EXHIBIT 1

FIRSTCARBONSOLUTIONS™

DRAFT
South McKinley Avenue East Industrial Project
Initial Study/Mitigated Negative Declaration
City of Stockton, San Joaquin County, California

Prepared for:
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Report Date: August 30, 2024

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Table of Contents

Acronyms and Abbreviations v

Section 1: Introduction 1
1.1 - Purpose 1
1.2 - Project Location 1
1.2.1 - Environmental Setting 1
1.2.2 - Surrounding Land Uses 2
1.2.3 - General Plan and Zoning 2
1.3 - Project Description 2
1.3.1 - Parking, Access, and Circulation 3
1.3.2 - Utilities 3
1.3.3 - Construction 4
1.4 - Required Discretionary Approvals 5
1.5 - Intended Uses of this Document 5

Section 2: Environmental Checklist and Environmental Evaluation 21
2.1 Aesthetics 22
2.2 Agriculture and Forestry Resources 26
2.3 Air Quality 29
2.4 Biological Resources 52
2.5 Cultural Resources and Tribal Cultural Resources 67
2.6 Energy 73
2.7 Geology and Soils 77
2.8 Greenhouse Gas Emissions 83
2.9 Hazards and Hazardous Materials 95
2.10 Hydrology and Water Quality 100
2.11 Land Use and Planning 106
2.12 Mineral Resources 108
2.13 Noise 110
2.14 Population and Housing 117
2.15 Public Services 119
2.16 Recreation 123
2.17 Transportation 125
2.18 Utilities and Service Systems 136
2.19 Wildfire 141
2.20 Mandatory Findings of Significance 144

Section 3: List of Preparers 147

Appendix A: Air Quality Supporting Information

Appendix B: Biological Resources Supporting Information

Appendix C: Cultural Resources Supporting Information

Appendix D: Geotechnical Supporting Information

Appendix E: Hazards and Hazardous Materials Supporting Information

Appendix F: Noise Supporting Information

Appendix G: Traffic Impact Analysis

List of Tables

Table 1: Regional Construction Air Pollutant Emissions 40
Table 2: Unmitigated Operational Pollutant Emissions (2025) 42
Table 3: Maximum On-site Daily Air Pollutant Emissions During Construction 43
Table 4: Maximum On-site Daily Air Pollutant Emissions During Operations 43
Table 5: Estimated Health Risks and Hazards During Project Construction at the Maximum Impacted Receptor 48
Table 6: Screening Levels for Potential Odor Sources 50
Table 7: Estimated Annual Project Energy Consumption 74
Table 8: Construction Greenhouse Gas Emissions 87
Table 9: Unmitigated Project Operational Greenhouse Gases 2025 87
Table 10: Proposed Project Consistency with 2017 Scoping Plan Greenhouse Gas Emission Reduction Strategies 89
Table 11: Proposed Project Consistency with 2022 Scoping Plan Greenhouse Gas Emission Reduction Strategies 91
Table 12: VMT per Employee Summary 130
Table 13: TDM Reduction Measures 130
Table 14: Water Supply Demand Comparison for Normal, Single Dry, and Multiple Dry Years in the COSMUD Service Area 138
Table 15: Landfill Capacities 140

List of Exhibits

Exhibit 1:Regional Location Map 7
Exhibit 2: Local Vicinity Map 9
Exhibit 3: FEMA Flood Zone Map 11
Exhibit 4: General Plan Land Use Map 13
Exhibit 5: Zoning Map 15
Exhibit 6: Site Plan 17
Exhibit 7: Conceptual Off-site Improvements 19
Exhibit 8: Land Cover and Vegetation Community Types 59
Exhibit 9: Impacts on Biological Resources 61

ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AAF	age-specific adjustment factor
AB	Assembly Bill
AERMOD	American Meteorological Society/EPA Regulatory Model
Air Basin	San Joaquin Valley Air Basin
ALUCP	Airport Land Use Compatibility Plan
APN	Assessor's Parcel Number
AQI	Air Quality Index
AQMD	Air Quality Management District
AQP	Air Quality Plan
ARB	California Air Resources Board
ASCE	American Society of Civil Engineers
ASF	age sensitivity factor
AST	aboveground storage tank
ASTM	American Society for Testing Materials
BERD	California Built Environment Resource Directory
BEV	battery electric vehicle
BMP	Best Management Practice
BNSF	Burlington Northern Santa Fe
BRA	Biological Resources Assessment
Cal/EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal/OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CBC	California Building Standards Code
CCIC	Central California Information Center
CCS	Carbon Capture and Sequestration
CDF	California Department of Finance
CDFW	California Department of Fish and Wildlife
CDR	Carbon Dioxide Removal

CEC	California Energy Commission
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CHL	California Historic Landmarks
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COSMUD	City of Stockton Municipal Utility District
CPF	cancer potency factor
CPHI	California Points of Historical Interest
CRA	Cultural Resources Assessment
CRHR	California Register of Historical Resources
CTR	Commuter Trip Reduction
dB	decibel
dBA	A-weighted decibel
DBR	daily breathing rates
DNL	Day-Night Level
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
DTSC	California Department of Toxic Substances Control
DWTP	Delta Water Treatment Plant
EIR	Environmental Impact Report
EMFAC	EMission FACtor mobile source emissions model
EOP	Emergency Operations Plan
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
EV	electric vehicle
FAR	floor area ratio
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FICAN	Federal Interagency Committee on Aviation Noise
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts

GHG	greenhouse gas
GWP	global warming potential
HBW	home-based work
HFC	hydrofluorocarbon
HHDT	Heavy Heavy-Duty Truck
HI	hazard index
HRA	Health Risk Assessment
HTAC	Habitat Technical Advisory Committee
HVAC	heating, ventilation, and air conditioning
I-L	Industrial Limited
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
ITMM	Incidental Take Minimization Measure
kBTU	kilo-British Thermal Unit
kWh	kilowatt-hour
LCFS	Low Carbon Fuel Standard
L_{dn}	day/night sound level
LED	light-emitting diode
L_{eq}	equivalent continuous sound level
L_{max}	maximum instantaneous noise level
LOS	Level of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MHDT	Medium Heavy-Duty Truck
MIR	Maximally Impacted Sensitive Receptor
MLD	Most Likely Descendant
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
MRP	Municipal Regional Stormwater NPDES Permit
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MT	metric tons
MUSD	Manteca Unified School District
NAHC	Native American Heritage Commission
NB	No Build
NEV	neighborhood electric vehicle

NFHL	National Flood Hazard Layer
NO_2	nitrogen dioxide
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OEHHA	California Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OSHA	Occupational Safety and Health Administration
PG&E	Pacific Gas and Electric Company
PM_{10}	particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$	particulate matter, including dust, 2.5 micrometers or less in diameter
PPV	peak particle velocity
REC	Recognized Environmental Condition
REL	Reference Exposure Level
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RWCF	Regional Wastewater Control Facility
RWQCB	Regional Water Quality Control Board
Sacramento Metro AQMD	Sacramento Metropolitan Air Quality Management District
SB	Senate Bill
SEL	sound exposure levels
SEWD	Stockton East Water District
SFD	Stockton Fire Department
SIL	significant impact level
SJCOG	San Joaquin Council of Governments
SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SNAP	Significant New Alternatives Policy
SO_2	sulfur dioxide
SOI	Sphere of Influence
South Coast AQMD	South Coast Air Quality Management District
SO_x	sulfur oxide
SPAL	Small Projects Analysis Level
SPD	Stockton Police Department
SR	State Route
SRA	State Responsibility Area
State Water Board	California State Water Resources Control Board
SUSD	Stockton Unified School District

SWITRS	Statewide Integrated Traffic Records System
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWQCP	Storm Water Quality Control Plan
TAC	toxic air contaminant
TAH	time at home factors
TAZ	Traffic Analysis Zone
TCR	Tribal Cultural Resource
TDM	Transportation Demand Management
TIA	Transportation Impact Analysis
TIS	Traffic Impact Study
TRU	Transport Refrigeration Unit
UCMP	University of California Museum of Paleontology
USGS	United States Geological Survey
VERA	Voluntary Emissions Reduction Agreement
VMT	Vehicle Miles Traveled
VOC	volatile organic compound
WID	Woodbridge Irrigation District
WMPU	Water Master Plan Update
ZEV	Zero-Emission Vehicle

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SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) is to identify any potential environmental impacts that would result from implementation of the proposed South McKinley Avenue East Industrial Project (proposed project) in the City of Stockton, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of Stockton has discretionary authority over the proposed project and is the Lead Agency in the preparation of this Draft IS/MND and any additional environmental documentation required for the project. The intended use of this Draft IS/MND is to determine the level of environmental analysis required to adequately analyze the proposed project pursuant to the requirements of CEQA and to provide the basis for input from public agencies, organizations, and interested members of the public. As identified in the following analysis, potential adverse environmental impacts associated with the proposed project either do not occur, are less than significant, or have been rendered less than significant. Therefore, this Initial Study is intended to support adoption of a Mitigated Negative Declaration.

The remainder of this section provides a brief description of the project location and the primary project characteristics. Section 2 includes an environmental checklist that provides an overview of the potential impacts that may result from project implementation, elaborates on the information contained in the environmental checklist, and provides justification for each checklist response, and Section 3 contains the List of Preparers.

1.2 - Project Location

The project site is located in the City of Stockton's Sphere of Influence (SOI) just south of the Stockton city limits, in San Joaquin County, California (Exhibit 1). The 11.7-acre project site corresponds to Assessor's Parcel Number (APN) 193-02-034, located at 6505 South McKinley Avenue East. Regional access to the site is provided by Interstate 5 (I-5), and State Route (SR) 99. As shown in Exhibit 2, the Union Pacific-Oakland Railroad parallels South McKinley to the east, and the Union Pacific-Fresno Railroad runs north–south to the west of the site.

1.2.1 - Environmental Setting

The project site is currently vacant and undeveloped, aside from a shipping container located at the north end of the project site. The site lies along French Camp Slough and riparian oak woodlands associated with French Camp Slough are located along the northern and western property lines. The site has historically been used for agricultural purposes. Most recently it was used for the cultivation of hay, and is plowed and disced regularly. A barbed wire fence and overhead electrical lines line the perimeter of the project site.

The project site Is located partially within a Federal Emergency Management Agency (FEMA) 500-year Flood Zone and partially within a FEMA 100-year Flood Zone in the area adjacent in the French Camp Slough[1] (Exhibit 3).

1.2.2 - Surrounding Land Uses

The surrounding area is designated as Industrial, Open Space/Agriculture, and Low Density Residential. The project site is surrounded by a manufacturing plant to the north; South McKinley Avenue and a logistics center and a distribution center to the east; French Camp Slough, a warehouse building and lot, and a single-family residence to the south; and French Camp Slough and vacant land to the west.

1.2.3 - General Plan and Zoning

The project site is designated Industrial by the Envision Stockton 2040 General Plan (General Plan) (Exhibit 4).[2] The Industrial land use designation allows for a wide variety of industrial uses, including warehousing, and office uses. The maximum allowable floor area ratio (FAR) for industrial uses is 0.6.

The project site is anticipated to be zoned Industrial Limited (I-L) upon annexation into the City and the proposed project would be designed to comply with I-L Zone regulations (Exhibit 5). The I-L Zone allows for warehouse uses and supporting office uses.

The County designates the project site as Mixed-Use (M/X).[3] However, because the property is within the City's SOI and it would be annexed into the City as part of the proposed project, the City's designation is used in this analysis.

1.3 - Project Description

The proposed project would result in the annexation of the site into the City of Stockton and the development of a 184,166-square-foot building containing 179,166 square feet of warehouse space and 5,000 square feet of office space (Exhibit 6). The building would include 27 dock doors and a loading area along the west side of the building. Parking spaces would be provided on the east, south, and west sides of the building. There would be a 30-foot setback at the front of the building along South McKinley Avenue. Landscaping would be provided around the perimeter of the parking lot, with trees and shrubs to provide canopy. All landscaping would be low-maintenance with water-efficient native species. All landscaping equipment used at the facility would be electric or battery powered. The design of the building would provide for outlets on the outside of buildings or in other accessible areas to facilitate the use of electrically powered landscape equipment.

[1] Federal Emergency Management Agency (FEMA). FEMA's National Flood Hazard Layer (NFHL) Viewer. Website: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed May 16, 2022.
[2] City of Stockton. 2018. Envision Stockton 2040 General Plan. Figure 2-8 General Plan Land Use Map. Website: http://www.stocktonca.gov/files/Adopted_Plan.pdf. Accessed May 16, 2022.
[3] San Joaquin County. 2016. San Joaquin County General Plan Policy Document. December.

In addition, the project would require a 4-foot-deep trench for a new sewer line in South McKinley Avenue, extending approximately 2,400 feet north of the site, near the intersection of Sperry Road (Exhibit 7). A sewer lift station would be constructed within the project site.

The tenant for the proposed project is speculative. The following operational features are proposed by the project proponent and would be included in project construction plans and specifications:

- Owners, operators, or tenants shall establish locations for food or catering truck service and cooperate with food service providers to provide consistent food service to operations employees on-site in order to minimize project generated trips.
- Owners, operators, or tenants shall prohibit the use of diesel generators, except in emergency situations, in which case such generators shall have Best Available Control Technology (BACT) that meets California Air Resources Board (ARB) Tier 4 emission standards.
- Owners, operators, or tenants shall provide periodic yard and parking area sweeping to minimize dust generation. All facility operators would train managers and employees on efficient scheduling and load management to eliminate unnecessary queueing and idling of trucks.

In addition, all tenant lease agreements for the project site shall include a provision requiring the tenant/lessee to comply with all applicable requirements of the Mitigation Monitoring and Reporting Program (MMRP), a copy of which shall be attached to each tenant/lease agreement.

1.3.1 - Parking, Access, and Circulation

Access would be provided by two 35-foot-wide driveways along South McKinley Avenue at the north and south ends of the project site and continue around the perimeter of the proposed building. A total of 192 parking stalls would be provided, 150 of which would be standard parking stalls located to the east and south of the proposed building. Thirty-seven trailer parking stalls would be located west of the proposed building adjacent to the loading area. All driveways and parking stalls would be constructed in accordance with the City's Development Code.[4]

In order to minimize the number of trips generated by the project during construction, the applicant has agreed to require the construction contract to provide transit and ride sharing information for construction workers. In addition, the contractor will establish one or more locations for food or catering truck service to construction workers and to cooperate with food service providers to provide consistent food service on-site.

1.3.2 - Utilities

The proposed project is located within the service areas of the following utility service providers, which would provide service following construction and operation:

[4] City of Stockton. 2023. Stockton, California, Municipal Code, Charter, and Civil Service Rules. Title 16. Development Code.

- Water: The proposed project would obtain water from the City of Stockton Municipal Utilities Department (COSMUD).[5]
- Wastewater: The proposed project's wastewater would be collected in a proposed sanitary sewer line extension that would connect to the City's sewer line near Sperry Road and treated by the Stockton Regional Wastewater Control Facility (RWCF).[6]
- Solid Waste: Waste Management would provide solid waste pickup services for the project site.[7]
- Electricity and Gas: Pacific Gas and Electric Company (PG&E) would provide electricity to the project site.[8]

1.3.3 - Construction

The proposed project would require site preparation, grading, paving, and installation of the warehouse facility. The construction phases and approximate dates for their duration are outlined below:

- **Site preparation (1 week)**: During this phase, the project site would be readied for construction, including the removal of existing vegetation.
- **Grading (4 weeks)**: During this phase, grading of the project site would occur.
- **Construction (38 weeks)**: This phase includes construction of the warehouse building and office space.
- **Paving (1 week)**: This phase includes paving and striping of the parking areas and driveways, as well as the construction of building setbacks, side yards, and signage.
- **Architectural Coating (2 weeks)**: This phase involves the application of architectural coatings.

