areas that may be disturbed by ancillary project features, such as the extension of domestic water, sanitary sewer, storm drainage, and electricity onto the project site.

<sup>1</sup> https://www.fws.gov/media/mojave-desert-tortoise-pre-project-survey-protocol-2019pdf

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering.

We recommend that the draft environmental impact report include the results of the surveys for desert tortoises. If desert tortoises or their sign are detected onsite or near the proposed industrial/warehouse facilities, we recommend that the applicant contact the Service to assess whether the take of desert tortoises is reasonably certain to occur. If the Service concludes that desert tortoises are reasonably certain to be taken as a result of construction or operation of the proposed project, we recommend that the applicant apply for an incidental take permit, pursuant to section 10(a)(1)(B) of the Act.

### Common Ravens

The construction and operation of the solar facility would likely lead to a local increase in the number of common ravens (*Corvus corax*); these birds are highly attracted to human activity and the proposed project would provide subsidies to them in the form of food, water, and sites for nesting, roosting, and perching that are not currently present in the area. In addition to water and food wastes that may be available to common ravens during construction and operation of the facility, these birds may also use various structures associated with the project for shade, perching, roosting, or nesting. Common ravens prey on wildlife including desert tortoises and, for this reason, any local increase in the number of common ravens may have detrimental effects on the desert tortoise, both near and distant, from the proposed project, as these birds travel large distances on a daily basis between sources of food, water, and shelter.

We recommend that the draft environmental impact report include consideration of the potential effects of the proposed project on desert tortoises as a result of the provision of additional subsidies. We also recommend that the draft environmental impact report consider the effect of measures that the applicant can take to reduce the attractiveness of the proposed action to common ravens. These measures include but are not limited to:

- 1. Educating construction and operations workers to not feed common ravens and to secure their food where common ravens cannot steal it;
- 2. Reducing as much as possible standing water from which common ravens can drink;
- 3. Designing structures (including any overhead power lines) in a manner that reduces the opportunities for nesting and perching;
- 4. Reporting any active common raven nests to the Service;
- 5. Removing inactive nests of common ravens;

- 6. Properly dispose of any carcasses of wildlife that are killed during construction and operation: and
- 7. Reporting any evidence of predation of desert tortoises to the Service.

We recommend that the Town of Apple Valley condition the conditional use permit to require the applicant implement all appropriate measures to reduce the attractiveness of the proposed project to common ravens. Even with the implementation of all such measures, we anticipate that at least some common ravens will obtain some form of food, water, or shelter from the project. To mitigate these residual effects, the Service recommends that the Town of Apple Valley also require the applicant to contribute the appropriate amount, currently \$105 per acre of permanent impacts, to the regional management program for common ravens. This program is managed by the Desert Managers Group and includes wide-scale surveys for common ravens, monitoring of the effectiveness of management actions, outreach to control subsidies, and increased levels of population control when necessary.

## Migratory Birds

Migratory birds are an important trust resource for the Service. We recommend that the draft environmental impact report include the results of studies to assess migratory bird use of the project area and an analysis of the effects of the proposed project on migratory birds. These effects would include mortality of birds during construction, collisions with project features, and loss of habitat.

We recommend that the draft environmental impact report analyze the effects of implementing measures to reduce or eliminate these adverse effects on migratory birds by scheduling construction to avoid the nesting season or buffering nests from construction, designing the transmission line according to Avian Power Line Interaction Committee standards, and appropriate education of workers.

We appreciate the opportunity to provide input into your planning process. If you have any questions, please contact <u>Ray Bransfield</u><sup>2</sup> of my staff.

Sincerely,

For

Rollie White Assistant Field Supervisor

<sup>&</sup>lt;sup>2</sup> Ray bransfield@fws.gov; (805) 677-3398

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

August 1, 2022 Sent via email

Mr. Daniel Alcayaga Planning Manager Town of Apple Valley 14955 Dale Evans Parkway Apple Valley, California 92307

Subject: Notice of Preparation of a Draft Environmental Impact Report

Apple Valley 143 Project

State Clearinghouse No. 2022070019

Dear Mr. Alcayaga:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the Town of Apple Valley for the Apple Valley 143 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.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may

1 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.

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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 is located the northern section of the Town of Apple Valley, in San Bernardino County. The project is located directly east of the I-15 and directly north of Stoddard Wells Road on Assessor Parcel Numbers (APN) 047-221-105, 047-221-106, 047-221-115, 047-222-206, and 047-222-211.

The Project will consist of three industrial warehouse buildings with a combined total size of approximately 2,628,000 square feet, utilizing approximately 143 acres. The southernmost building (Building 1) will be approximately 615,000 square feet, the middle building (Building 2) will be approximately 1,220,000 square feet, and the northernmost building (Building 3) will be approximately 793,000 square feet. Associated improvements such as loading docks, vehicle parking, and landscaped areas will be included in the project.

The I-15 and Stoddard Wells Road border the Project area to the west and south respectively. All adjacent properties are undeveloped.

### **COMMENTS AND RECOMMENDATIONS**

CDFW offers the comments and recommendations below to assist the Town of Apple Valley 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.

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 (CNDDB) in Sacramento should be contacted at (916) 322-2493 or CNDDB@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 CNDDB 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 Town of Apple Valley 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: <a href="https://www.wildlife.ca.gov/conservation/survey-protocols">https://www.wildlife.ca.gov/conservation/survey-protocols</a>. 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.

If burrowing owls are found to occupy the Project site and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance.

CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 2 artificial burrow constructed to 1 natural burrow collapsed (2:1) as minimization for the potentially significant impact of evicting burrowing owls. Burrowing owls may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance of the Project site during Project activities, at a rate that is sufficient to detect burrowing owls if they return. CDFW also recommends that when temporary or permanent burrow exclusion and/or burrow closure is implemented, burrowing owls should not be excluded from burrows unless or until a Burrowing Owl Exclusion Plan is developed and approved by CDFW; permanent loss of occupied burrow(s) and habitat is mitigated in accordance with the Staff Report; site monitoring is conducted prior to, during, and after exclusion of burrowing owls from their burrows sufficient to ensure take is avoided; and excluded burrowing owls are documented using artificial or natural burrows on an adjoining mitigation site.

If burrowing owls are found to occupy the Project site and avoidance is not possible, CDFW recommends mitigation for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. CDFW recommends permanent protection of mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, development, and implementation of a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls, and funding for the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.