The proposed project would include the following features as Best Management Practices (BMPs):

- At least 10 percent of building materials used for project construction would be sourced from local suppliers.
- At least 65 percent of construction and demolition waste materials would be recycled or reused.
- Architectural coatings used for project construction shall be "Low-VOC," containing no greater than 50 grams of volatile organic compounds (VOC) per liter of product.

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[5] City of Stockton. January 2021. Water Master Plan Update. Website: http://www.stocktonca.gov/files/COS_MUD__Water_Master_Plan_Update_2021.pdf#page=41&zoom=100,92,116. Accessed May 16, 2022.

[6] City of Stockton. 2022. Wastewater (Sewer). Website: http://www.stocktonca.gov/government/departments/municipalUtilities/utilSewer.html. Accessed May 16, 2022.

[7] City of Stockton. 2023. Garbage Collection. Website: http://www.stocktonca.gov/government/departments/adminServices/ubilServGarb.html#:~:text=Waste%20collection%20services%20are%20provided,by%20Waste%20Management%20(WM).&text=Customers%20with%20brown%2Dbodied%20carts,by%20Republic%20Services%20(Republic).&text=Your%20garbage%20service%20provider%20is%20determined%20by%20the%20location%20of%20your%20residence. Accessed May 16, 2022.

[8] Pacific Gas and Electric Company (PG&E). Website: https://www.pge.com/. Accessed May 16, 2022.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Signs would be posted at every truck exit driveway providing directional information to the truck route.

For the purposes of this analysis, the proposed project is anticipated to be constructed over a 9-month period from April 2024 through December 2024.

1.4 - Required Discretionary Approvals

As mentioned previously, the City of Stockton has discretionary authority over the proposed project and is the CEQA Lead Agency for the preparation of this Draft IS/MND. The City has pre-zoned the site as Industrial Limited (I-L), which will take effect upon annexation. In order to implement the project, the City would need to secure the following permits/approvals:

- Annexation into the City of Stockton
- Design Review

1.5 - Intended Uses of this Document

This Draft IS/MND has been prepared to evaluate the potential adverse environmental impacts resulting from the proposed project. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft IS/MND will be circulated for a minimum of 30 days, during which comments concerning the analysis contained in the Draft IS/MND should be sent to:

Nicole D. Moore, LEED® AP
City of Stockton
345 North El Dorado Street
Stockton, CA 95202
Phone: 209.937.8561
Email: Matt.Diaz@stockton.gov

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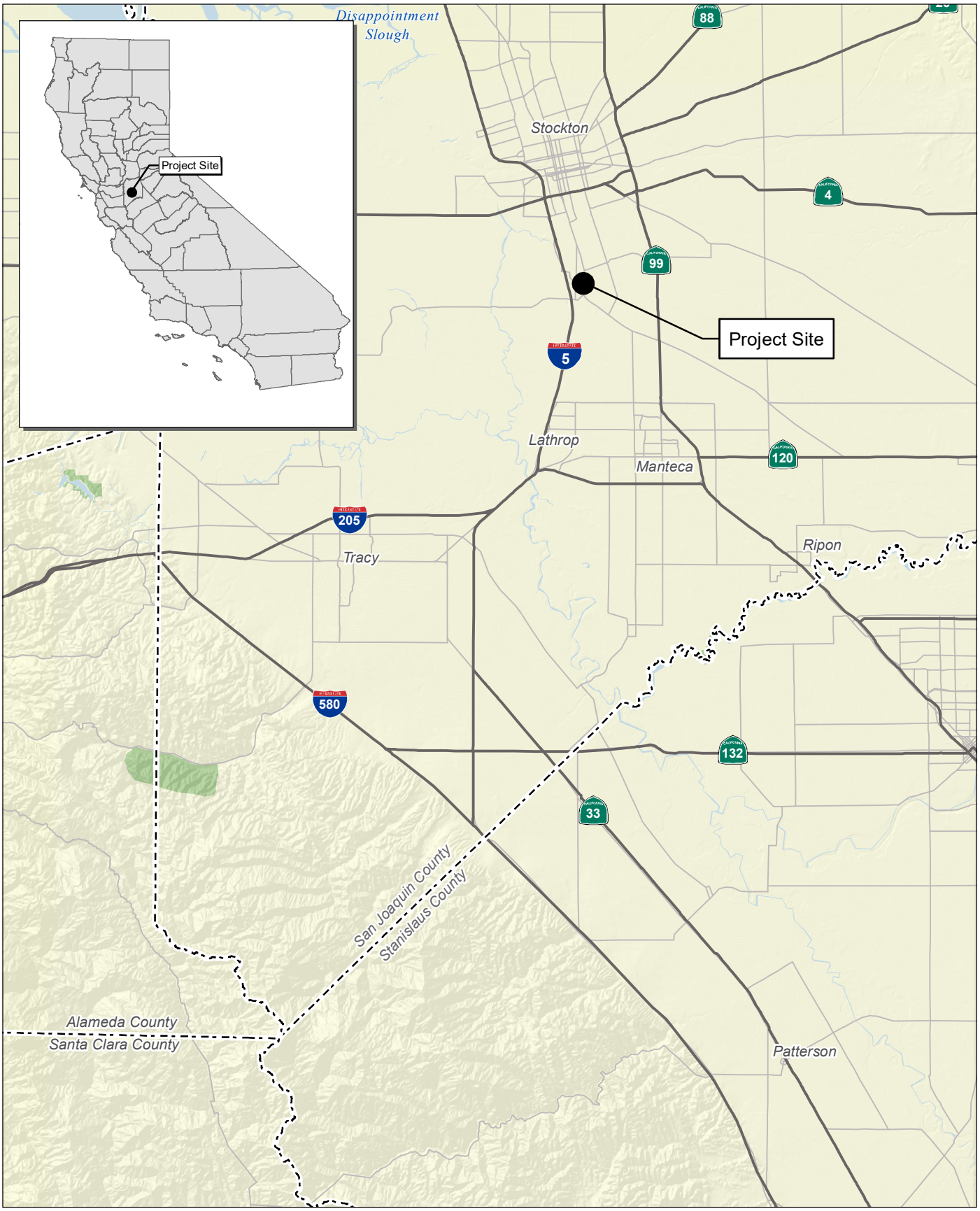
EXHIBIT 1



Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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CITY OF STOCKTON
SOUTH MCKINLEY AVENUE EAST INDUSTRIAL PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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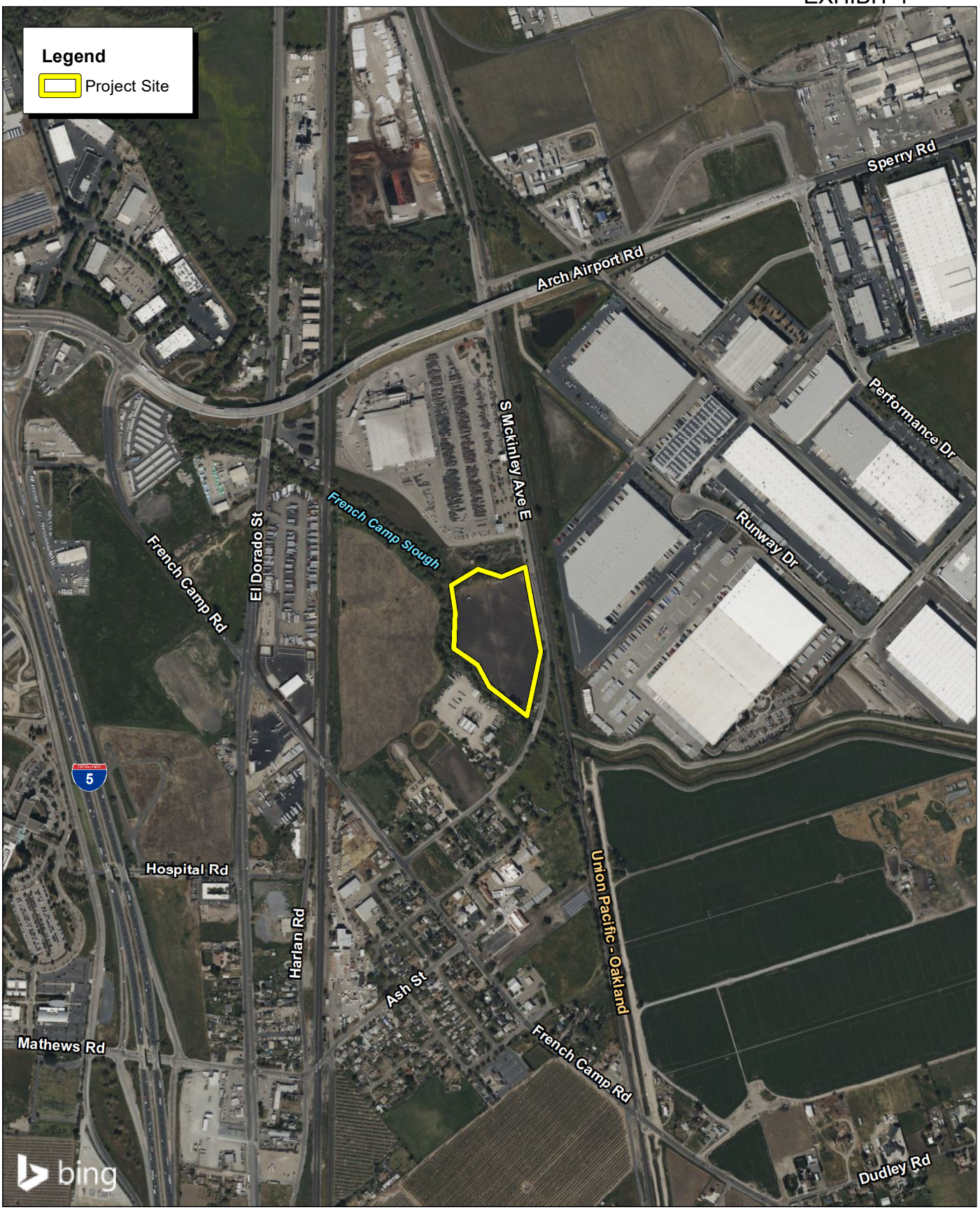

Source: Bing Aerial Imagery.

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Exhibit 2
Local Vicinity Map

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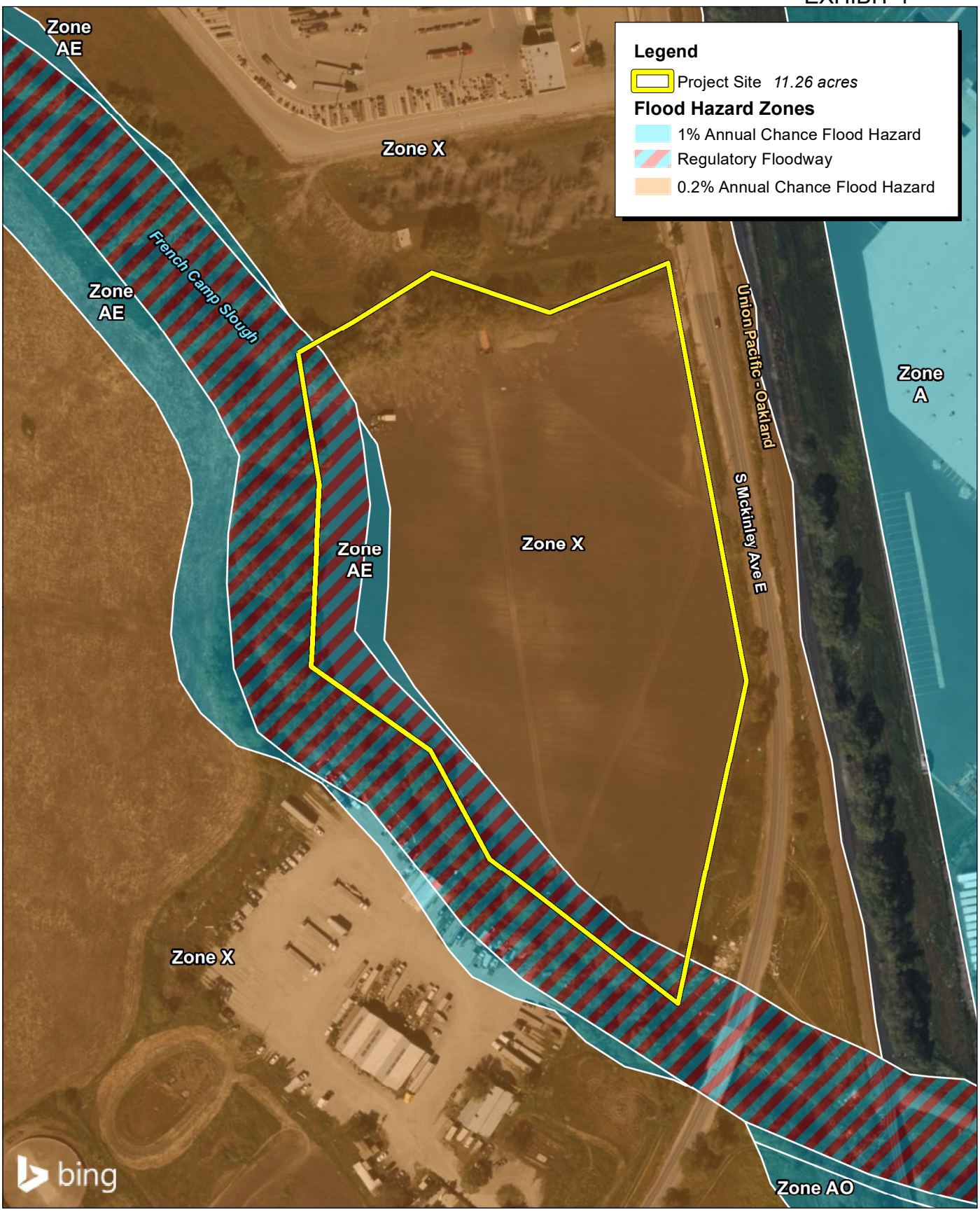

Source: Bing Aerial Imagery. FEMA National Flood Hazard Layer.

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200 100 0 200
Feet

Exhibit 3
FEMA Flood Zones

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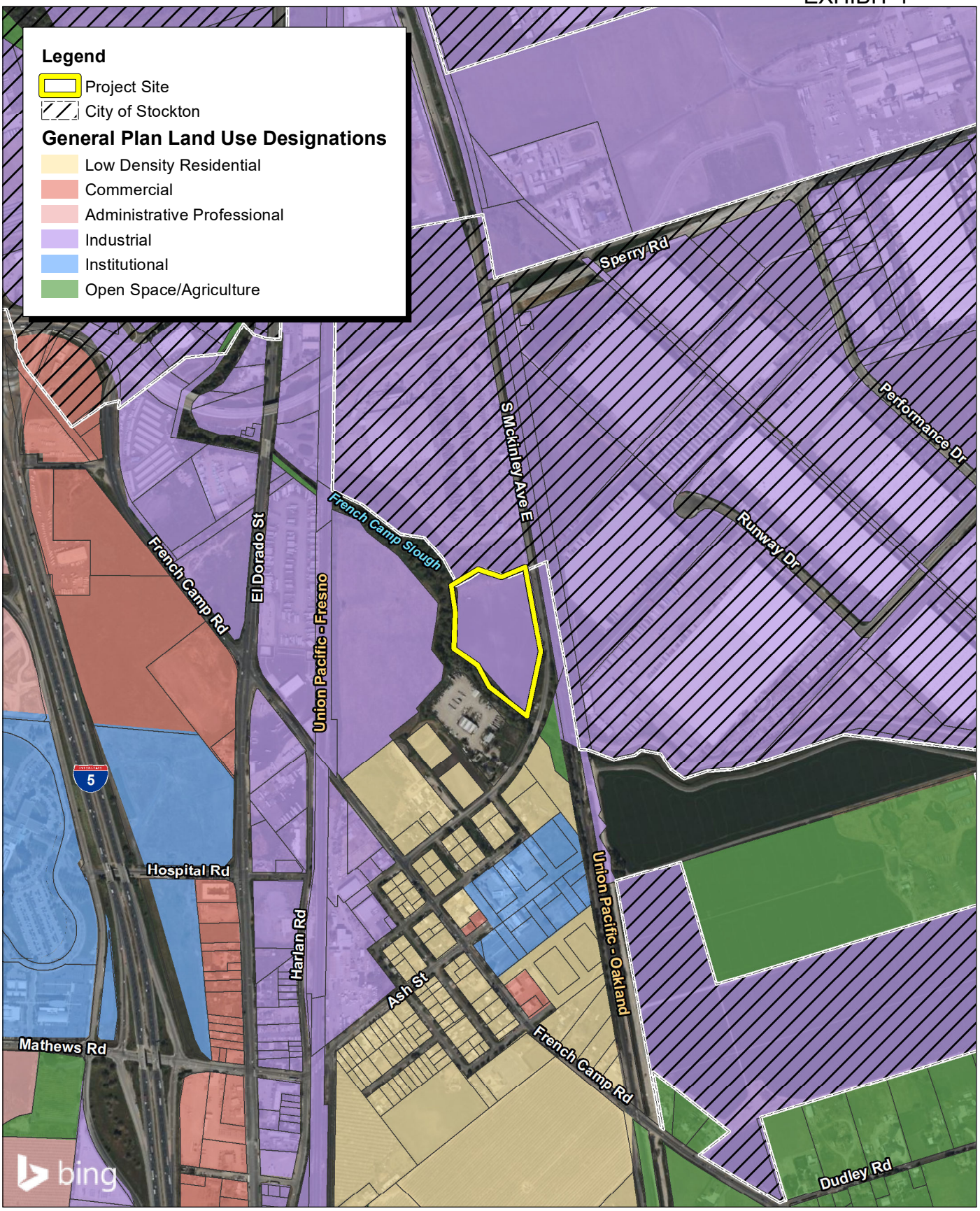

Source: Bing Aerial Imagery. CIty of Stockton.

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Exhibit 4
General Plan Land Use

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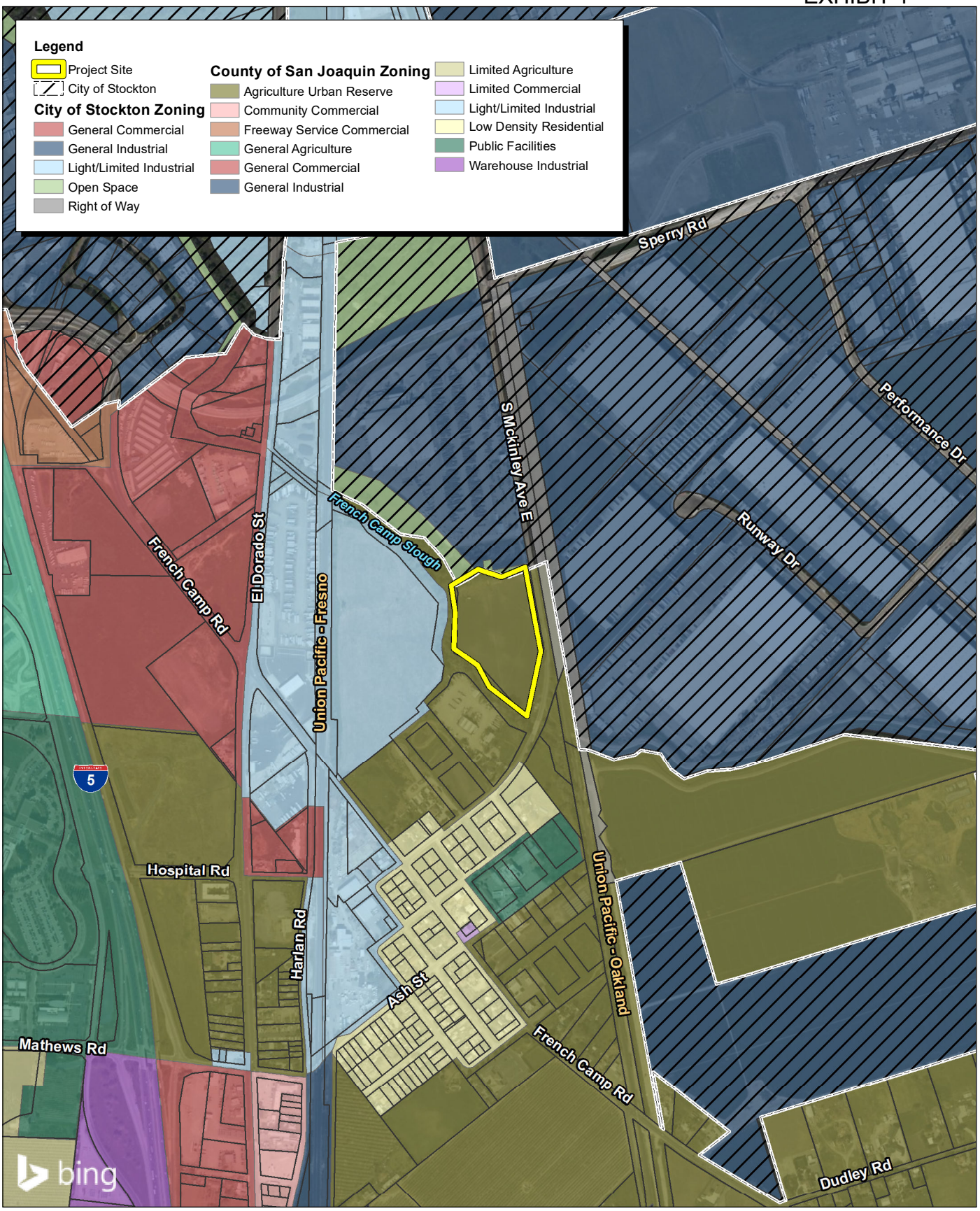

Source: Bing Aerial Imagery. CIty of Stockton. County of San Joaquin.

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1,000 500 0 1,000 Feet

Exhibit 5
Zoning

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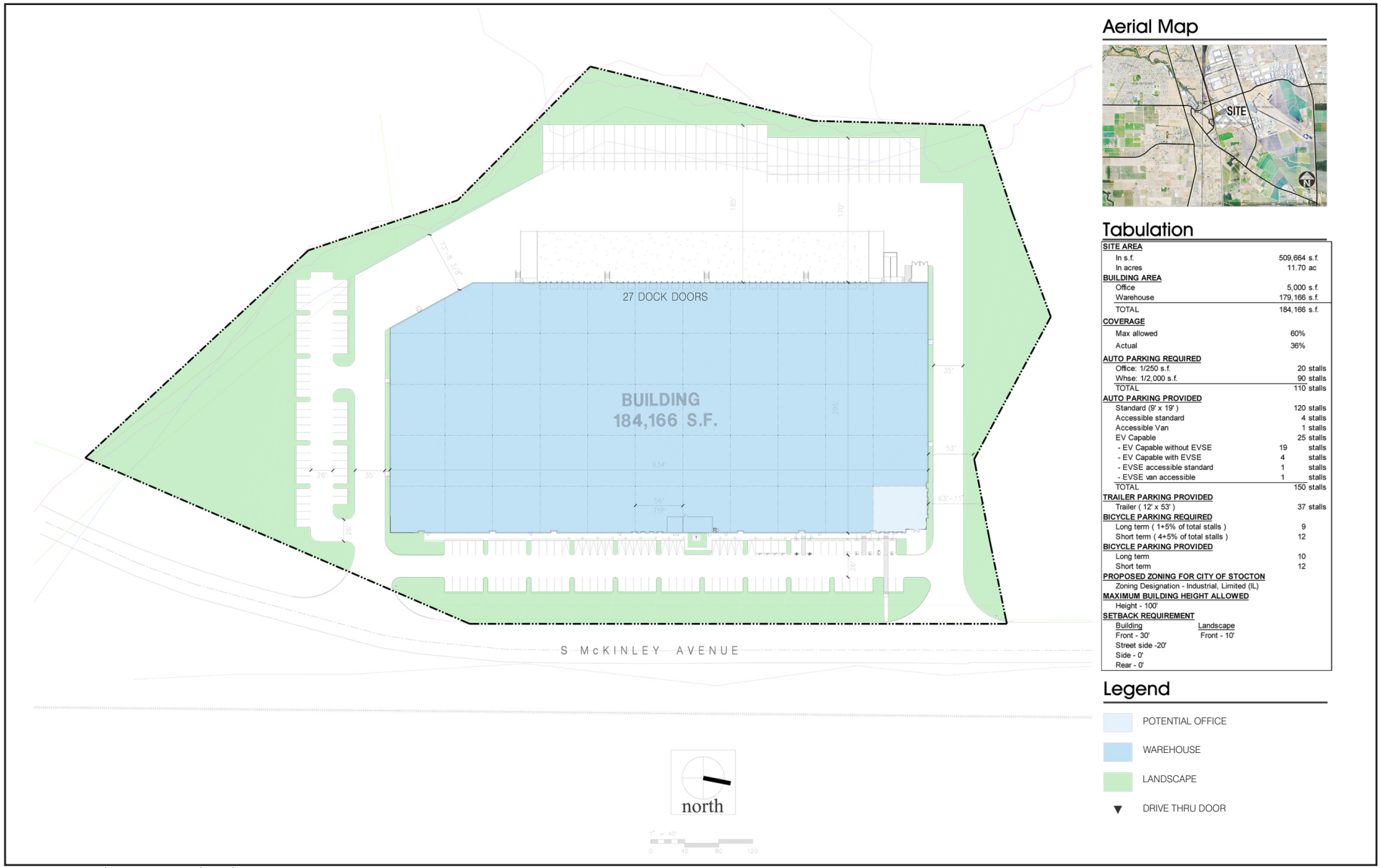

Source: HPA Architecture, March 30th, 2023.

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Exhibit 6
Site Plan

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Exhibit 7
Conceptual Off-site Improvements

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SECTION 2: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

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	☐	Energy
☒	Geology/Soils	☒	Greenhouse Gas Emissions	☒	Hazards/Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☒	Transportation	☒	Tribal Cultural Resources
☐	Utilities/Services Systems	☐	Wildfire	☒	Mandatory Findings of Significance
Environmental Determination					

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: _____ Signed: _____

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.1 Aesthetics *Except as provided in Public Resources Code Section 21099, would the project:*				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building 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?	☐	☐	☒	☐

Environmental Evaluation

Setting

Parks, recreation, open space, and agricultural uses account for about 14 percent of the City and its SOI. The General Plan Community Vision aims to preserve scenic vistas of agricultural land. The project site is designated as Farmland of Local Importance by the California Important Farmland Finder.[9]

The City collaborates with regional agencies and neighboring jurisdictions to manage and protect natural resources as a voluntary participant in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), which was adopted in 2001.

General Plan Action LU-1.3C requires the incorporation of scenic views, including open space features like waterways, wetlands, natural landscapes, and parks, into the design of the built environment.

General Plan Action LU-5.3A requires that landscaping and other attractive edging are used at the interface between development and rural landscapes, rather than sound walls and similar utilitarian edges, in order to maintain the visual integrity of open space.

[9] California Department of Conservation. 2016. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed April 1, 2023.

General Plan Action LU-5.3C requires the maintenance of the City's agricultural conservation program, which requires that either dedication of an agricultural conservation easement at a 1:1 ratio or payment of an in lieu agricultural mitigation fee for the conversion of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland, as defined by the State Farmland Monitoring and Mapping Program (FMMP). As stated above, the project site is designated Farmland of Local Importance, which is not listed in this policy.

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Less than significant impact. While the General Plan notes agricultural resources as important scenic vistas in the City, there are no officially designated scenic vistas within the Planning Area.

The project site is currently vacant and undeveloped. It was previously used for agricultural purposes and is designated Farmland of Local Importance. While General Plan policies protect Prime Farmland, Farmland of Statewide Importance, or Unique Farmland, they do not apply to Farmland of Local Importance.

The project site is adjacent to French Camp Slough and is bordered to the north, west, and south by trees associated with this riparian feature. Land designated as Open Space/Agriculture is located across South McKinley Avenue East, encompassing a portion of French Camp Slough. Therefore, development of the proposed project would change current scenic views of the project site. However, none of the scenic resources on-site are officially designated or regulated by General Plan policies. Furthermore, the proposed project would comply with General Plan Policy LU-5.3A by providing landscaping around the perimeter of the project site. The project site has a General Plan land use designation of Industrial and is also adjacent to Industrial and Low Density Residential uses. Therefore, impacts to scenic vistas would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?

No impact. There are no designated State Scenic Highways near the project site. The nearest officially designated State Scenic Highway is a portion of I-580, located approximately 18 miles southwest of the project site, which is not visible.[10] As the proposed project would not have the potential to damage any trees, rock outcroppings, or historic buildings visible from these roadways, no impact would occur.

[10] California Department of Transportation (Caltrans). 2019. Scenic Highway System Lists. Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed April 1, 2023.

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?

Less than significant impact. While the project site is adjacent to French Camp Slough, a portion of which is designated Open Space/Agriculture, the site is largely surrounded by industrial uses to the east, north, and west and is in an area largely characterized by industrial development. Therefore, the project site is considered to be in an urbanized area. The project site itself is designated Industrial by the General Plan, which allows for a wide variety of industrial uses, including the proposed warehousing and associated office uses. The maximum allowable FAR for the Industrial land use designation is 0.6. The FAR of the proposed project would be approximately 0.4, which would be consistent with the maximum allowable FAR for the Industrial land use designation. Upon annexation into the City, the project site would be zoned I-L, which also allows for warehouse uses and supporting office uses. The proposed project would be required to follow the I-L zoning district standards outlined in Municipal Code Section 16.24.130. Furthermore, per Municipal Code Chapter 16.120, the proposed project would undergo Design Review prior to approval to ensure consistency with the Stockton Municipal Code and Citywide Design Guidelines. Therefore, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact. Excessive or inappropriately directed lighting can adversely affect nighttime views by reducing the ability to see the night sky and stars. Glare can be derived from unshielded or misdirected lighting sources. Reflective surfaces (i.e., polished metal) can also cause glare. Impacts associated with glare range from simple nuisance to potentially dangerous situations (i.e., if glare is directed into the eyes of motorists). Light-sensitive land uses in the area include Low Density Residential uses to the south.

The project site is currently undeveloped and does not contain existing sources of light and glare. The area surrounding the project site has existing sources of light and glare, including headlights from vehicles traveling on South McKinley Avenue East, streetlights, and existing development such as the industrial uses north and east of the project site. The proposed project would create new sources of light and glare resulting from indoor and outdoor lighting as well as vehicles circulating the site.