Agassiz's Desert Tortoise (Gopherus agassizii)

The proposed Project occurs within the range of Agassiz's desert tortoise; a state and federally-listed threatened species. CDFW recommends that the City of Apple Valley complete protocol level surveys over all areas (i.e., 100 percent coverage) proposed to be directly or indirectly affected by the Project, using appropriately qualified biologists, following the USFWS Desert Tortoise Field Manual, accessible here: <a href="https://www.fws.gov/nevada/desert\_tortoise/documents/field\_manual/Desert\_Tortoise-Field-Manual.pdf">https://www.fws.gov/nevada/desert\_tortoise/documents/field\_manual/Desert\_Tortoise-Field-Manual.pdf</a>. To reduce the likelihood of nonconcurrence with proposed surveys, methodology, and qualifications of biologists, CDFW recommends working with the USFWS and CDFW concurrently to ensure a consistent and adequate approach to planning your work (USFWS, 2018).

CDFW recommends that biologists retained to complete desert tortoise protocol level surveys submit their qualifications to CDFW and the USFWS prior to initiation of surveys. Should the Town of Apple Valley desire CDFW to pre-approve the qualifications of biologists conducting protocol level desert tortoise surveys, CDFW requests information by provided on the Desert Tortoise Authorized Biologist Qualifications Form (Section 3.2) of the USFWS Desert Tortoise Field Manual for all biologists participating in survey efforts to the following email address: julian.potier@wildlife.ca.gov

### Western Joshua Tree (Yucca brevifolia)

CDFW recognizes the presence of western Joshua tree (*Yucca brevifolia*) on the Project site. As a Candidate for Threatened CESA-listed species, CDFW is concerned with the Project's potential impacts to western Joshua trees (WJT).

CDFW recommends that the forthcoming DEIR quantifies WJT presence on the entirety of APNs through focused surveys. The WJT survey results should be included in the DEIR and should identify and provide: a) the GPS coordinates and accompanying map of each WJT within the Project area; b) the age class of each WJT; c) the number of clonal WJT associated with each parent plant and the methodology used to make this determination; d) a unique numbering system for each WJT, and e) geo-referenced, representative photos of parent trees, clones, and general distribution of WJT across the Project site. Furthermore, the DEIR should include: 1) an impact analysis assessing potential Project impacts to WJT within a 186-foot buffer zone of WJT (Vander Wall et al. 2006), 2) implementing a 300-foot buffer around WJT not scheduled for removal to avoid impacts to WJT, and 3) a mitigation strategy for Project impacts to WJT individuals, WJT seedbank, and indirect impacts to WJT. Indirect impacts to WJT include destruction of WJT's obligate pollinating moth (yucca moth; Tegeticula synthetica), while it is dormant in the soil or while it is in its flight phase, which would impact the ability of WJT to sexually recruit new individuals (Sweet et al. 2019). Destruction or modification of WJT habitat in the Project area could also disrupt the seed dispersal behavior of

rodents, which is the primary way that WJT seeds are buried at a soil depth suitable for successful germination (Waitman et al. 2012). Destruction or modification of WJT habitat in the Project area could also eliminate nurse plants that are critical for WJT seedling survival (Brittingham and Walker 2000).

CDFW requests the DEIR 1) adequately identify and disclose the Project's impacts (i.e., direct, indirect, and cumulative) to WJT as noted above, 2) propose mitigation to offset those impacts to WJT, and 3) demonstrate that impacts to WJT are less than significant and, for the purposes of CESA permitting, are fully mitigated.

# Desert kit fox (Vulpes macrotis)

The Project occurs within the range of desert kit fox, a protected species pursuant to Title 14 of the California Code of Regulations Section 460, which prohibits the take of the species at any time. CDFW recommends surveys, following CDFW-approved protocols, be conducted over all areas proposed to be directly or indirectly affected by the Project to determine presence/absence and numbers of desert kit fox, and that this information be included in the DEIR.

If desert kit fox is found, or have the potential to occupy the Project site, CDFW recommends the CPUC require species-specific mitigation to offset impacts and avoidance, minimization, and monitoring measures aimed at avoiding direct impacts to the desert kit fox be incorporated into the DEIR. Avoidance and minimization measures should include pre-activity surveys following CDFW-approved survey methods, including procedures used to classify identified dens as inactive dens, active and potentially active dens, and active natal dens, and methods utilized to quantify and locate single or paired animals that would need to be avoided or passively relocated, and the burrows or burrow complexes that would need to be collapsed to prevent re-occupancy. The measures should also include detailed monitoring requirements and methods of exclusion/passive relocation to be conducted, and methods and timing of den excavation.

### American Badger (Taxidea taxus)

The Project occurs within the range of the American badger, a California species of special concern. CDFW recommends the CPUC complete surveys for American badger over the Project area proposed to be directly or indirectly affected by the Project and that the results of such surveys be included in the DEIR, along with avoidance, minimization, and mitigation measures, if appropriate.

If American badger are found, or have the potential to occupy the Project site, CDFW recommends the CPUC require species specific mitigation to offset impacts and avoidance, minimization and monitoring measures aimed at avoiding direct impacts to American badger be incorporated into the DEIR. Avoidance and

minimization measures should include pre-activity surveys following CDFW-approved survey methods, including procedures used to classify identified dens as inactive dens, active and potentially active dens, and active natal dens, and methods utilized to quantify and locate single or paired animals that would need to be avoided or passively relocated, and the burrows or burrow complexes that would need to be collapsed to prevent re-occupancy. The measures should also include detailed monitoring requirements and methods of exclusion/passive relocation to be conducted, and methods and timing of den excavation.

### Ring-tailed cat (Bassariscus astutus)

The Project occurs within the range of the ring-tailed cat, a California species of special concern and fully protected species. CDFW recommends the CPUC complete surveys for ring-tailed cat over the Project area proposed to be directly or indirectly affected by the Project and that the results of such survey be included in the DEIR, along with measures to avoid all impacts to the species.

If ring-tailed cat are found, or has the potential to occupy the Project site, CDFW recommends the CPUC require species-specific mitigation to avoiding impacts to the ring-tailed cat be incorporated into the DEIR. Avoidance measures should include pre-activity surveys following CDFW-approved survey methods, including procedures used to classify identified dens as inactive dens, active and potentially active dens, and active natal dens, and methods utilized to quantify and locate single or paired animals that would need to be avoided.

### Mohave ground squirrel (*Xerospermophilus mohavensis*)

The proposed Project occurs within the range of Mohave ground squirrel, as state listed threatened species. CDFW recommends that a qualified permitted biologist conduct protocol surveys for Mohave ground squirrel following the methods described in the "Mohave Ground Squirrel Survey Guidelines" (CDFG 2003) during the appropriate survey season prior to Project implementation, including any vegetation- or ground-disturbing activities. Results of the Mohave ground squirrel surveys should be submitted to CDFW and incorporated into the DEIR. Please note Mohave ground squirrel surveys are valid for one year and should be conducted within a year of start of ground-disturbing activities.

If Mohave ground squirrel are found within the Project area during surveys, CDFW recommends the CPUC require species-specific mitigation to offset impacts and avoidance, minimization, and monitoring measures aimed at avoiding direct impacts to the Mohave ground squirrel be incorporated into the DEIR.

If Mohave ground squirrel are found within the Project area during surveys or construction activities, and complete avoidance is not possible CDFW recommends

the Project proponent acquire a CESA Incidental Take Permit prior to any vegetation- or ground-disturbing activities. Any take of Mohave ground squirrel without take authorization would be a violation of Fish and Game Code section 2080. The DEIR should fully describe the impacts and mitigation measures, including compensatory mitigation sufficient to reduce impacts to less than significant.

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 <a href="https://www.wildlife.ca.gov/Conservation/Plants">https://www.wildlife.ca.gov/Conservation/Plants</a>).

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]).

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 (including the plan's land use designations, policies and programs). 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.
- 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 Town of Apple Valley 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 CNDDB and are included in *The Manual of*

California Vegetation (Sawyer et al. 2009). The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts. Plant communities near the project site include but are not limited to: Mojave monkeyflower (*Diplacus mohavensis*), desert cymopterus (*Cymopterus deserticola*).

- 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 (Athene cunicularia) American badger (Taxidea taxus).
- 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, 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 recreating 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 by injured or killed, and individuals should be moved only as far a 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. It is the policy of CESA 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 CNDDB, 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: Desert tortoise (*Gopherus agassizii*), western Joshua tree (*Yucca brevifolia*) and Mohave ground squirrel (*Xerospermophilus mohavensis*).

# **Lake and Streambed Alteration Program**

Based on review of material submitted with the NOP and review of aerial photography a wash was identified crossing the center of the Project area from north to south, and likely draining into a wash to the south across Stoddard Wells Road that runs east to west. Depending on how the Project is designed and constructed, it is likely that the Project applicant will need to notify CDFW per Fish and Game Code section 1602. 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 <a href="https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS">https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS</a>.

### 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. Information on drought-tolerant landscaping and water-efficient irrigation systems is available on California's Save our Water website: <a href="http://saveourwater.com/what-you-can-do/tips/landscaping/">http://saveourwater.com/what-you-can-do/tips/landscaping/</a>

### **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 (CNDDB). Information can be submitted online or via completion of the CNDDB field survey form at the following link:

https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: <a href="mailto:CNDDB@wildlife.ca.gov">CNDDB@wildlife.ca.gov</a>. The types of information reported to CNDDB can be found at the following link: <a href="https://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals">https://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals</a>.

#### 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 Apple Valley 143 Project (SCH No. 2022070019) and recommends that the Town of Apple Valley 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 Julian Potier, Environmental Scientist, at 909-938-6112 or julian.potier@wildlife.ca.gov.

Sincerely,

Docusigned by:

Ulsa Ellsworth

84FBB8273E4C480...

Alisa Ellsworth

Environmental Program Manager

ec:

Office of Planning and Research, State Clearinghouse, Sacramento 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/

From: Richard Bunck

Sent: Monday, August 1, 2022 11:30 PM

To: Daniel Alcayaga, Willow Waters

Subject: comments A/V 143 project

Apple Valley along with other high desert communities is essentially land locked.

Practically the 15 is the only option to get to the basin. I don't have access to current traffic counts but myself and other commuters will tell you it is gridlock at certain times and extremely busy at other times and getting worse by the day. Adding a lane which creates a chock point. It is not a realistic solution.

The good paying jobs are down the hill. It has been that way for ever and there is no indication that it will change. The 15 is the major artery to Las Vegas and that traffic element has become a 7/24-365 operation. The truck traffic has increased geometrically in the last several years.

In short, the transportation infastructure is not there to match the housing and commercial development that is occurring. The geography of the region, namely the San Bernardino mountain range precludes any practical solution.

Good planning dictates that the infrastructure leads development. In our case, the patch work of road improvements is decades behind the need.

Realistically, we approaching or all ready in a transportation emergency. On that basis alone, further large commercial and or residentially developments in the high desert beg the Question: Where is the plan?

Drilling under the mountains which has been done in Europe is not even being talked about. Double decking the Freeway, if even possible, is not being considered.

This transportation situation is creating a very poor quality of life for a large number of residents in Apple Valley and the high desert. In many cases, the time spent on the freeway exceeds any productive time down the hill.

Please consider the well being of the the citizens of Apple Valley and the high desert. We are losing productive citizens of the high desert at an alarming rate because of quality of life issues and the transportation issue is a major component of that.

Thank You for the opportunity to participate

Richard Bunck 19277 Stoddard Wells Rd P: (626) 381-9248 F: (626) 389-5414 E: info@mitchtsailaw.com 139 South Hudson Avenue Suite 200 Pasadena, California 91101

### VIA E-MAIL

July 18, 2022

Daniel Alcayaga Town of Apple Valley 14955 Dale Evans Parkway Apple Valley, CA 92307

Em: dalcayaga@applevalley.org

RE: Town of Apple Valley, Apple Valley 143 Project (SCH#: 2022070019)

Dear Mr. Alcayaga,

On behalf of the Southwest Regional Council of Carpenters ("Southwest Carpenter" or "SWRCC"), my Office is submitting these comments to the Town of Apple Valley ("Town") regarding the Notice of Preparation of a Draft Environmental Impact Report for the Apple Valley 143 Project ("Project").

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

Individual members of the Southwest Carpenters live, work and recreate in the Town and surrounding communities and would be directly affected by the Project's environmental impacts.

SWRCC 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.

Moreover, SWRCC requests that the Town 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.

# I. THE TOWN SHOULD REQUIRE THE USE OF A LOCAL SKILLED AND TRAINED WORKFORCE

The Town 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 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>

Local skilled and trained workforce requirements and policies have significant environmental benefits since they improve an area's jobs-housing balance, decreasing the amount of and length of job commutes and their associated greenhouse gas emissions. Recently, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component" can result in air pollutant reductions.<sup>2</sup>

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

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

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

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

<sup>&</sup>lt;sup>3</sup> City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* <a href="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</a>.

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

to "utilize apprentices from state-approved, joint labor-management training programs." 5

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. 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 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.

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

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

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

The Town 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.