The proposed lighting would be consistent with the site's zoning and the existing character of the surrounding industrial area. Additionally, the proposed project would comply with Municipal Code Section 16.32.070, Light and Glare, general performance standards,[11] which would ensure that light generated on-site would be directed downward so as not to trespass onto residential properties to

[11] City of Stockton. Stockton, California Municipal Code, Charter, and Civil Service Rules. Title 16 Development Code. Division 3. Site Planning and General Development Regulations. Chapter 16.32 General Performance Standards. Section 16.32.070 Light and glare. Website: https://library.qcode.us/lib/stockton_ca/pub/municipal_code/item/title_16-division_3-chapter_16_32-16_32_070. Accessed April 1, 2023.

the south or adversely affect nearby light-sensitive uses. Furthermore, per Municipal Code Chapter 16.120, the proposed project would undergo Design Review prior to approval to ensure consistency with the Stockton Municipal Code and Citywide Design Guidelines. Therefore, impacts would be less than significant.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.2 Agriculture and Forestry Resources *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the 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 nonagricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Environmental Evaluation

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the ARB.

Setting

The General Plan Community Vision aims to preserve scenic vistas of agricultural land. The project site is designated as Farmland of Local Importance by the California Important Farmland Finder.[12]

General Plan Action LU-5.3C discusses the maintenance of the City's agricultural conservation program, and requires either dedication of an agricultural conservation easement at a 1:1 ratio or payment of an in lieu agricultural mitigation fee for the conversion of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland, as defined by the State FMMP. As stated above, the project site is designated Farmland of Local Importance, which is not listed in this policy.

Would the 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 nonagricultural use?

No impact. The project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; therefore, the proposed project would not result in the conversion of any protected Farmlands to nonagricultural uses. As such, General Plan Action LU-5.3C does not apply. No impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?

No impact. The project site would be zoned as I-L upon annexation into the City. This zone does not allow for agricultural uses. Furthermore, the project site is not encumbered by a Williamson Act Contract.[13] Therefore, no impact would occur.

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))?

No impact. The California Public Resources Code defines forestland as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits (Public Resources Code [PRC] § 12220). "Timberland" is defined as land that is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products (PRC § 4526). "Timberland production zone" is defined as an area that has been zoned and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses (PRC § 51104(g)).

The project site does not have a forest land zoning designation and does not contain forestland or timberland as defined above. The project site would be zoned as I-L upon annexation into the City,

[12] California Department of Conservation. 2016. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed April 1, 2023.

[13] San Joaquin Valley Gateway. 2015. San Joaquin County Williamson Act Parcels. Website: https://sjvp.databasin.org/datasets/a32f8f44b4524b07b1861e779a0857c0/. Accessed April 1, 2022.

which is an industrial designation that does not allow for forest land or timberland uses. No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. The project site does not contain nor is it adjacent to any forest land. Therefore, there would be no loss of forest land or conversion of forest land to non-forest use as a result of the proposed project. No impact would occur.

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

Less than significant impact. The project site is designated Farmland of Local Importance; it is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. While the project site was previously used for agriculture, it is now vacant and no longer used for agricultural purposes.

Furthermore, the proposed project is not located on or near forestland and therefore would not convert forest land to a non-forest use. Therefore, impacts would be less than significant.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.3 Air Quality *Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.* *Would the project:*				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental Evaluation

The analysis in this section is based, in part, on the Air Quality, Greenhouse Gas Emissions, and Energy Report prepared by FirstCarbon Solutions (FCS), which is included as Appendix A.

Where available, the significance criteria established by the applicable Air Quality Management District or Air Pollution Control District may be relied upon to make the following determinations.

Setting

The proposed project is located in the City of Stockton, in San Joaquin County, California, situated in the San Joaquin Valley Air Basin (Air Basin) and within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The Air Basin is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).[14]

The air pollutants for which national and State standards have been promulgated and that are most relevant to air quality planning and regulation in the Air Basin include ozone, nitrogen oxide (NO_X), carbon monoxide (CO), particulate matter, including dust, 10 micrometers or less in diameter (PM_{10}), and particulate matter, including dust, 2.5 micrometers or less in diameter ($PM_{2.5}$). In addition, toxic air contaminants (TACs) are of concern in the Air Basin. Each of these pollutants is briefly described

[14] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February.

below. Other pollutants that are regulated but not considered an issue in the project area are sulfur dioxide (SO_2), vinyl chloride, sulfates, hydrogen sulfide, and lead; the proposed project would not emit substantial quantities of those pollutants, so they are not discussed further in this section.

- Ozone is a gas that is formed when reactive organic gases (ROG), also known as volatile organic compounds (VOC), and NO_X—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are conducive to its formation. Its effects can include the following: irritate respiratory system; reduce lung function; cause breathing pattern changes; reduce breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; cause some immunological changes; increase mortality risk; and cause vegetation and property damage.
- CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines—unlike ozone—and motor vehicles operating at slow speeds are the primary source of CO in the Air Basin, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections. Potential health effects from CO ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; and death.
- PM_{10} and $PM_{2.5}$ consist of extremely small, suspended particles, or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. Health effects from short-term exposure (hours per days) can include the following: irrigation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravation of existing lung disease causing asthma attacks and acute bronchitis; those affected with heart disease can suffer heart attacks and arrhythmias. Health effects from long-term exposure can include the following: reduced lung function; chronic bronchitis; changes in lung morphology; and death.
- TACs refer to a diverse group of air pollutants that can affect human health but have not had ambient air quality standards established for them. Diesel particulate matter (DPM) is a toxic air contaminant that is emitted from construction equipment and diesel-fueled vehicles and trucks. Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.

The Air Basin is currently designated as nonattainment for ozone, PM_{10} (State only), and $PM_{2.5}$.

Construction and operation of the proposed project would be subject to applicable SJVAPCD rules and requirements. The SJVAPCD CEQA Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) was developed to assist local jurisdictions and lead agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality.[15]

City of Stockton General Plan and General Plan Environmental Impact Report

Envision Stockton 2040 General Plan

The General Plan was adopted on December 4, 2018. The General Plan contains several policies which aim to reduce air quality impacts from new land use development. Relevant General Plan policies are listed below.

Policy SAF-4.1 **Reduce air impacts from mobile and stationary sources of air pollution.**

Action SAF-4.1A Require the construction and operation of new development to implement best practices that reduce air pollutant emissions, including:

- Use of low-emission and well-maintained construction equipment, with idling time limits.
- Development and implementation of a dust control plan during construction.
- Installation of electrical service connections at loading docks, where appropriate.
- Installation of Energy Star-certified appliances.
- Entering into Voluntary Emissions Reduction Agreements with the San Joaquin Valley Air Pollution Control District.

Action SAF-4.1B Use the results of the Health Risk Assessments required by the California Air Toxics "Hot Spots" Act to establish appropriate land use buffer zones around any new sources of toxic air pollutants that pose substantial health risks.

Action SAF-4.1C Require the use of electric-powered construction and landscaping equipment as conditions of project approval when appropriate.

Action SAF-4.1D Limit heavy-duty off-road equipment idling time to meet the California Air Resources Board's idling regulations for on-road trucks.

Policy SAF-4.2 Encourage major employers to participate in a Transportation Demand Management (TDM) program that reduces vehicle trips through approaches such as carpooling, vanpooling, shuttles, car-sharing, bike-sharing, end-of-trip facilities like showers and bicycle parking, subscription bus service, transit subsidies, preferential parking, and telecommuting.

[15] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February.

Action SAF-4.2A Provide information and conduct marketing and outreach to major existing and new employers about the Transportation Demand Management (TDM) program facilitated by the San Joaquin Council of Governments.

Policy SAF-4.3 Coordinate with the San Joaquin Valley Air Pollution Control District and non-profit organizations to promote public awareness on air quality issues and consistency in air quality impacts analyses.

Action SAF-4.3A Distribute educational materials from the San Joaquin Valley Air Pollution Control District on the City's website and at its Permit Center.

Action SAF-4.3B Coordinate review of development project applications with the San Joaquin Valley Air Pollution Control District to ensure that air quality impacts are consistently identified and mitigated during CEQA review.

General Plan Environmental Impact Report Mitigation

The General Plan Environmental Impact Report (EIR) was filed with the State Clearinghouse on December 5, 2018, and amended on June 8, 2020. The amended EIR contains several mitigation measures that aim to reduce air quality impacts from new land use development and may be applied, as appropriate and necessary, to the proposed project. All General Plan EIR mitigation measures pertaining to air quality and greenhouse gas (GHG) emission impacts are listed below. The following mitigation measures are from the Mitigation and Monitoring Reporting Program of the General Plan EIR.

MM AQ-1 Implement Mitigation Measure AQ-3 to further reduce long-term criteria air pollutant emissions.

MM AQ-2 Prior to issuance of any construction permits for development projects subject to California Environmental Quality Act (CEQA) review (i.e., non-exempt projects), development project applicants shall prepare and submit to the City of Stockton Planning and Engineering Division a technical assessment evaluating potential project construction-related air quality impacts. The evaluation shall be prepared in conformance with San Joaquin Valley Air Pollution Control District (SJVAPCD) methodology in assessing air quality impacts. The prepared evaluation for projects that meet the SJVAPCD Small Projects Analysis Level (SPAL) screening criteria shall at minimum, identify the primary sources of construction emissions and include a discussion of the applicable SJVAPCD rules and regulations and SPAL screening criteria to support a less than significant conclusion.

For projects that do not meet the SPAL screening criteria, project-related construction emissions shall be quantified. If construction-related criteria air pollutants are determined to have the potential to exceed the SJVAPCD adopted thresholds of significance, as identified in the Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), the City of Stockton Planning and Engineering Division shall require that applicants for new development projects incorporate

mitigation measures to reduce air pollutant emissions during construction activities to below these thresholds. These identified measures shall be incorporated into appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning and Engineering Division. Mitigation measures to reduce construction-related emissions could include, but are not limited to:

- Using construction equipment rated by the United States Environmental Protection Agency (EPA) as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower (hp). A list of construction equipment by type and model year shall be maintained by the construction contractor on-site, which shall be available for City review upon request.
- Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards.
- Use of alternative-fueled or catalyst-equipped diesel construction equipment, if available and feasible.
- Clearly posted signs that require operators of trucks and construction equipment to minimize idling time (e.g., five-minute maximum).
- Preparation and implementation of a fugitive dust control plan that may include the following measures:
- Disturbed areas (including storage piles) that are not being actively utilized for construction purposes shall be effectively stabilized using water, chemical stabilizer/suppressant, or covered with a tarp or other suitable cover (e.g., revegetated).
- On-site unpaved roads and off-site unpaved access roads shall be effectively stabilized using water or chemical stabilizer/suppressant.
- Land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled utilizing application of water or by presoaking.
- Material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained when materials are transported off-site.
- Operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden.) (Utilize electric-powered vacuums or devices to capture materials.)
- Following the addition of materials to or the removal of materials from the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.

- Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.
- Limit traffic speeds on unpaved roads to 15 miles per hour (mph).
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.
- Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the project area.
- Adhere to Regulation VIII's 20 percent opacity limitation, as applicable.

Enter into a Voluntary Emissions Reduction Agreement (VERA) with the SJVAPCD. The VERA shall identify the amount of emissions to be reduced, in addition to the amount of funds to be paid by the project applicant to the SJVAPCD to implement emission reduction projects required for the project.

MM AQ-3 Prior to discretionary approval by the City of Stockton for development projects subject to California Environmental Quality Act (CEQA) review (i.e., non-exempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation phase-related air quality impacts to the City of Stockton Planning and Engineering Division for review and approval. The evaluation shall be prepared in conformance with San Joaquin Air Pollution Control District (SJVAPCD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the SJVAPCD adopted thresholds of significance, as identified in the Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), the City of Stockton Planning and Engineering Division shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions can include, but are not limited to the following:

- For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.
- Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.
- Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with Section 2485 of 13 California Code of Regulations Chapter 10.
- Provide changing/shower facilities as specified, at minimum, or greater than in the guidelines in Section A5.106.4.3 of the CALGreen Code (Nonresidential Voluntary Measures).

- Provide bicycle parking facilities equivalent to or greater than as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code.
- Provide preferential parking spaces for low-emitting, fuel efficient, and carpool/van vehicles equivalent to or greater than Section A5.106.5.1 of the CALGreen Code (Nonresidential Voluntary Measures).
- Provide facilities to support electric charging stations per Section A5.106.5.3 (Nonresidential Voluntary Measures) and Section A5.106.8.2 (Residential Voluntary Measures) of the CALGreen Code.
- Applicant-provided appliances shall be Energy Star-certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star-certified or equivalent appliances shall be verified by Building and Safety during plan check.
- Applicants for future development projects along existing and planned transit routes shall coordinate with the City Stockton and San Joaquin Regional Transit District to ensure that bus pad and shelter improvements are incorporated, as appropriate, and that these transit improvements consider and implement design features (e.g., pullout lanes for buses) to avoid or reduce impediment/queueing of vehicles.
- Applicants for future development projects shall enter into a Voluntary Emissions Reduction Agreement (VERA) with the SJVAPCD. The VERA shall identify the amount of emissions to be reduced, in addition to the amount of funds to be paid by the project applicant to the SJVAPCD to implement emission reduction projects required for the project.

MM AQ-4a Implement MM AQ-2 and MM AQ-3 to further reduce construction and operation-related criteria air pollutant emissions.

MM AQ-4b Prior to discretionary approval, applicants for development projects that are subject to the California Environmental Quality Act (CEQA) shall assess their projects to the San Joaquin Valley Air Pollution Control District's (SJVAPCD) Rule 9510 Applicability Thresholds as follows:

- 50 residential units;
- 2,000 square feet of commercial space;
- 25,000 square feet of light industrial space;
- 100,000 square feet of heavy industrial space;
- 20,000 square feet of medical office space;
- 39,000 square feet of general office space;
- 9,000 square feet of education space;
- 10,000 square feet of government space;
- 20,000 square feet of recreational space; or
- 9,000 square feet of space not identified above.

Applicants for development projects subject to CEQA that do not meet the SJVAPCD Rule 9510 Applicability Thresholds shall assess whether project-related construction and operational emissions exceed the SJVAPCD 100 pounds per day ambient air quality screening threshold. Applicants for development projects that exceed this ambient air quality screening threshold shall prepare or have prepared an ambient air quality analysis, consistent with the SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), to assess whether the subject development project would cause or contribute to a violation of any California Ambient Air Quality Standard or National Ambient Air Quality Standard. The ambient air quality analysis shall identify measures to reduce impacts, as necessary. Recommended measures may include those identified in MM AQ-2 and MM AQ-3. The related recommendations of the ambient air quality analysis shall be incorporated into all construction management and design plans and shall be submitted to the City and verified by the City's Planning and Engineering Division.

MM AQ-5 Prior to discretionary project approval, applicants for industrial or warehousing land uses in addition to commercial land uses that would generate substantial diesel truck travel (i.e., 100 diesel trucks per day or 40 or more trucks with diesel-powered Transport Refrigeration Units (TRUs) per day based on the California Air Resources Board recommendations for siting new sensitive land uses), shall contact the San Joaquin Valley Air Pollution Control District (SJVAPCD) or the City of Stockton in conjunction with the SJVAPCD to determine the appropriate level of Health Risk Assessment (HRA) required. If preparation of an HRA is required, all HRAs shall be submitted to the City of Stockton and the SJVAPCD for evaluation.