# II. DUE TO THE COVID-19 CRISIS, THE TOWN SHOULD MITIGATE SIGNIFICANT ENVIRONMENTAL EFFECTS ON HUMAN BEINGS STEMMING FROM THE PROJECT

CEQA establishes that environmental effects also encompass adverse effects on human beings stemming from a project. Cal. Code Regs. 14 § 15065(a)(4). Public health risks related to construction work constitutes adverse effects on human beings as it has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. In fact, several construction sites have been identified as sources of community spread of COVID-19.8 Accordingly, the Project may cause significant environmental effects on human beings, which the Town should consider in the EIR along with feasible mitigation measures. In particular, based upon SWRCC's experience with safe construction site work practices, SWRCC recommends that the Town require the following 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.

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

- A 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.
- 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 entrances from 5:30 am to 7:30 am.
- After 7:30 a.m., 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, the individual will be instructed that he/she will not be allowed to enter the Project Site. The individual will also be instructed to promptly notify his/her supervisor and his/her human resources (HR) representative.

# **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), and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health, or applicable local public health agencies.<sup>9</sup>

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

Sincerely,

Talia Nimmer

Attorneys for Southwest Regional

Council of Carpenters

<sup>&</sup>lt;sup>9</sup> See also The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, available at <a href="https://www.cpwr.com/wp-content/uploads/publications/NABTU\_CPWR\_Standards\_COVID-19.pdf">https://www.cpwr.com/wp-content/uploads/publications/NABTU\_CPWR\_Standards\_COVID-19.pdf</a>; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at <a href="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</a>.

Town of Apple Valley – Apple Valley 143 Project July 18, 2022 Page 8 of 8

# 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).



2656 29<sup>th</sup> Street, Suite 201 Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg. (949) 887-9013 mhagemann@swape.com

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

March 8, 2021

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

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai.

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

# Worker Trips and Greenhouse Gas Calculations

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

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

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

<sup>&</sup>lt;sup>2</sup> "California Emissions Estimator Model." CAPCOA, 2017, available at: http://www.aqmd.gov/caleemod/home.

<sup>&</sup>lt;sup>3</sup> "CalEEMod User's Guide." CAPCOA, November 2017, available at: <a href="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</a>, p. 34.

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

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

```
"VMT<sub>d</sub> = \Sigma(Average Daily Trip Rate _i * Average Overall Trip Length _i) _n Where:
```

n = Number of land uses being modeled."5

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

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

Where:

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

VMT = vehicle miles traveled

EF_{running,pollutant} = emission factor for running emissions."
```

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. 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. The default number of construction-related worker trips is calculated by multiplying the

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

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

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

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

<sup>&</sup>lt;sup>8</sup> CalEEMod User Guide, available at: <a href="http://www.caleemod.com/">http://www.caleemod.com/</a>, 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 trip lengths are:

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

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

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

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

<sup>&</sup>lt;sup>10</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.agmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

<sup>&</sup>lt;sup>11</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: <a href="http://www.aqmd.gov/docs/default-source/caleemod/02">http://www.aqmd.gov/docs/default-source/caleemod/02</a> appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.

<sup>&</sup>lt;sup>12</sup> "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.agmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.

<sup>&</sup>lt;sup>13</sup> "Appendix D Default Data Tables." CAPCOA, October 2017, available at: <a href="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</a>, 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).

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

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.

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<sup>&</sup>lt;sup>14</sup> "Appendix D Default Data Tables." CAPCOA, October 2017, available at: <a href="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</a>, 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,

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

Paul Rosupeld

M Horam

Paul E. Rosenfeld, Ph.D.

# Attachment A

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	<b>Amador County</b>	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	<b>Butte County</b>	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	<b>Great Basin</b>	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
	District	Siskiyou County	16.8	10.8
	District	South Coast	19.8	14.7
	District	Tehama County	16.8	10.8
	District	Tuolumne	16.8	10.8
Air [	District	Ventura County	16.8	10.8
Air [	District	Yolo/Solano	15	10
Co	ounty	Alameda	10.8	10.8
Co	ounty	Alpine	16.8	10.8
Co	ounty	Amador	16.8	10.8
Co	ounty	Butte	12.54	12.54
Co	ounty	Calaveras	16.8	10.8
Co	ounty	Colusa	16.8	10.8
Co	ounty	Contra Costa	10.8	10.8
Co	ounty	Del Norte	16.8	10.8
Co	ounty	El Dorado-Lake	16.8	10.8
Co	ounty	El Dorado-	16.8	10.8
Co	ounty	Fresno	16.8	10.8
Co	ounty	Glenn	16.8	10.8
Co	ounty	Humboldt	16.8	10.8
Co	ounty	Imperial	10.2	7.3
	ounty	Inyo	16.8	10.8
	ounty	Kern-Mojave	16.8	10.8
	ounty	Kern-San	16.8	10.8
	ounty	Kings	16.8	10.8
	ounty	Lake	16.8	10.8
	ounty	Lassen	16.8	10.8
	ounty	Los Angeles-	16.8	10.8
	ounty	Los Angeles-	19.8	14.7
	ounty	Madera	16.8	10.8
	ounty	Marin	10.8	10.8
	ounty	Mariposa	16.8	10.8
	ounty	Mendocino-	16.8	10.8
	ounty	Mendocino-	16.8	10.8
	ounty	Mendocino-	16.8	10.8
	ounty	Mendocino-	16.8	10.8
	ounty	Merced	16.8	10.8
	ounty	Modoc	16.8	10.8
	ounty	Montorov	16.8 16.8	10.8 10.8
	ounty	Monterey		
Co	ounty	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	10.5	
County	Yuba	16.8	10.8	
Statewide	Statewide	16.8	10.8	
Statewide	Statewide	10.0	10.0	

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

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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

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

# 1.3 User Entered Comments & Non-Default Data

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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

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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 <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	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					tor	ns/yr							МТ	/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	1,721.682 6	1,721.682 6	0.1294	0.0000	1,724.918 7
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.529 5	1,627.529 5	0.1185	0.0000	1,630.492 5
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
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 6	1,721.682 6	0.1294	0.0000	1,724.918 7

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

### 2.1 Overall Construction

### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tor	ns/yr						•	M	Γ/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	1,721.682 3	1,721.682 3	0.1294	0.0000	1,724.918 3
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.529 1	1,627.529 1	0.1185	0.0000	1,630.492 1
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
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 3	1,721.682 3	0.1294	0.0000	1,724.918 3
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

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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					ton	s/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	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

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

### 2.2 Overall Operational

### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		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	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

### **Construction Phase**

#### 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

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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

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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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	2.9000e- 003	0.0641	0.0233	2.0000e- 004	6.4100e- 003	2.1000e- 004	6.6200e- 003	1.7300e- 003	2.0000e- 004	1.9300e- 003	0.0000	19.6816	19.6816	1.2800e- 003	0.0000	19.7136

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

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3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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
1	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
Total	2.9000e- 003	0.0641	0.0233	2.0000e- 004	6.4100e- 003	2.1000e- 004	6.6200e- 003	1.7300e- 003	2.0000e- 004	1.9300e- 003	0.0000	19.6816	19.6816	1.2800e- 003	0.0000	19.7136

### 3.3 Site Preparation - 2021

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

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3.3 Site Preparation - 2021
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e- 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
Total	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

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

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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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e- 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
Total	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

### 3.4 Grading - 2021

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

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3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

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

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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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e- 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
Total	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

### 3.4 Grading - 2022

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

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3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

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

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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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e- 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
Total	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

### 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	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

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# 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	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
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.795 2	1,408.795 2	0.0530	0.0000	1,410.120 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	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

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### 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	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
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.795 2	1,408.795 2	0.0530	0.0000	1,410.120 8

### 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	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

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# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e- 003	1.2051	0.3200	9.1400e- 003	0.3292	0.0000	1,327.336 9	1,327.336 9	0.0462	0.0000	1,328.491 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	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
Total	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

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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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e- 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
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e- 003	1.2051	0.3200	9.1400e- 003	0.3292	0.0000	1,327.336 9	1,327.336 9	0.0462	0.0000	1,328.491 6

# 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	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
Total	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

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

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	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
	0.0000		 		 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 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

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

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e- 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
Total	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

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	<sup>-</sup> /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
Total	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

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3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	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

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3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

## 3.7 Architectural Coating - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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	1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	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

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# 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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	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
Total	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	4.1404	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

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## 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e- 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
Total	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

## 4.0 Operational Detail - Mobile

### **4.1 Mitigation Measures Mobile**

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

### **4.2 Trip Summary Information**

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

### **4.3 Trip Type Information**

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

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
Electricity Unmitigated					       	0.0000	0.0000	       	0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e- 003	       	0.0966	0.0966	       	0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8
	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966	,	0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8

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## 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/уг		
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)		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
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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# **5.2 Energy by Land Use - NaturalGas Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/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)		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
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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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	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		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
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

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## 5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		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
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

### 6.0 Area Detail

### **6.1 Mitigation Measures Area**

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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

### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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					ton	s/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
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

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6.2 Area by SubCategory

### <u>Mitigated</u>

	ROG	NOx	CO	SO2	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					ton	s/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	i i	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	i i	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

### 7.0 Water Detail

### 7.1 Mitigation Measures Water

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

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7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door 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		
	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		
Total		585.8052	3.0183	0.0755	683.7567		

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## 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door 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)			0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
-,,	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

#### 8.0 Waste Detail

## **8.1 Mitigation Measures Waste**

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## Category/Year

	Total CO2	CH4	N2O	CO2e	
	MT/yr				
"	207.8079	12.2811	0.0000	514.8354	
	207.8079	12.2811	0.0000	514.8354	

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8.2 Waste by Land Use <u>Unmitigated</u>

	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)		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		
Total		207.8079	12.2811	0.0000	514.8354		

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#### 8.2 Waste by Land Use

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/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)		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
Total		207.8079	12.2811	0.0000	514.8354

## 9.0 Operational Offroad

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

## **10.0 Stationary Equipment**

#### **Fire Pumps and Emergency Generators**

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

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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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

## 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

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 33

 Climate Zone
 9
 Operational Year
 2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

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

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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

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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

#### 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/d	day							lb/d	day		
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.797 4	6,234.797 4	1.9495	0.0000	6,283.535 2
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.52 69	14,807.52 69	1.0250	0.0000	14,833.15 21
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.398 9	2,361.398 9	0.7177	0.0000	2,379.342 1
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88

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

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

#### **Mitigated Construction**

0.00

Percent Reduction 0.00

0.00

0.00

0.00

0.00

0.00

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

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

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#### 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/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 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
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 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
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### 3.0 Construction Detail

#### **Construction Phase**

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

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

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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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	       	1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0643	0.0442	0.6042	1.7100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		170.8155	170.8155	5.0300e- 003	     	170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.056 8	1,463.056 8	0.0927		1,465.375 0

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

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#### 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/d	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		170.8155	170.8155	5.0300e- 003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.056 8	1,463.056 8	0.0927		1,465.375 0

#### 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920	     	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	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
Total	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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	       	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	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
Total	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

#### 3.4 Grading - 2021

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

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

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	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
Total	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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	11 11				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000		i i	0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	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
Total	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

## 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	       	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	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
Total	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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust	 				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	 	1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0803	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
Total	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

#### 3.5 Building Construction - 2022

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

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#### 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/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 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
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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
Total	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

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

## 3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	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
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

#### 3.5 Building Construction - 2023

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

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

# 3.5 Building Construction - 2023 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	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
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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
Total	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

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#### 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/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	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
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

# 3.6 Paving - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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
Total	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

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

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0566	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
Total	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

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

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748
Total	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

## 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1			0.0000	0.0000	       	0.0000	0.0000		<del></del>       	0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	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
Total	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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000	 				0.0000	0.0000	 	0.0000	0.0000			0.0000		       	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	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
Total	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

## 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	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
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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#### 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/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401	,	1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

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

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

# 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.5707	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
Total	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

## 4.0 Operational Detail - Mobile

## **4.1 Mitigation Measures Mobile**

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 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**

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

## **4.3 Trip Type Information**

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

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down 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/d	day							lb/c	lay		
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 <u>Unmitigated</u>

	NaturalGa s 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/d	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		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
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)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
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		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
Total		0.7660	6.7463	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

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

# **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	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		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
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)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
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
Total		0.7660	6.7463	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

#### 6.0 Area Detail

### **6.1 Mitigation Measures Area**

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

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

# 6.2 Area by SubCategory

# <u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	lay		
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	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
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
Total	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

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#### 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/d	day							lb/d	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	i i	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	! ! !	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
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
Total	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

#### 7.0 Water Detail

# 7.1 Mitigation Measures Water

#### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

#### 9.0 Operational Offroad

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

# 10.0 Stationary Equipment

#### 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

#### **Boilers**

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

#### **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

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 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

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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

#### 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/d	day							lb/d	lay		
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.493 7	6,221.493 7	1.9491	0.0000	6,270.221 4
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.34 24	14,210.34 24	1.0230	0.0000	14,235.91 60
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.417 8	2,352.417 8	0.7175	0.0000	2,370.355 0
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63

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

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

#### **Mitigated Construction**

Percent

Reduction

0.00

0.00

0.00

0.00

0.00

0.00

0.00

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

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

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#### 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/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 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
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 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
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### 3.0 Construction Detail

#### **Construction Phase**

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

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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**

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#### 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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	       	1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/c	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0715	0.0489	0.5524	1.6100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		160.8377	160.8377	4.7300e- 003	     	160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

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

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

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		160.8377	160.8377	4.7300e- 003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

# 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust	 				18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	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
Total	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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	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
Total	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

#### 3.4 Grading - 2021

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

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

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0954	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
Total	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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	11 11 11				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000		i i	0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0954	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
Total	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

#### 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965	1 1 1	! !	0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	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
Total	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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust	 				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	 	1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	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
Total	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

#### 3.5 Building Construction - 2022

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

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

# 3.5 Building Construction - 2022 Unmitigated Construction Off-Site

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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
	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
Total	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

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

# 3.5 Building Construction - 2022 Mitigated Construction Off-Site

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

#### 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	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

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

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.868 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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
Total	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

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#### 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/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.868 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

# 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 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
Total	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

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

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	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
Total	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

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

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

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	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
Total	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

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1			0.0000	0.0000	       	0.0000	0.0000		<del></del>       	0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	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
Total	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

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

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

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	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
Total	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

# 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	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
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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

# 3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

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

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

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#### 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/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	     	0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376	     	1,546.226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

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#### 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/d	day							lb/c	lay		
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39

# **4.2 Trip Summary Information**

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

## **4.3 Trip Type Information**

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

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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 <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	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		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
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)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696	 	0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
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		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
Total		0.7660	6.7463	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

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

# **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/o	day							lb/c	lay		
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	1 1 1	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	#	4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004	<del></del>	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)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696	,	0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	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	<del></del>	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	<del></del>	1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	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

#### 6.0 Area Detail

### **6.1 Mitigation Measures Area**

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

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

# 6.2 Area by SubCategory

## <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000		! !	0.0000
Consumer Products	24.1085		1       			0.0000	0.0000	1       	0.0000	0.0000		,	0.0000		,	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	1       	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	y <del></del>       	0.4574	0.4574		148.5950	148.5950	0.1424	,	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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

# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000	i i i	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	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
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
Total	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

#### 7.0 Water Detail

## 7.1 Mitigation Measures Water

#### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

#### 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

#### 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

#### **Boilers**

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

#### **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

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 33

 Climate Zone
 9
 Operational Year
 2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

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

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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

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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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# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	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					tor				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	1,418.655 4	1,418.655 4	0.1215	0.0000	1,421.692 5
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.441 2	1,342.441 2	0.1115	0.0000	1,345.229 1
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
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 4	1,418.655 4	0.1215	0.0000	1,421.692 5

#### 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					tor	ns/yr							M	Г/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	1,418.655 0	1,418.655 0	0.1215	0.0000	1,421.692 1
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.440 9	1,342.440 9	0.1115	0.0000	1,345.228 7
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
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 0	1,418.655 0	0.1215	0.0000	1,421.692 1
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	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

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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					ton				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	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

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

#### 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton				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	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste			i			0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### 3.0 Construction Detail

#### **Construction Phase**

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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

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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** 

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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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Total	2.6500e- 003	0.0639	0.0209	2.0000e- 004	5.6200e- 003	2.0000e- 004	5.8200e- 003	1.5300e- 003	1.9000e- 004	1.7200e- 003	0.0000	18.9847	18.9847	1.2600e- 003	0.0000	19.0161

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

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#### 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					ton	s/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
Total	2.6500e- 003	0.0639	0.0209	2.0000e- 004	5.6200e- 003	2.0000e- 004	5.8200e- 003	1.5300e- 003	1.9000e- 004	1.7200e- 003	0.0000	18.9847	18.9847	1.2600e- 003	0.0000	19.0161

#### 3.3 Site Preparation - 2021

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

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3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

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

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#### 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e- 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
Total	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

#### 3.4 Grading - 2021

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

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

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

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

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

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

## 3.4 Grading - 2022

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

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

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

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