The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment (OEHHA) and the SJVAPCD. If the HRA shows that the incremental cancer risk exceeds 10 in one million (10E-06) or the risk thresholds in effect at the time a project is considered, or that the appropriate non-cancer hazard index exceeds 1.0 or the thresholds as determined by the SJVAPCD at the time a project is considered, the applicant will be required to identify and demonstrate that measures are capable of reducing potential cancer and non-cancer risks to an acceptable level, including appropriate enforcement mechanisms.

Measures to reduce risk impacts may include but are not limited to:

- Restricting idling on-site beyond Air Toxic Control Measures idling restrictions, as feasible.
- Electrifying warehousing docks.
- Requiring use of newer equipment and/or vehicles.
- Restricting off-site truck travel through the creation of truck routes.

Measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the proposed project.

MM AQ-6 Prior to project approval, if it is determined during project-level environmental review that a project has the potential to emit nuisance odors beyond the property line, an odor management plan shall be prepared and submitted by the project applicant prior to project approval to ensure compliance with San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4102. The following facilities that are within the buffer distances specified from sensitive receptors (in parentheses) have the potential to generate substantial odors:

- Sanitary Landfill (1 mile)
- Transfer Station (1 mile)
- Composting Facility (1 mile)
- Petroleum Refinery (2 miles)
- Asphalt Batch Plan (1 mile)
- Chemical Manufacturing (1 mile)
- Fiberglass Manufacturing (1 mile)
- Painting/Coating Operations (1 mile)
- Food Processing Facility (1 mile)
- Feed Lot/ Dairy (1 mile)
- Rendering Plant (1 mile)

The odor management plan prepared for these facilities shall identify control technologies that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. Control technologies may include but are not limited to scrubbers (e.g., air pollution control devices) at an industrial facility. Control technologies identified in the odor management plan shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact. Current Air Quality Plans (AQPs) provides the following criteria for determining project consistency:

1. Will the project support the primary goals of the AQP?
2. Will the project comply with applicable control measures in the AQP?
3. Will the project disrupt or hinder implementation of any AQP control measures?

The use of the criteria listed above is a standard approach for CEQA analysis of projects in the SJVAPCD's jurisdiction, as well as within other air districts, for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- AQP emissions inventories and attainment modeling are based on growth assumptions for the area within the air district's jurisdiction.
- AQPs rely on a set of air district-initiated control measures as well as implementation of federal and State measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

AQPs are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine whether the Air Basin can reach attainment for the ambient air quality standards. To show attainment of the standards, the SJVAPCD analyzes the growth projections in the valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures.

Criterion 1

A measure for determining whether the proposed project supports the primary goals of the AQP is if the proposed project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs. The development of the AQP is based in part on the land use general plan determinations of the various cities and counties that constitute the Air Basin. The Stockton 2035 General Plan Land Use Map adopted in 2007 and the Envision Stockton 2040 General Plan Land Use Element designates the project site as Industrial and has pre-zoned it as I-L, Industrial. The proposed project is a warehouse development intended to be used primarily for a commercial warehouse and logistics facility accommodating the storage and transport of commercial goods. Therefore, the proposed project's operational use as a warehouse development would be considered consistent with the site's General Plan land use designation. Additionally, the land use designation was adopted before the AQPs were most recently updated. Because the proposed project would be consistent with land use assumptions used in the AQPs, it is reasonable to conclude that the proposed project would not adversely affect the AQPs.

Criterion 2

The AQP contains a number of control measures, which are enforceable requirements through the adoption of rules and regulations. A detailed description of rules and regulations that apply to the proposed project is provided in the Air Quality, GHG Emissions, and Energy Report. The proposed project would comply with all applicable SJVAPCD rules and regulations through the issuance of applicable permits and applications. Therefore, the proposed project complies with this criterion and would not conflict with or obstruct implementation of the applicable air quality attainment plan for this criterion.

Criterion 3

A measure of determining whether the proposed project is consistent with the AQPs is if the proposed project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs. Because of the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}, if project-generated emissions of either of the ozone precursor pollutants (ROG and NO_X), PM_{10}, or $PM_{2.5}$ would exceed the SJVAPCD's significance thresholds, then the proposed project would be considered to conflict with the attainment plans.

As discussed in Impact 2.3(b) below, annual emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ associated with the construction and operation of the proposed project would not exceed the SJVAPCD's significance thresholds. As shown in Impact 2.3(b), the proposed project would not result in CO hotspots that would violate CO standards. Therefore, the proposed project would not contribute to air quality violations.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

Less than significant impact. Air pollutant emissions have regional effects and localized effects. This analysis assesses the regional effects of the proposed project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the proposed project.

The primary pollutants of concern during project construction and operation are ROG, NO_x, PM_{10}, and $PM_{2.5}$. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_x, ROG, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$.[16]

Ozone is a secondary pollutant that can be formed miles from the source of emissions, through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. The Air Basin often exceeds the State and national ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The Air Basin also exceeds air quality standards for PM_{10} and $PM_{2.5}$; therefore, substantial project emissions may contribute to an exceedance for these pollutants. The SJVAPCD's annual emission significance thresholds used for the project define the substantial contribution for both operational and construction emissions as follows:

- 100 tons per year CO
- 10 tons per year NO_X
- 10 tons per year ROG
- 27 tons per year SO_X
- 15 tons per year PM_{10}
- 15 tons per year $PM_{2.5}$

[16] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts.

The proposed project does not contain sources that would produce substantial quantities of SO_2 emissions during construction and operation.

Construction Emissions

The proposed project construction would start with site preparation beginning in April of 2024 and would end in December 2024. In addition, the proposed project would require an off-site sewer trench in South McKinley Avenue, extending approximately 2,400 feet north of the site (Exhibit 6). The off-site construction would occur in April 2024. The proposed construction schedule and equipment assignment presented in Air Quality, GHG Emissions, and Energy Report are based on California Emissions Estimator Model (CalEEMod) defaults with a building construction duration to match the applicant's schedule for the warehouse construction, by shortening the construction slightly appropriate to the type of construction and assuming that painting and paving occur at the same time.

Table 1 summarizes the criteria pollutant emissions from construction of the proposed project and compares these emissions to the SJVAPCD's regional thresholds of significance. It should be noted that unmitigated construction emissions incorporate the basic dust control measures required under District Rule 8201, which requires that vehicle speeds on unpaved roads and surfaces be reduced to no more than 15 miles per hour and exposed construction areas are watered during earthmoving activities.

Table 1: Regional Construction Air Pollutant Emissions

Project Construction Activity	Emissions (tons)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Site Preparation	0.02	0.21	0.18	< 0.0005	0.053	0.029
Grading	0.01	0.09	0.10	< 0.0005	0.018	0.011
Building Construction	0.12	1.01	1.36	0.002	0.11	0.055
Paving	0.01	0.04	0.05	< 0.0005	0.003	0.002
Architectural Coating	0.45	0.01	0.01	< 0.0005	0.001	< 0.0005
Off-site Construction	0.001	0.015	0.013	< 0.0005	0.002	0.001
Annual Emissions	**0.62**	**1.38**	**1.7**	**0.002**	**0.187**	**0.098**
SJVAPCD Annual Thresholds	10	10	100	27	15	15
Do Construction Emissions Exceed Regional Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
SO_X = sulfur oxides
Totals may not add up due to rounding. CalEEMod Output files are contained in Appendix A.

Table 1 shows that criteria pollutant emissions would not exceed any of the SJVAPCD's regional thresholds of significance during unmitigated construction of the proposed warehouse project. General Plan EIR MMs AQ-2 AQ-4a require project applicants to prepare a technical assessment evaluating potential project construction phase-related air quality impacts. The analysis of regional pollutant emissions generated by construction of the project, summarized above, fulfills the requirements of these General Plan MMs.

Operational Emissions

Emissions from the operation of the facility would be from stationary and area sources of emissions at the project site itself and from mobile sources (i.e., vehicles) associated with the operation of the warehouse.

The facility has planned for a diesel- fueled fire pump but no other stationary sources such as boilers or emergency standby generators are anticipated.

There are no sources of air pollutant related to the industrial operations inside of the warehouse since all of the material handling equipment is electric (e.g., battery electric forklifts and electric pallet jacks). Area sources refer to VOC compound emissions from use of consumer products by employee (cosmetics and personal care products) and also include emissions from cleaning products including detergents, cleaning compounds, polishes, floor finishes. Emissions from exhaust of any gasoline-fueled landscaping equipment also contribute to, and are included in, the area source emissions. The proposed project would not provide connections for natural gas usage so there would be no future natural gas use in the building for heating or cooking, although those estimates were included in the emissions estimates as a worst-case scenario. There would be no emissions from the proposed project due to natural gas energy use.

The warehouse operations will generate both employee and visitor passenger vehicle trips and truck trips which are mobile sources of both criteria pollutant and TAC emissions. On-site idling will generate small amounts of emissions at the site; however, regulations limit this idling to less than 5 minutes per occurrence and the on-site emissions will be minimal. Signs would be posted at the facility to facilitate compliance with the regulation. Signs also directing truck traffic into and out of the facility would ensure smooth traffic flow and avoid wasteful queueing and idling. The Advanced Mobility Group produced a Transportation Impact Study (TIA)[17] for the proposed project that estimated the proposed project would generate 378 daily passenger vehicle trips and 20 daily truck trips. The Air Quality Analysis and CalEEMod estimates are conservatively based on CalEEMod defaults for Vehicle Miles Traveled (VMT) trip length.

Table 2 summarizes the proposed project's emissions from these sources.

[17] Advanced Mobility Group. 2022. Traffic Impact Study for the Proposed Industrial Development at 6505 South McKinley Avenue East, Stockton, California.

Table 2: Unmitigated Operational Pollutant Emissions (2025)

Emission Source	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	0.88	0.01	0.72	< 0.005	< 0.005	< 0.005
Energy	< 0.005	0.06	0.05	< 0.005	< 0.005	< 0.005
Stationary Source	0.01	0.03	0.03	< 0.005	< 0.005	< 0.005
Mobile	0.19	0.86	2.02	0.01	0.29	0.07
Project Total	**1.08**	**0.96**	**2.82**	**0.01**	**0.29**	**0.07**
SJVAPCD Annual Thresholds	10	10	100	27	15	15
Do Operational Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
SO_X = sulfur oxides
Totals may not add up due to rounding.
Source: CalEEMod Output files are contained in Appendix A.

As shown in Table 2, operational emissions are well below the SJVAPCD's regional significance thresholds for all pollutants. General Plan EIR MMs AQ-1, AQ-3, and AQ-4a require project applicants to prepare a technical assessment evaluating potential project operational phase-related air quality impacts. The analysis of regional pollutant emissions generated by project operations, summarized above, fulfills the requirements of these General Plan MMs.

Localized Pollutant Analysis

Emissions occurring at or near the project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard.

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after compliance with Rule 9510 and implementation of all enforceable mitigation measures would require preparation of an ambient air quality analysis. The criteria pollutants of concern for localized impact in the Air Basin are PM_{10}, $PM_{2.5}$, nitrogen dioxide (NO_2), and CO. CO violations require heavy

traffic volumes and extreme traffic congestion that would not occur at or near the project site; therefore, operational CO emission hotspots are highly unlikely.

An analysis of maximum daily emissions during construction and operation was conducted to determine whether emissions would exceed the 100 pounds per day screening threshold for any pollutant of concern. The maximum daily model has adjusted both construction and operational trips to be 0.25 mile to represent on-site emissions of on-road trucks visiting the site. The results of the analysis are presented in Table 3 and Table 4. The proposed project would not exceed daily emission thresholds during construction and operation for any pollutant of concern. Operational emissions include emissions generated on-site by area sources such as natural gas combustion and landscape maintenance, and on-site travel from motor vehicles accessing the project.

Table 3: Maximum On-site Daily Air Pollutant Emissions During Construction

Source	On-site Emissions (pounds per day)[1]				
	ROG	NO_x	CO	PM_{10} (Total)	$PM_{2.5}$ (Total)
Site Preparation	4	37	34	9.3	5.4
Grading	2	18	19	3.6	2.1
Building Construction	2	12	14	0.5	0.5
Architectural Coating and Paving	92	9	12	0.4	0.4
Maximum Daily Emissions	**92**	**37**	**34**	**9.3**	**5.4**
Screening threshold	100	100	100	100	100
Exceed screening threshold?	No	No	No	No	No

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
[1] PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions.
Source of Emissions: CalEEMod Output (Appendix A).
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19.

Table 4: Maximum On-site Daily Air Pollutant Emissions During Operations

Source	On-site Emissions (pounds per day)[1]				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Daily	7	2	12	0.1	0.1
Screening threshold	100	100	100	100	100
Exceed screening threshold?	No	No	No	No	No

Source	On-site Emissions (pounds per day)[1]				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Notes: CO = carbon monoxide NO_X = nitrogen oxides PM_{10} = particulate matter less than 10 microns in diameter $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter ROG = reactive organic gases Source of Emissions: CalEEMod Output (Appendix A). Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19.					

The proposed project would not exceed SJVAPCD screening thresholds for requiring additional ambient air quality modeling; therefore, the proposed project's localized criteria pollutant impacts are less than significant.

Summary

In summary, regional emissions generated by the proposed project would not exceed any applicable thresholds after compliance with all rules, regulations, and application of General Plan MM AQ-1, MM AQ-3, MM AQ-4a, and MM AQ-4b during either construction or operation. Localized construction and operational emissions would also be less than significant after incorporation of the required General Plan mitigation. In summary, the overall impacts would be less than significant. No project-specific mitigation measures are required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools.

Construction: Reactive Organic Gases

ROG is emitted during the application of architectural coatings (painting). The amount emitted is dependent on the amount of ROG (or VOC) in the paint. ROG emissions are typically an indoor air quality health hazard concern rather than an outdoor air quality health hazard concern. Therefore, exposure to ROG during architectural coatings is a less than significant health impact.

There are three types of asphalt that are typically used in paving: asphalt cements, cutback asphalts, and emulsified asphalts. However, SJVAPCD Rule 4641 prohibits the use of the following types of asphalt: rapid cure cutback asphalt; medium cure cutback asphalt; slow cure asphalt that contains more than 0.5 percent of organic compounds that evaporate at 500°F or lower; and emulsified asphalt containing organic compounds, in excess of 3 percent by volume that evaporate at 500°F or lower. An exception to this is medium cure asphalt when the National Weather Service official forecast of the high temperature for the 24-hour period following application is below 50°F.

The acute (short-term) health effects from worker direct exposure to asphalt fumes include irritation of the eyes, nose, and throat. Other effects include respiratory tract symptoms and pulmonary function changes. The studies were based on occupational exposure of fumes. Residents are not in the immediate vicinity of the fumes; therefore, they would not be subjected to concentrations high enough to evoke a negative response. In addition, the restrictions that are placed on asphalt in the San Joaquin Valley reduce ROG emissions from asphalt and exposure. The impact to nearby sensitive receptors from ROG during construction is less than significant.

Operation: Reactive Organic Gases

During operation, ROG would be emitted primarily from motor vehicles. Direct exposure to ROG from project motor vehicles would not result in health effects, because the ROG would be distributed across miles and miles of roadway and in the air. The concentrations would not be great enough to result in direct health effects.

Construction: NO_X, PM_{10}, and $PM_{2.5}$

As discussed in Impact 2.3(b), emissions during construction would not exceed the significance thresholds and would not be expected to result in concentrations that would exceed ambient standards or contribute substantially to an existing exceedance of an ambient air quality standard.

Operation: NO_X, PM_{10}, and $PM_{2.5}$

As discussed in Impact 2.3(b), localized concentrations of NO_X, PM_{10}, and $PM_{2.5}$ would not exceed the ambient air quality standards. Therefore, the proposed project would not expose sensitive receptors to substantial criteria air pollutant concentrations during operation.