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

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

## 3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	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
Total	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

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# 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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e- 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
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e- 003	0.8790	0.2336	8.7800e- 003	0.2424	0.0000	1,105.977 1	1,105.977 1	0.0451	0.0000	1,107.103 9

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	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
Total	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

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# 3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e- 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
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e- 003	0.8790	0.2336	8.7800e- 003	0.2424	0.0000	1,105.977 1	1,105.977 1	0.0451	0.0000	1,107.103 9

#### 3.5 Building Construction - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cil rioda	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
Total	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

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# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e- 003	0.8564	0.2281	6.8500e- 003	0.2349	0.0000	1,042.529 4	1,042.529 4	0.0392	0.0000	1,043.509 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	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
Total	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

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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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e- 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
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e- 003	0.8564	0.2281	6.8500e- 003	0.2349	0.0000	1,042.529 4	1,042.529 4	0.0392	0.0000	1,043.509 0

# 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirribad	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
Total	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

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3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	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
	0.0000		 		 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 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

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#### 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e- 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
Total	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

# 3.6 Paving - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 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

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

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	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

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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
Total	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

# 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	4.1404	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

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# 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e- 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
Total	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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
Total	4.1404	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

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#### 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e- 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
Total	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

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

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#### 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					ton	s/yr							MT	/yr		
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2

#### **4.2 Trip Summary Information**

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

## **4.3 Trip Type Information**

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

		Miles			Trip %		Trip Purpose %					
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by			
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3			
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3			
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4			
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43			
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4			
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44			
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11			

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr									MT/yr						
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8

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# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/уг		
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)		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
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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# **5.2 Energy by Land Use - NaturalGas Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	-/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)		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
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

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	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		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
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

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		МТ	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		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
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

#### 6.0 Area Detail

## **6.1 Mitigation Measures Area**

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							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

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

	ROG	NOx	CO	SO2	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					ton	s/yr							МТ	/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
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

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#### 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					ton	s/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	i i	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	i i	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

#### 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	
ı	585.8052	3.0183	0.0755	683.7567
	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 <u>Unmitigated</u>

	Indoor/Out door 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
	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

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

# 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door 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)			0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
-,,	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

#### 8.0 Waste Detail

# **8.1 Mitigation Measures Waste**

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# Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	-/yr	
	207.8079	12.2811	0.0000	514.8354
	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 <u>Unmitigated</u>

	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)		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
Total		207.8079	12.2811	0.0000	514.8354

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

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## 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)		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					
Total		207.8079	12.2811	0.0000	514.8354					

# 9.0 Operational Offroad

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

# **10.0 Stationary Equipment**

# **Fire Pumps and Emergency Generators**

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

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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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 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

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

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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

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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

#### 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	6,163.416 6	6,163.416 6	1.9475	0.0000	6,212.103 9
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.48 90	12,150.48 90	0.9589	0.0000	12,174.46 15
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.180 8	2,313.180 8	0.7166	0.0000	2,331.095 6
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07

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

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

#### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year		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	6,163.416 6	6,163.416 6	1.9475	0.0000	6,212.103 9	
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07	
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.48 90	12,150.48 90	0.9589	0.0000	12,174.46 15	
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.180 8	2,313.180 8	0.7166	0.0000	2,331.095 5	
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07	
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e	
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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

# 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	i i	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
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category		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		
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86		

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### 3.0 Construction Detail

#### **Construction Phase**

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

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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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549	 	3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0487	0.0313	0.4282	1.1800e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		117.2799	117.2799	3.5200e- 003	     	117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust	 				3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	 	1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549	 	3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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#### 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/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		117.2799	117.2799	3.5200e- 003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

#### 3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920	     	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	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
Total	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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	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
Total	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

#### 3.4 Grading - 2021

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

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

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0649	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
Total	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

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

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

3.4 Grading - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	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
Total	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

## 3.4 Grading - 2022

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

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

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	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
Total	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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442	 	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0607	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
Total	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

#### 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	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
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
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
Total	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

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	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
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

## 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	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

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

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 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
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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
Total	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

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#### 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/d				lb/c	lay						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 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
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

# 3.6 Paving - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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		<del></del>       	0.0000			0.0000
Total	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

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

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d				lb/d	day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	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
Total	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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000	1 1 1	0.0000	0.0000		       	0.0000		i i i	0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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#### 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/d				lb/d	day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	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
Total	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

# 3.6 Paving - 2024

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

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

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	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
Total	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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1 1		       	0.0000	0.0000	i i	0.0000	0.0000		i i i	0.0000		i i	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

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

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	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
Total	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

## 3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	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
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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#### 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/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280	       	1,127.458 3
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280		1,127.458 3

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

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

## 3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280	       	1,127.458 3
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280		1,127.458 3

## 4.0 Operational Detail - Mobile

#### **4.1 Mitigation Measures Mobile**

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 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**

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

## **4.3 Trip Type Information**

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

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

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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
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 <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
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		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
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)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	0.0355	0.0355	<del></del>	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	<del></del>	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003	<del></del>	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	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

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

## **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	lay		
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		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003	<del></del>  -  -  -	9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134	<del></del>	0.1696	0.1696	,	0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	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	<del></del>	0.0377	0.0377	,	0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004	<del></del>	1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	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

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

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

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

## 6.2 Area by SubCategory

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

	ROG	NOx	CO	SO2	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	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
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
Total	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

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

## 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000	i i i	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	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
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
Total	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

#### 7.0 Water Detail

## 7.1 Mitigation Measures Water

#### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

#### 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

#### 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
		1.00.0, 2.0,	1,00,00			

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

## 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

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 33

 Climate Zone
 9
 Operational Year
 2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

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

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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

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

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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

#### 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/d	day							lb/d	day		
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.337 7	6,154.337 7	1.9472	0.0000	6,203.018 6
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.40 80	11,710.40 80	0.9617	0.0000	11,734.44 97
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.051 7	2,307.051 7	0.7164	0.0000	2,324.962 7
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13

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

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

#### **Mitigated Construction**

Percent

Reduction

0.00

0.00

0.00

0.00

0.00

0.00

0.00

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	'day							lb/d	day		
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.337 7	6,154.337 7	1.9472	0.0000	6,203.018 6
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.40 80	11,710.40 80	0.9617	0.0000	11,734.44 97
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.051 7	2,307.051 7	0.7164	0.0000	2,324.962 7
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

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

## 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 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
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 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
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### 3.0 Construction Detail

#### **Construction Phase**

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

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

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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	†	6.00	78	0.48

#### **Trips and VMT**

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#### 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

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	       	1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

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

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		110.4707	110.4707	3.3300e- 003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.326 2	1,380.326 2	0.0941		1,382.679 1

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

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

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		110.4707	110.4707	3.3300e- 003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.326 2	1,380.326 2	0.0941		1,382.679 1

#### 3.3 Site Preparation - 2021

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

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

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	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
Total	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

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

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#### 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/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	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
Total	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

#### 3.4 Grading - 2021

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

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

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	, ! ! !	0.0000
Worker	0.0709	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
Total	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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	11 11 11				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000		i i	0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

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

3.4 Grading - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	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
Total	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

## 3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	lay		
Fugitive Dust	0; 0; 0; 0;				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		! !	0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	       	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

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

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	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
Total	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

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

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#### 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/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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
Total	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

#### 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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

## 3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381	       	3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602	     	5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
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
Total	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

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381		3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602		5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

#### 3.5 Building Construction - 2023

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

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

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.797 4	5,483.797 4	0.1442		5,487.402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.198 1	9,155.198 1	0.3538		9,164.043 7

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
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
Total	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

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#### 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/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.797 4	5,483.797 4	0.1442		5,487.402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.198 1	9,155.198 1	0.3538		9,164.043 7

# 3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 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
Total	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

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

3.6 Paving - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	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
Total	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

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

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#### 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	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
Total	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

# 3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day									lb/day						
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1		       	0.0000	0.0000		0.0000	0.0000		       	0.0000		       	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547	0.7140		2,225.396 3

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

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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	
Total	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	

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

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## 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/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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
Total	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

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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

## 3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264	       	1,062.041 0
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264		1,062.041 0

## **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/d	day							lb/d	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	1 1 1 1	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	, , ,	281.8443
Total	236.5923	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

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## 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264	,	1,062.041 0
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264		1,062.041 0

## 4.0 Operational Detail - Mobile

## **4.1 Mitigation Measures Mobile**

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## 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/d	day							lb/c	lay		
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39

## **4.2 Trip Summary Information**

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

## **4.3 Trip Type Information**

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

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	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 <u>Unmitigated</u>

	NaturalGa s 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/d	day							lb/c	lay		
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		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
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)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003	<del></del>	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	<del></del>	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
Total		0.7660	6.7463	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

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

## **5.2 Energy by Land Use - NaturalGas**

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day												lb/d	lay		
Apartments Low Rise	1.11916	0.0121	004 003 003 003 003										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		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
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)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696	,	0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
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
Total		0.7660	6.7463	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

## 6.0 Area Detail

## **6.1 Mitigation Measures Area**

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

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

# 6.2 Area by SubCategory

## <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000		! !	0.0000
Consumer Products	24.1085		1       			0.0000	0.0000	1       	0.0000	0.0000		,	0.0000		,	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	1 1 1 1 1	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	y <del></del>       	0.4574	0.4574		148.5950	148.5950	0.1424	,	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

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

## 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day								lb/d	day						
Architectural Coating	2.2670					0.0000	0.0000	i i i	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	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
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
Total	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

#### 7.0 Water Detail

## 7.1 Mitigation Measures Water

#### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

## 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
		1.00.0, 2.0,	1,00,00			

#### **Boilers**

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

## **User Defined Equipment**

Equipment Type	Number
----------------	--------

## 11.0 Vegetation

## Attachment C

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



#### SOIL WATER AIR PROTECTION ENTERPRISE

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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

**Education** 

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

**Professional Experience** 

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

#### **Professional History:**

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner

UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)

UCLA School of Public Health; 2003 to 2006; Adjunct Professor

UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator

UCLA Institute of the Environment, 2001-2002; Research Associate

Komex H<sub>2</sub>O Science, 2001 to 2003; Senior Remediation Scientist

National Groundwater Association, 2002-2004; Lecturer

San Diego State University, 1999-2001; Adjunct Professor

Anteon Corp., San Diego, 2000-2001; Remediation Project Manager

Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager

Bechtel, San Diego, California, 1999 – 2000; Risk Assessor

King County, Seattle, 1996 – 1999; Scientist

James River Corp., Washington, 1995-96; Scientist

Big Creek Lumber, Davenport, California, 1995; Scientist

Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist

Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

#### **Publications:**

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- **Rosenfeld**, **P.E**. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, Lecture conducted from Tuscon, AZ.
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- **Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.
- **Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., Rosenfeld P.E., Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D.** (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D.** (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D**. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D.** (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D.** (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. 2005 National Groundwater Association Ground Water And Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. 2005 National Groundwater Association Ground Water and Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

- **Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.
- Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference Orlando, FL.
- **Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants.*. Lecture conducted from Hyatt Regency Phoenix Arizona.
- **Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.
- **Paul Rosenfeld, Ph.D.** (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.
- **Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.
- **Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.
- **Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.
- **Rosenfeld, P.E**. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.
- **Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.
- **Rosenfeld. P.E.** (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.
- **Rosenfeld, P.E.** (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.
- Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.
- **Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.
- **Rosenfeld, P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.
- **Rosenfeld, P.E.**, C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

#### **Teaching Experience:**

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## **Academic Grants Awarded:**

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## **Deposition and/or Trial Testimony:**

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, 112th Judicial District

Phillip Bales et al., Plaintiff vs. Dow Agrosciences, 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 17th Judicial Circuit, in and For Broward County, Florida

Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.

Case Number CACE07030358 (26) Rosenfeld Deposition: December 2014

#### In the United States District Court Western District of Oklahoma

Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City

Landfill, et al. Defendants. Case No. 5:12-cv-01152-C

Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas

Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.

Case Number cc-11-01650-E

Rosenfeld Deposition: March and September 2013

Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio

John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants* 

Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)

Rosenfeld Deposition: October 2012

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

Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.

Case 3:10-cv-00622

Rosenfeld Deposition: February 2012

Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland

Philip E. Cvach, II et al., Plaintiffs vs. Two Farms, Inc. d/b/a Royal Farms, Defendants

Case Number: 03-C-12-012487 OT Rosenfeld Deposition: September 2013



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Email: mhagemann@swape.com

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 CEOA 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 shippard 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 nationwide 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 aguifer 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, Coloradao.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**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 repesentatives, 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.

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## Other Experience:

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

# NCARECA

08/01/2022

#### **VIA EMAIL ONLY**

Daniel Alcayaga, Planning Manager, Town of Apple Valley, 14955 Dale Evans Parkway, Apple Valley, CA 92307. dalcayaga@applevalley.org

**RE: NOP Comments for Apple Valley 143 Project** 

Dear Mr. Alcayaga,

Californians Allied for a Responsible Economy ("CARE CA") appreciates the opportunity to comment on the Notice of Preparation ("NOP") for environmental review of the Apple Valley 143 Project (the "Project"). The Project applicant is COV Apple Valley LLC.

The proposed Project consists of the construction and operation of three industrial/warehouse buildings totaling approximately 2,628,000 square feet. The Project will require approval of a conditional use permit and development agreement.

The Initial Study ("IS") identifies the Project's potentially significant impacts under CEQA to include all impacts except Agriculture and Forestry Resources, Mineral Resources, Recreation and Wildfire. CARE CA respectfully requests, under CEQA complete analysis of these impacts, imposition of all feasible mitigation and study of a reasonable range of alternatives, including at least two environmentally superior alternatives to the Project.

#### **General Comments**

After reviewing the documents and information provided, we are concerned about the unidentified industrial uses. Neither the NOP nor the IS provide detailed information about the type of industrial uses for the warehouses that will be constructed on the Project site.

Since the tenant(s) for the project buildings are not yet identified, as part of the CEQA process, the Town of Apple Valley, as lead agency must make certain assumptions regarding the type and mix of light industrial uses that would likely occupy the proposed buildings. To ensure a conservative analysis on the Project's environmental impacts, the DEIR should:

- 1. Study a reasonable combination of the five primary logistics-type uses at the site,<sup>1</sup> including providing justification and square footage assumed for each use analyzed so that a broad and diverse range of environmental impacts are included in the analysis. This is important because each studied use has unique operational characteristics that result in different types/levels of environmental impacts (i.e., both truck and vehicular trips, air quality, GHG emissions, public health risk and other environmental effects)
- 2. Study a reasonable worst-case scenario (i.e., most impactful) of the combination of logistics-type uses. The analysis must, therefore, include higher intensity uses such as cold storage and subsequent potential use of transportation refrigeration units (TRUs) during Project operation. The cold storage analysis should also specify the type of refrigerant that will be used in the cooling system because different types of refrigerants have different impacts on GHG and energy efficiency.

Such analysis will ensure that all environmental impacts are comprehensively evaluated and disclosed to the public and Town decision makers throughout the CEQA process.

Finally, the goods movement industry is one of the major contributors of air pollutants across Southern California. Warehouse operations including trips by heavy duty trucks and cargo handling equipment contribute to local pollution. Since the Project will attract diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, the Town should perform a mobile source health risk assessment.

#### **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 subsequent environmental review documents when these documents are released for public review.

Sincerely,

Jeff Modrzejewski Executive Director

<sup>&</sup>lt;sup>1</sup> South Coast Air Quality Management District [SCAQMD], High Cube Warehouse Vehicle Trip Generation Analysis, prepared by Institute of Transportation Engineers, October 2016, p. 3.