Toxic Air Contaminants

Project construction would involve the use of diesel-fueled vehicles and equipment that emit DPM, which is considered a TAC. The SJVAPCD's latest threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million). The SJVAPCD's 2015 GAMAQI does not currently recommend analysis of TAC emissions from project construction activities, but instead focuses on projects with operational emissions that would expose sensitive receptors over a typical lifetime of 70 years.

Toxic Air Pollutants—On-site Workers

A variety of State and national programs protect workers from safety hazards, including high air pollutant concentrations.[18,19]

On-site workers are not required to be addressed through this Health Risk Assessment (HRA) process. A document published by the California Air Pollution Control Officers Association (CAPCOA), Health Risk Assessments for Proposed Land Use Projects, indicates that on-site receptors are

[18] Southern California Gas Company (SoCalGas). 2023. Methane and Health and Safety. Website: https://www.socalgas.com/stay-safe/methane-emissions/methane-and-health-and-safety#:~:text=Methane%20is%20non%2Dtoxic%20and,oxygen%20may%20result%20in%20suffocation. Accessed March 21, 2023.

[19] Centers for Disease Control and Prevention (CDC). 2012. Construction. Website: www.cdc.gov/niosh/construction/. Indoor Environmental Quality. Website: www.cdc.gov/niosh/topics/indoorenv/constructionieq.html. Accessed March 21, 2023.

included in risk assessments if they are persons not employed by the proposed project.[20] Therefore, an HRA for on-site workers is not required or recommended. No further discussion is necessary.

Construction Health Risk Assessment

During construction and operation, the proposed project would result in emissions of several TACs that could potentially impact nearby sensitive receptors. The SJVAPCD has defined health risk significance thresholds. These thresholds are represented as a cancer risk to the public and a non-cancer hazard from exposures to TACs. Cancer risk represents the probability (in terms of risk per million individuals) that an individual would contract cancer resulting from exposure to TACs continuously over a period of several years. The SJVAPCD's latest threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million). The principal TAC emission analyzed in this assessment was DPM from operation of off-road equipment and diesel-powered delivery and worker vehicles during construction and operation. DPM has been identified by the ARB as a carcinogenic substance. For purposes of this analysis, DPM is represented as exhaust emissions of PM_{10}. DPM represented as exhaust PM_{10} adequately addresses impacts from PM_{10} and $PM_{2.5}$ emissions, as $PM_{2.5}$ comprises a component of PM_{10}. Fugitive dust components of PM_{10} and $PM_{2.5}$ would be controlled through the use of required dust control practices during project construction.

Exposures to TACs can also result in both short-term (acute) or long-term (chronic) non-cancer health impacts. Such impacts could include illnesses related to reproductive effects, respiratory effects, eye sensitivity, immune effects, kidney effects, blood effects, central nervous system, birth defects, or other adverse environmental effects.

Estimation of Cancer Risks

Cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer as a direct result of exposure to potential carcinogens over a specified exposure duration. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 10 in a million implies a likelihood (or risk) that up to 10 persons out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer risk that is in addition to any environmental cancer risk borne by a person not exposed to these air toxics.

The California Office of Environmental Health Hazard Assessment (OEHHA) has developed guidance for estimating cancer risks that considers the increased sensitivity of infants and adults to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from the construction and operation of the proposed project.

The recommended method for the estimation of cancer risk is shown in the equations.

$$\text{Cancer Risk} = C_{DPM} \times \text{Inhalation Exposure Factor} \quad \text{(EQ-1)}$$

[20] California Air Pollution Control Officers Association (CAPCOA). 2009. Health Risk Assessments for Proposed Land Use Projects.

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

C_{DPM} = Period average DPM air concentration calculated from the air dispersion model in $\mu g/m^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

$$\text{Inhalation Exposure Factor} = CPF \times EF \times ED \times DBR \times AAF/AT \quad \text{(EQ-2)}$$

Where:

CPF = Inhalation cancer potency factor for the TAC: 1.1 $(mg/kg\text{-}day)^{-1}$ for DPM
EF = Exposure frequency (days/year)
ED = Exposure duration (years of construction)
AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rates (DBR), and time at home factors (TAH)
AT = Averaging time period over which exposure is averaged (days)

Estimation of Chronic Non-Cancer Hazards

An evaluation of potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate Reference Exposure Level (REL). Available RELs promulgated by OEHHA were considered in the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as an HI. The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the REL.

To quantify non-carcinogenic impacts, the HI approach was used.

$$HI = C_{ann}/REL \quad \text{(EQ-3)}$$

Where:

HI = chronic hazard index
C_{ann} = annual average concentration of TAC as derived from the air dispersion model ($\mu g/m^3$)
REL = reference exposure level above which a significant impact is assumed to occur ($\mu g/m^3$)

The HI assumes that chronic exposures to TACs adversely affect a specific organ or organ system (toxicological endpoint) of the body. For each discrete chemical exposure, target organs presented in

regulatory guidance were used. To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds 1, a health hazard is presumed to exist. OEHHA has defined a REL for DPM of 5 $\mu g/m^3$. The principal toxicological endpoint assumed in this assessment was through inhalation.

Toxic Air Contaminant Construction Analysis

Major sources of DPM during construction include off-road construction equipment and heavy-duty delivery truck activities. The results of the HRA prepared for project construction for cancer risk and long-term chronic cancer risk are summarized below. Air dispersion modeling was utilized to assess the project's potential health risks using American Meteorological Society/EPA Regulatory Model (AERMOD) Version 22112 which is an air dispersion model accepted by the United States Environmental Protection Agency (EPA) and the SJVAPCD for preparing HRAs. Exhaust emissions of DPM (as PM_{10} exhaust) were estimated using CalEEMod Version 2022.1.

The estimated health and hazard Impacts at the Maximally Impacted Sensitive Receptor (MIR) from the project's construction emissions are provided in Table 5. The MIR was determined to be a single-family home located 440 feet southwest of the project site.

Table 5: Estimated Health Risks and Hazards During Project Construction at the Maximum Impacted Receptor

Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI[1]
Unmitigated Risk and Hazards	0.8	0.001
Significance Threshold	**20**	**1**
Exceeds Individual Source Threshold?	**No**	**No**

Notes:
$\mu g/m^3$ = micrograms per cubic meter
DPM = diesel particulate matter
HI = hazard index
MIR = Maximally Impacted Sensitive Receptor
PM_{10} = particulate matter, including dust, 10 micrometers or less in diameter
REL = Reference Exposure Level
[1] Chronic non-cancer HI was estimated by dividing the maximum annual DPM concentration (as PM_{10} exhaust) by the REL of 5 $\mu g/m^3$.
[2] Risk is based on Infant Exposure starting in Third Trimester and over the construction period.
Source: Appendix A.
The MIR was determined to be a residence located at 7201 South McKinley Avenue, French Camp, CA 95231, approximately 440 feet from the project site.

As noted in Table 5, the proposed project's construction DPM emissions would not exceed the cancer risk significance threshold or non-cancer hazard index significance threshold at the MIR. Therefore, the proposed project would not result in a significant impact on nearby sensitive receptors from TACs during construction.

Toxic Air Pollutants Emitted from Operations of the Proposed Project

The proposed project would generate passenger vehicle trips from employees, visitors, and light-duty delivery vehicles traveling to and from the project site; however, the proposed project would also be served with daily truck deliveries. The main source of DPM from the long-term operations of warehouses is from combustion of diesel fuel in diesel-powered engines in heavy-duty trucks. Motor vehicle emissions refer to DPM exhaust emissions from the motor vehicle traffic that would travel to and from the project site each day. An estimate of the number of vehicle trips that the proposed project would generate was provided in the project-specific traffic analysis, which indicates the project will generate 20 truck trips per day.

The General Plan EIR, MM A-5 requires industrial or warehousing land uses that would generate substantial diesel truck travel (i.e., 100 diesel trucks per day or 40 or more trucks with diesel-powered TRUs per day based on ARB recommendations for siting new sensitive land uses) to coordinate with the SJVAPCD and determine the appropriate level of HRA required in such cases.

Since the proposed project will generate only 20 truck trips per day, it would not be considered to generate substantial diesel truck traffic. Therefore, an HRA and consultation is not required and health risks from operation of the facility, including DPM emissions from trucks, are considered to be less than significant.

Exposure to Naturally Occurring Asbestos and Valley Fever

As discussed in more detail in the Air Quality, GHG Emissions, and Energy Report, exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present. Review of the Department of Conservation maps indicates that the project site and San Joaquin County do not have reported historic asbestos mines, historic asbestos prospects, and other natural occurrences of asbestos.[21] Therefore, impacts associated with the project's potential to expose sensitive receptors to naturally occurring asbestos are less than significant.

As discussed in the report, the project site would have low probability of *C. immitis* (Valley Fever) growth on-site or exposure from disturbed soil. Compliance with dust control regulations would further reduce the potential to expose sensitive receptors to Valley Fever during construction. During operations, the project site would be built up and would not provide a conducive environment for Valley Fever. Therefore, impacts associated with the project's potential to expose sensitive receptors to Valley Fever are less than significant. No further analysis is needed.

d) Result in other emission (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant impact. Odors can cause a variety of responses. The impact of an odor is dependent on interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

According to the SJVAPCD, analysis of potential odor impacts should be conducted for the following two situations:

- **Generators:** projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate, and
- **Receivers:** residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

The SJVAPCD provides a suggested screening distance for a variety of odor-generating land uses and operations. Those distances are used as a guide to assess whether nearby facilities could be sources of significant odors. Projects that would site a new sensitive receptor farther than the applicable screening distances from an existing odor source are not likely to have a significant impact. These screening distances by type of odor generator are listed in Table 6.

Table 6: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: Source: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). February 19.	

The proposed project is not in the category of generator sources listed in Table 6 and warehouses are not known sources of odorous emissions. Furthermore, the project is an industrial project and is not considered a sensitive receptor that would need to consider impacts as a "receiver." There are no significant concerns related to odors or a need for further odor assessment of the project operations.

The proposed project has the potential to emit odors during construction activities from sources such as the exhaust from diesel-fueled construction equipment, or during the application of architectural coatings. However, because of the low intensity of these emissions, intermittent and short-term nature of construction activities, and highly diffusive properties of diesel exhaust, a

substantial number of nearby receptors would not be affected by odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site. The proposed project would utilize typical construction techniques, and odors would be typical of most construction-sites and temporary in nature. The proposed project would not have the potential to emit nuisance odors beyond the property line, therefore, MM AQ-6 is satisfied by the analysis included in this document; an odor management plan would not applicable for this project and no project-specific mitigation measures related to odor are required. This impact would be less than significant.

Mitigation Measures

No project-specific mitigation is required. The air quality technical analysis included as Appendix A of this IS/MND and summarized above fulfills the requirements of General Plan MMs AQ-1, MM AQ-2, MM AQ-3, MM AQ-4a, MM AQ-5, and MM AQ-6. General Plan MM AQ-4b would remain applicable to the project.

MM AQ-4b Prior to discretionary approval, applicants for development projects that are subject to the California Environmental Quality Act (CEQA) shall assess their projects to the San Joaquin Valley Air Pollution Control District's (SJVAPCD) Rule 9510 Applicability Thresholds as follows:

- 50 residential units;
- 2,000 square feet of commercial space;
- 25,000 square feet of light industrial space;
- 100,000 square feet of heavy industrial space;
- 20,000 square feet of medical office space;
- 39,000 square feet of general office space;
- 9,000 square feet of education space;
- 10,000 square feet of government space;
- 20,000 square feet of recreational space; or
- 9,000 square feet of space not identified above.

Applicants for development projects subject to CEQA that do not meet the SJVAPCD Rule 9510 Applicability Thresholds shall assess whether project-related construction and operational emissions exceed the SJVAPCD 100 pounds per day ambient air quality screening threshold. Applicants for development projects that exceed this ambient air quality screening threshold shall prepare or have prepared an ambient air quality analysis, consistent with the SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), to assess whether the subject development project would cause or contribute to a violation of any California Ambient Air Quality Standard or National Ambient Air Quality Standard. The ambient air quality analysis shall identify measures to reduce impacts, as necessary. Recommended measures may include those identified in MM AQ-2 and MM AQ-3. The related recommendations of the ambient air quality analysis shall be incorporated into all construction management and design plans and shall be submitted to the City and verified by the City's Planning and Engineering Division.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.4 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 Wildlife or United States 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, and regulations or by the California Department of Fish and Wildlife or United States 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 wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
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?	☐	☒	☐	☐

Environmental Evaluation

Setting

The project parcel is in the San Joaquin Valley bioregion near the center of California's Central Valley. The site is part of the southern French Camp district of the City of Stockton, surrounded by suburban, industrial, and agricultural zones. For many decades the site has been used for agriculture. The site is bordered by South McKinley Avenue to the east and French Camp Slough to the west and south. French Camp Slough is a perennial stream with a substantial valley oak (*Quercus lobata*) riparian corridor (Exhibit 8). Open areas are dominated by non-native grasses and bare ground. The

soils are mainly Stockton and Galt clay, which are somewhat poorly drained. The relatively flat, low elevation (10-15 feet above mean sea level) site does not have obvious concentrated surface flows into French Camp Slough, but precipitation may percolate and flow underground to the Slough. The Slough flows north into the San Joaquin River, which drains to San Francisco Bay. 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 Wildlife or United States Fish and Wildlife Service?

Less than significant impact with mitigation incorporated.

Special-status Plants

The 2022 Biological Resources Assessment (Appendix B) documents 25 special-status plant species for the *Stockton West*, United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, and the eight surrounding USGS quadrangles.[8,9] However, 16 of these species are not expected to occur on the project site, based on the absence of suitable habitat. Nine special-status plant species have at least low potential to occur in the adjacent riparian corridor of French Camp Slough (Appendix B, Appendix A), albeit not necessarily within the proposed development footprint. Therefore, no significant impacts on special-status plant species are anticipated.

Special-Status Wildlife Covered Under SJMSCP

The 2022 Biological Resources Assessment (Appendix B) identifies 21 special-status wildlife species for the *Stockton West*, USGS 7.5-minute Topographic Quadrangle Map, and the eight surrounding USGS quadrangles.[10,11] However, 11 special-status wildlife species are not expected to occur within the project site, based on the absence of suitable habitat. Ten special-status wildlife species have at least low potential to occur within the project site (Appendix B, Appendix A), albeit not necessarily within the proposed development footprint. The avoidance, minimization, and compensatory mitigation measures required by the SJMSCP are intended to reduce any impacts on these species to a less than significant level.

Valley Elderberry Longhorn Beetle

Per the SJMSCP, within San Joaquin County distribution of the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) includes elderberry (*Sambucus spp.*) and all valley floor riparian and foothill habitats that support elderberry. No stands of elderberry were observed within the project site; however, presence of individual elderberry shrubs within the riparian corridor of French Camp Slough nearby cannot be ruled out.

The proposed project would not result in direct impacts to the riparian corridor of French Camp Slough (Exhibit 8). No valley elderberry longhorn beetle habitat is present outside the riparian corridor. Therefore, the project would not have direct impacts on this species or this species habitat. The construction of the proposed project could result in dust that may coat and potentially adversely impact this species, if present. However, with implementation of MM BIO-1 and MM BIO-3, requiring coverage through the SJMSCP, and avoidance of direct and indirect impacts on the riparian and

aquatic habitats of French Camp Slough, potential project-related impacts on this species can be reduced to a less than significant level.

Western Pond Turtle

French Camp Slough and its associated riparian corridor and adjacent upland grassland provides potential suitable habitat for this species.

The proposed project would not result in direct impacts on the aquatic habitat and riparian corridor of French Camp Slough. However, western pond turtle (*Actinemys marmorata*) could disperse into the ruderal grassland area and agricultural field in search of upland nesting opportunities. Therefore, the proposed project could have direct impacts on this species through construction equipment resulting in take of western pond turtle and their nests, if present. However, with implementation of MM BIO-1 and MM BIO-3, requiring coverage through the SJMSCP, and avoidance of direct and indirect impacts on the riparian and aquatic habitats of French Camp Slough, potential project-related impacts on this species can be reduced to a less than significant level.

Giant Garter Snake

French Camp Slough and its associated riparian corridor and adjacent upland grassland provides potential suitable habitat, including overwintering habitat, for this species.

The proposed project would not result in direct impacts on the aquatic habitat and riparian corridor of French Camp Slough. However, giant garter snakes (*Thamnophis gigas*) could disperse into the ruderal grassland area and agricultural field in search of upland overwintering opportunities. Therefore, the project could have direct impacts on this species from construction equipment resulting in take of this species if present. However, with implementation of MM BIO-1 and MM BIO-3, requiring coverage through the SJMSCP, and avoidance of direct and indirect impacts on the riparian and aquatic habitats of French Camp Slough, potential project-related impacts on this species can be reduced to a less than significant level.

Specifically, the San Joaquin Council of Governments (SJCOG) requires a temporary construction setback of 200 feet from the banks of French Camp Slough for giant garter snakes from October 2 to April 30. The buffer can be reduced at the discretion of the Habitat Technical Advisory Committee (HTAC) and Board. The time period in which the proposed project may build within that 200-foot buffer is from May 1 to October 1, when giant garter snakes are not potentially burrowing in the banks of the Slough.

Tricolored Blackbird

Tricolored blackbird (*Agelaius tricolor*) nesting habitat is present within the riparian corridor of French Camp Slough adjacent to the project site.

The proposed project would not result in direct impacts on the riparian corridor of French Camp Slough. However, the construction of the proposed project could result in indirect disturbance of a tricolored blackbird nesting colony (if present) through excessive noise, dust, and other construction-related disturbance. However, with implementation of MM BIO-1 and MM BIO-3, requiring pre-construction nesting bird surveys and nest avoidance, coverage for this species through the SJMSCP,

and avoidance of impacts on the riparian and aquatic habitats of French Camp Slough, potential project-related impacts on this species can be reduced to a less than significant level.

Burrowing Owl

The upland herbaceous portions of the project site, including the agricultural field under certain conditions (e.g., if left fallow and mowed or grazed, and if colonized by ground squirrels), could potentially provide burrowing owl (*Athene cunicularia*) habitat.

The proposed project would result in direct impacts on these areas through grading, resulting in adverse impacts on this species, if present. However, with implementation of MM BIO-1 and MM BIO-3, requiring pre-construction nesting bird surveys and nest avoidance, coverage for this species through the SJMSCP, and avoidance of impacts on the riparian and aquatic habitats of French Camp Slough, potential project-related impacts on this species can be reduced to a less than significant level.

Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is listed as threatened under CEQA and is a covered species under the SJMSCP, Fish and Game Code, and Migratory Bird Treaty Act (MBTA). Up to four Swainson's hawk nests have been documented in the past by California Natural Diversity Database (CNDDB) on the project site and within disturbance distance. A stick nest consistent with the appearance of a nest of Swainson's hawk or other hawk species was observed in the tallest valley oak tree on the northern property boundary; however, whether this tree is a Swainson's hawk nest tree would need to be confirmed through protocol-level surveys. The agricultural field and ruderal/disturbed grassland (together approximately 10.36 acre on-site) and surrounding areas provide Swainson's hawk foraging habitat. Therefore, the probability of Swainson's hawks to nest and forage on-site is high.

The proposed project would result in both potential direct and indirect impacts related to Swainson's hawk. Direct impacts would occur if an occupied nest tree were to be removed, or if disturbance from construction activities would result in failure of a Swainson's hawk nest. Potential indirect impacts could occur if unoccupied but confirmed Swainson's hawk nest trees and foraging habitat is removed. Approximately 8.46 acres of Swainson's hawk foraging habitat in the form of agricultural field and ruderal grassland are proposed to be removed.

With implementation of MM BIO-1 and MM BIO-3, requiring pre-construction nesting bird surveys and nest avoidance, coverage for this species through the SJMSCP, implementing all SJMSCP-required avoidance, minimization and compensatory mitigation measures (including compensatory mitigation for loss of Swainson's hawk foraging habitat at a ratio determined by SJCOG), and avoidance of direct and indirect impacts on nests and occupied nest trees, potential project-related impacts on this species can be reduced to a less than significant level under CEQA Guidelines.

White-tailed Kite

This species has a moderate potential to nest in the trees on-site. Suitable nest trees and foraging habitat in the form of the agricultural field and ruderal/disturbed grassland (together approximately 10.36 acre on-site) and surrounding areas provide white-tailed kite (*Elanus leucurus*) foraging habitat.

The proposed project would result in both potential direct and indirect impacts related to white-tailed kite. Direct impacts would occur if an occupied nest tree were to be removed, or if disturbance from construction activities would result in failure of a white-tailed kite nest. Potential indirect impacts could occur if unoccupied but confirmed white-tailed kite nest trees and foraging habitat is removed. Approximately 8.46 acres of white-tailed kite foraging habitat in the form of agricultural field and ruderal grassland are proposed to be removed.

With implementation of MM BIO-1 and MM BIO-3, requiring pre-construction nesting bird surveys and nest avoidance, coverage for this species through the SJMSCP, implementing all SJMSCP-required avoidance, minimization and compensatory mitigation measures, and avoidance of direct and indirect impacts on nests and occupied nest trees, potential project-related impacts on this species can be reduced to a less than significant level under CEQA.

Loggerhead Shrike

This species has a moderate potential to nest in the shrubs on-site, including in shrubs potentially to be removed or disturbed by the proposed project. Loss of an active loggerhead shrike (*Lanius ludovicianus*) nest would be a significant impact on this species.

However, with implementation of MM BIO-1 and MM BIO-3, requiring pre-construction nesting bird surveys and nest avoidance, coverage for this species through the SJMSCP, implementing all SJMSCP-required avoidance, minimization and compensatory mitigation measures, and avoidance of direct and indirect impacts on nests and nest trees, potential project-related impacts on this species can be reduced to a less than significant level.

Song Sparrow ("Modesto" population)

Song sparrow (*Melospiza melodia mailliardi*) nesting habitat is present within the riparian corridor of French Camp Slough adjacent to the project site.

The proposed project would not result in direct impacts on the riparian corridor of French Camp Slough. However, the construction of the proposed project could result in indirect disturbance of song sparrow nests (if present) through excessive noise, dust, and other construction-related disturbance. However, with implementation of MM BIO-1 and MM BIO-3, requiring pre-construction nesting bird surveys and nest avoidance, coverage for this species through the SJMSCP, implementing all SJMSCP-required avoidance, minimization and compensatory mitigation measures, and avoidance of direct and indirect impacts on the riparian and aquatic habitats of French Camp Slough, potential project-related impacts on this species can be reduced to a less than significant level.

Least Bell's Vireo

Least Bell's vireo (*Vireo bellii*) nesting habitat is present within the riparian corridor of French Camp Slough adjacent to the project site.

The proposed project would not result in direct impacts to the riparian corridor of French Camp Slough. However, the construction of the proposed project could result in indirect disturbance of least Bell's vireo nests (if present) through excessive noise, dust, and other construction-related

disturbance. However, with implementation of MM BIO-1 and MM BIO-3, requiring pre-construction nesting bird surveys and nest avoidance, coverage for this species through the SJMSCP, implementing all SJMSCP-required avoidance, minimization and compensatory mitigation measures, and avoidance of direct and indirect impacts on the riparian and aquatic habitats of French Camp Slough, potential project-related impacts on this species can be reduced to a less than significant level.

Longfin Smelt and Delta Smelt

Both species (*Spirinchus thaleichthys* and *Hypomesus transpacificus*) have been documented downstream from French Camp Slough. Presence of vagrant individuals cannot be ruled out from occurring in the water column of French Camp Slough. The proposed project does not impact French Camp Slough directly. Therefore, no impacts on these species are anticipated.

The construction and operation of the proposed project could have indirect impacts on the water quality of French Camp Slough through erosion, sediment, and runoff of polluted stormwater. Therefore, the proposed project could result in potential impacts on aquatic habitats for special-status fish species occurring in French Camp Slough and other waterbodies downstream.

With implementation of MM BIO-1 and MM BIO-2, the proposed project would implement all water quality protection measures imposed by the SJCOG and the Regional Water Quality Control Board (RWQCB), and therefore any potential indirect impacts on aquatic special-status species would be reduced to less than significant.

Roosting Bats

The project site contains trees that could provide suitable bat roosting habitat, including for special-status bats such as the pallid bat. Potential direct and indirect impacts could occur to roosting bats due to removal of potential roosting habitat during project construction. Therefore, it is recommended that a roosting bat survey be conducted prior to the start of project construction, as described below in MM BIO-4.

Other Non-listed Species Covered Under the SJMSCP

The SJMSCP covers additional species that are not listed by State or federal resource agencies. These include more common species including Ferruginous hawk, great egret, great blue heron, short-eared owl, Cooper's hawk, sharp-shinned hawk, pocket mouse, and others. Potential impacts on any of these will be mitigated to a less than significant level by obtaining coverage by the SJMSCP as stated in MM BIO-1 and MM BIO-3.

Special-status Species Not Covered Under the SJMSCP

Steelhead–Central Valley Distinct Population Segment

Steelhead have been documented downstream of French Camp Slough in the San Joaquin River. French Camp Slough does not provide suitable spawning habitat, but presence of vagrant individuals cannot be ruled out. The proposed project does not impact French Camp Slough directly, therefore no direct impacts on this species are anticipated.

The construction and operation of the proposed project could have indirect impacts on the water quality of French Camp Slough and downstream reaches through sediment and polluted stormwater runoff. Therefore, the proposed project could result in potential indirect impacts on aquatic habitats for special-status fish species.

With implementation of MM BIO-2, the proposed project would implement all water quality protection measures imposed by the SJCOG and the RWQCB, and therefore any potential indirect impacts on aquatic special-status species would be reduced to less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

Less than significant impact with mitigation incorporated.

Valley Oak Riparian Forest and Woodland

As shown in Exhibit 9, no direct impacts on Valley Oak Riparian Forest and Woodland (0.35 acre within the project site) are proposed. Per communication with the SJCOG in April 2022, no permanent setback is required to avoid impacts on the riparian corridor.

Approximately 0.15 acre of Valley Oak Woodland and Forest (CDFW California Sensitive Natural Community 71.040.00 and protected under the SJMSCP) are proposed to be removed. The SJCOG offers compensatory mitigation for loss of Valley Oak Woodland and Forest through the SJMSCP permitting process. The applicant would be required to obtain a SJMSCP permit, as stated in MM BIO-1, above. With implementation of the mitigation requirements defined by the SJCOG, impacts to sensitive natural communities would be considered less than significant under CEQA.

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?

Less than significant impact with mitigation incorporated.

French Camp Slough is a protected water through federal and State regulations. No direct impacts are proposed to French Camp Slough. However, the construction and operation of the proposed project could have indirect impacts on the water quality of French Camp Slough and downstream reaches through sediment and polluted stormwater runoff. Therefore, the proposed project could result in potential impacts on State and federally protected waters.

With implementation of MM BIO-2 the proposed project would implement all water quality protection measures imposed by the SJCOG and the RWQCB, and therefore any potential indirect impacts on aquatic special-status species would be reduced to less than significant.

Source: Bing Aerial Imagery.

FIRSTCARBON SOLUTIONS™

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Exhibit 8
Land Cover and
Vegetation Community Types

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Source: Bing Aerial Imagery.

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Exhibit 9
Impacts on Biological Resources

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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 wildlife nursery sites?

Less than significant impact with mitigation incorporated.

Nursery Sites

The aquatic and riparian habitats of French Camp Slough, and the upland valley oak woodland are potential nursery sites, including for nesting birds and roosting bats, giant garter snakes, western pond turtles and others. With implementation of MM BIO-1 through MM BIO-6, impacts on nursery sites would be reduced to less than significant through direct and indirect impact avoidance of the riparian corridor and compensatory mitigation for loss of 0.15 acre of valley oak woodland.

Protected Nesting Birds

The riparian corridor of French Camp Slough and all vegetated habitats within the project site could provide suitable habitat for a variety of species of nesting birds. Ground nesting birds may use undisturbed grassland and barren areas. Grading and the removal of trees during the nesting season (generally February 15 to August 31) could result in direct harm to nesting birds protected under the Fish and Game Code or MBTA. Construction noise, light, and other man-made disturbances may cause nesting birds to abandon their nests.

Implementation of MM BIO-3 would reduce impacts on protected bird nests to a less than significant level.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than significant impact with mitigation incorporated.

Local policies include protection of biological and natural resources and require preparation of a Biological Study, which the FCS Biological Resources Assessment (BRA) constitutes. With implementation of the mitigation measures developed and recommended here, the proposed project would not conflict with any local policies. Specifically, MM BIO-6 would ensure that the proposed project would not conflict with the Municipal Code Section 16.130 – Heritage Oak Permit by requiring a Tree Report as well as a tree removal permit and mitigation as required by the SJCOG and SJMSCP for removal of any ordinance-size valley oak trees protected under the Municipal Code. Impacts would be less than significant with mitigation incorporated.

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?

Less than significant impact with mitigation incorporated.

The project site is located within the SJMSCP planning area, and the City of Stockton is a signatory to the SJMSCP. MM BIO-1 would require the project to obtain SJMSCP coverage for potential project-related impacts on covered species and loss of 0.15 acre of protected valley oak woodland; and

implementation of all required avoidance, minimization, and compensatory mitigation measures. With implementation of MM BIO-1, no significant conflict with the provisions of the SJMSCP would occur.

Mitigation Measures

MM BIO-1 Prior to any disturbance activities (including vegetation removal and grading), the applicant shall obtain a San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) permit from San Joaquin Council of Governments (SJCOG) to mitigate for impacts to SJMSCP-covered species and their habitats. The applicant shall implement all requirements and conditions stated in the SJMSCP permit. Coverage involves compensation for habitat impacts on covered species through implementation of Incidental Take Minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered species.

MM BIO-2a **Avoidance and Minimization of Indirect Temporary Impacts to Water Quality and Riparian Habitat**

- The project applicant shall obtain a Construction General Permit from the Regional Water Quality Control Board (RWQCB). The applicant shall ensure that the project Civil Engineer prepares all required stormwater planning documents consistent with the requirements of the RWQCB (e.g., a Storm Water Pollution Prevention Plan [SWPPP] that complies with current National Pollutant Discharge Elimination System [NPDES]; Best Management Practices [BMPs] to control the pollutants in stormwater runoff, and/or a Storm Water Management Plan [SWMP]) shall be developed and integrated into the project plan.

MM BIO-2b **No Work Within the Riparian Corridor and Creek Bed or Banks**

- No work (including vegetation removal) shall take place within the riparian corridor of French Camp Slough unless specifically permitted by the California Department of Fish and Wildlife (CDFW) or Regional Water Quality Control Board (RWQCB).
- Prior to construction the applicant shall install silt fencing including the placement of straw wattles between all construction areas and the riparian corridor to avoid impacts to water quality by grading and construction. A qualified Biologist shall be on-site to monitor the installation of fencing. Fencing shall be in place and regularly maintained during project implementation.

MM BIO-2c **Avoidance and Minimization of Indirect Permanent Impacts to Water Quality and Riparian Habitat**

- The applicant shall install post-construction stormwater management measures and establish a long-term maintenance plan. This requirement is intended to

ensure that the post-construction conditions at the project site do not cause or contribute to direct or indirect water quality impacts (i.e., pollution and/or hydromodification) upstream and downstream. Specifically, the discharger shall demonstrate compliance with the post-construction standards set forth in the General Permit. The discharger is responsible for all compliance issues including all annual fees until the Notice of Termination (NOT) has been filed and approved by the local Regional Water Quality Control Board (RWQCB).

- The applicant shall establish permanent fencing to keep trash and other debris from moving off-site into the aquatic or riparian habitats of French Camp Slough.

MM BIO-3 Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).

- Removal of trees shall be limited to only those necessary to construct the proposed project as reflected in the relevant project approval documents.
- If the proposed project requires trees to be removed during the nesting season, pre-construction surveys shall be conducted no more than 10 days prior to the start of ground or vegetation disturbance (including tree removal) to determine whether or not active nests are present.
- If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).
- The qualified Biologist shall monitor the active nest during construction activities to prevent any potential impacts that may result from the construction of the proposed project, until the young have fledged.

MM BIO-4 Roosting Bat Pre-construction Survey and Avoidance

Prior to the star of construction (e.g., prior to any earthmoving or ground-disturbing activity), a qualified Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.).

Visual surveys will include trees within 500 feet of project construction activities. Not more than 2 weeks prior to building demolition, the project applicant shall ensure that a qualified Biologist (i.e., one familiar with the identification of bats and signs of bats) survey buildings proposed for demolition for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the structure, demolition may proceed. If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Building demolition shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on young non-volant (i.e., non-flying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young) as determined by the Biologist.

Movement Corridors

French Camp Slough and associated riparian corridors provide a significant wildlife movement corridor. The proposed project avoids all direct impacts on this corridor, and implementation of MM BIO-1 through MM BIO-4 (above), MM BIO-5, below, and MM BIO-6 (in subsequent sections) will avoid and minimize all indirect impacts to this area.

MM BIO-5 The project applicant shall implement GP NCR-2.18 *Minimize Lighting Impacts* for the portion of the project site that is visible from the riparian corridor of French Camp Slough. The applicant shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than 1 foot-candle above ambient conditions.

MM BIO-6 The applicant shall prepare and submit a tree report to the City of Stockton. The tree report shall include the location, species, and diameter at 24 inches above grade (for multi-trunked trees the combined total trunk diameter shall be used for all trunks measuring 6 inches or greater measured at 24 inches above actual grade). The tree report shall list the number of ordinance-size trees proposed to be removed. For ordinance-size trees to be removed, the applicant shall obtain a tree removal permit from the City of Stockton. If ordinance-size valley oaks are proposed to be removed, then mitigation for loss of these valley oaks can be covered through valley oak woodland mitigation as required by the San Joaquin Council of Governments (SJCOG) and defined in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJCMSCP) permit to be obtained by the applicant.

Conclusion

With adherence to Standard Permit Conditions and implementation of MM BIO-1 through MM BIO-6, impacts to biological resources would be less than significant.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.5 Cultural Resources and Tribal Cultural Resources *Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
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:				
d) 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), or	☐	☒	☐	☐
e) 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 I of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision I of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☐

Environmental Evaluation

Setting

Click and type narrative to describe impact.This section describes the existing cultural resources setting and potential effects from project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based on information provided by the Native American Heritage Commission (NAHC), the Central California Information Center (CCIC), National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historic Landmarks list (CHL), California Points of Historical Interest (CPHI) list, California Built Environment Resource Directory (BERD), California Historical Resources Inventory, and a pedestrian survey of the site conducted by FCS. The Confidential Phase I Cultural Resources Assessment (Phase I CRA) can be provided upon request.

Central California Information Center

A records search was conducted on March 21, 2022, at the CCIC, located at California State University, Stanislaus, for the project site and a 0.5-mile radius beyond the project boundaries. The purpose of this review was to access existing cultural resource survey reports, archaeological site records, and historic aerial photographs and evaluate whether any previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or other resources exist within or near the project area.

Results from the CCIC indicate that 12 cultural resources (four prehistoric resources, seven historic resources, and one protohistoric resource) and three informal resources (Bridge 29C033, 29C0124, and 29C0340) have been recorded within 0.5 mile of the project site, no cultural resources have been recorded within the project site. In addition, 18 area-specific survey reports are on file with the CCIC for the project site and its 0.5-mile search radius. One survey report, SJ-00729, is partially within the project boundary indicating that the project site has partially been surveyed for cultural resources.

Native American Heritage Commission and Tribal Outreach

On March 18, 2022, FCS sent a request to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the project site. A response was received on May 5, 2022, indicating that the Sacred Lands File was positive for the presence of Native American cultural resources in the immediate project area. The NAHC included a list of 12 tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential Tribal Cultural Resources (TCRs) that may be affected by the project are addressed, a letter containing project information and requesting any additional information was sent to each tribal representative on May 6, 2022. One response was received on June 7, 2022, from the Confederated Villages of Lisjan requesting records search results. No additional responses have been received to date.

Cultural Resources Survey and Buried Site Potential

On May 4, 2022, FCS Senior Archaeologist, Dr. Dana DePietro, surveyed the project site to identify any unrecorded cultural resources within the project boundary. The survey began on the northeast corner of the project site and moved south using east/west transects spaced at 15-meter intervals whenever possible. The project site consists entirely of plowed agricultural land, bordered by South McKinley Avenue to the east, and French Camp Slough to the west. Overall visibility of native soils was moderate due to some ground cover and vegetation, ranging from 40-50 percent across the site. A trowel was used to test subsurface soil composition in areas of obscured visibility. Overall, soils which were primarily composed of rich, medium brown (Munsell 10 YR 4/2) loamy soils interspersed with small (2-5 cm) stones composed primarily of schist, quartz, basalt, and Franciscan chert. Particular attention was paid to areas along the western banks of French Camp Slough that may have been utilized by Native American tribes in antiquity.

Survey conditions were documented using digital photographs and field notes. During the survey, Dr. DePietro examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, toolmaking debris, ceramics), soil discoloration and

depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics.)

The entire project site appears to have been recently plowed, and as a result, quite a bit of modern trash (plastic straws, bottlecaps, etc.) were observed across the site. Interspersed with these items were also older pieces of detritus including heavily patinaed blue glass and milk glass fragments. Most significantly, a green chert lithic isolate was discovered in the property boundary. The isolate is a piece of lithic debitage, exhibiting cortex with a clearly defined bulb of percussion and at least four channels where flakes were knapped away as part of the lithic reduction strategy. This isolate was found out-of-context along with modern refuse that had been moved across the site as a result of extensive plowing and agricultural activity. As such, no defined archaeological deposit or feature associated with the isolate was discernible. Similar lithics have been recovered at pre-contact archaeological sites along French Camp Slough, significantly, at site CA-SJO-000226 to the immediate north of the project site.

Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5? Define Impact. **Click and type narrative to describe impact.**

No impact. CEQA Guidelines Section 15064.5 defines "historic resources" as resources listed in the CRHR, a local register, determined significant by the Lead Agency, or determined to be eligible by the California Historical Resources Commission for listing in the CRHR. The criteria for eligibility are generally set by the National Historic Preservation Act of 1966, which established the NRHP, and which recognizes properties that are significant at the national, State, and local levels. To be eligible for listing in the NRHP and CRHR, a district, site, building, structure, or object must possess integrity of location, design, setting, materials, workmanship, feeling, and association relative to American history, architecture, archaeology, engineering, or culture. In addition, unless the property possesses exceptional significance, it must be at least 50 years old to be eligible.

The records search conducted at the CCIC for the project radius determined that seven historic resources have been recorded within the 0.5-mile search radius, however none are within the project boundaries. Additionally, the pedestrian survey did not identify any potentially historic built environment resources. There would be no impacts to historical built environment resources from the proposed project.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? **Define Impact.Click and type narrative to describe impact.**

Less than significant with mitigation incorporated. Section 15064.5 of the CEQA Guidelines defines significant archaeological resources as resources that meet the criteria for historical resources, as discussed above, or resources that constitute unique archaeological resources. A project-related

significant adverse effect could occur if a project were to affect archaeological resources that fall under these categories.

The records search conducted at the CCIC for the project site determined that four prehistoric resources, one protohistoric resource, and seven historic resources are recorded within the 0.5-mile search radius, no archaeological resources are recorded within the project boundaries. In addition, the results of the pedestrian survey did identify a green chert lithihc isolate and painted blue glass and milk glass fragments. No additional archaeological resources were discovered during the pedestrian survey. Nevertheless, it is possible that earthmoving activities associated with project construction and off-site improvements could encounter previously undiscovered archaeological resources. Archaeological resources can include but are not limited to stone, bone, wood or shell artifacts or features, including hearths and structural elements. Damage or destruction of these resources would be a potentially significant impact. Implementation of MM CUL-1 would ensure that this potential impact is reduced to a less than significant level.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant with mitigation incorporated. No human remains or cemeteries are known to exist within the project site, however a recorded burial site is within 0.5-mile search radius of the project boundaries. Although human remains within the project site are unlikely, there is always the possibility that earthmoving activities associated with project construction could potentially damage or destroy previously undiscovered human remains. This would be a potentially significant impact.

In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 must be followed. MM CUL-2 further specifies the procedures to follow in the event human remains are uncovered. Along with compliance with these guidelines and statutes, implementation of this mitigation would reduce potential impacts related to human remains to a less than significant level.

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:

d) 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), or Define Impact.**Click and type narrative to describe impact.**

Less than significant with mitigation incorporated. The records search conducted at the CCIC, which included a search of the CRHR, did not identify any listed or eligible TCRs that would be adversely affected by the proposed project. Additionally, the NAHC Sacred Lands File search results determined the immediate project is postive for TCRs, however the results did not indicate whether the TCRs are listed or eligible for listing in the CRHR. Should any undiscovered TCRs be encountered

during project construction, implementation of MM CUL-1 and MM CUL-2 would reduce potential impacts to a less than significant level.

e) 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 I of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision I of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Define Impact. As of April 5, 2023, the City had not initiated Assembly Bill (AB) 52. This section will be updated with the results of that consultation.

Mitigation Measures

MM CUL-1 An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall provide full-time archaeological monitoring both on-site and off-site for the new sewer line connection in South McKinley Avenue, for all ground disturbance, including, but not limited to, grubbing, clearing, grading, and trenching into previously undisturbed soils.

It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources**.** In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area shall be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the Archaeological Monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific

institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

MM CUL-2 In the event of an accidental discovery or recognition of any human remains, Public Resources Code Section 5097.98 must be followed. For purposes of this project, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The Most Likely Descendant (MLD) may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Section 5097.98, or
2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
   - The descendant identified fails to make a recommendation.
   - The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.6 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?	☐	☐	☒	☐

Environmental Evaluation

Setting

The analysis in this section is based, in part, on the Air Quality, GHG Emissions, and Energy Report prepared by FCS, which is included as Appendix A.

Energy use, especially through fossil fuel consumption and combustion, relates directly to environmental quality since it can adversely affect air quality and generate GHG emissions that contribute to climate change. Electrical power is generated through a variety of sources, including fossil fuel combustion, hydropower, wind, solar, biofuels, and others. Natural gas is widely used to heat buildings, prepare food in restaurants and residences, and fuel vehicles, among other uses. Fuel use for transportation is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes such as auto, carpool, and public transit; and miles traveled by these modes, and generally based on petroleum-based fuels such as diesel and gasoline. Electric vehicles (Evs) may not have any direct emissions but do have indirect emissions via the source of electricity generated to power the vehicle. Construction and routine operation and maintenance of transportation infrastructure also consume energy. PG&E provides electricity to the project site.

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?

Less than significant impact. Energy consumed by the proposed project was estimated and includes natural gas (although the proposed project does not provide natural gas connections), electricity, and fuel consumption for project construction and operation. Energy calculations are included as part of Appendix C of the Air Quality, GHG Emissions, and Energy Report (Appendix A).

Construction Impacts

The project construction schedule was assumed to begin in April 2024 and conclude in December 2024. If the construction schedule moves to later years, construction emissions would likely decrease

because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. The proposed project would require demolition, site preparation, grading, building construction, architectural coating, and paving. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., demolition, site clearing, and grading), and the actual construction of the building. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

The types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, graders, tractors, and cranes. Main site construction equipment is estimated to consume a total of 20,526 gallons of diesel fuel over the entire construction duration (Appendix A).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB Emission FACtor (EMFAC) mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix A. In total, the proposed project is estimated to generate 211,950 VMT and a combined 7,447 gallons of combined gasoline and diesel for vehicle travel during construction.

The overall construction schedule and process Is already designed to be efficient In order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Therefore, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Operational Impacts

The proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 7.

Table 7: Estimated Annual Project Energy Consumption

Energy Consumption Activity	Annual Consumption
Electricity Consumption	2,117,255 kWh/year
Natural Gas Consumption	1,139,771 kBTU/year
Operational Energy Consumption–ZEVs	20,699 kWh/year
Operational Fuel Consumption–Trucks	*61,013 gallons of gasoline and diesel*
Operational Fuel Consumption–Passenger Vehicles	*54,051 gallons of primarily gasoline*

Energy Consumption Activity	Annual Consumption
Total Fuel Consumption (Passenger Vehicles and Trucks Combined)	**115,064 gallons of gasoline and diesel**

Notes:
kWh = kilowatt-hour
kBTU = kilo-British Thermal Unit
VMT = Vehicle Miles Traveled
ZEV = Zero-Emission Vehicle
Source: Appendix A.

Operation of the proposed warehouse would consume an estimated 2,117,255 kWh of electricity and an estimated 1,139,771 kBTU of natural gas on an annual basis (if it were retrofitted to provide natural gas). The proposed project's building would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Building Energy Efficiency Standards. These are widely regarded as the most advanced building energy efficiency standards and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary.

Project-related vehicle trips would consume an estimated 115,064 gallons of gasoline and diesel annually and would involve activities and travel routes typical of a warehouse-type project. Zero-Emission Vehicles (ZEV) passenger vehicles represent 4 percent of the passenger vehicle fleet in 2024 and electricity consumption associated with this is 20,700 kWh for 2024. This will increase as ZEVs penetrate the California market and fossil fuels will decrease. Thus, transportation fuel consumption would not be wasteful, inefficient, or unnecessary. Impacts would be less than significant.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Less than significant impact. The proposed project would be served with electricity provided by PG&E. In 2021, PG&E obtained 47.7 percent of its electricity from renewable energy sources.[22] PG&E also offers a 50 percent and 100 percent solar choice that source 70.9 and 93.9 percent of its power mix from eligible renewable energy sources respectively, as well as a Green Saver option that sources 83.9 percent of its power mix from eligible renewable energy sources.[23] The utility would be required to meet the future objective of 60 percent of electricity from renewable energy sources by 2030. The proposed warehouse building would be designed in accordance with Title 24, California's Energy Efficiency Standards for Nonresidential Buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting. The incorporation of the Title 24 standards into the design of the proposed project would ensure that the proposed project would not result in the use of energy in a wasteful manner.

[22] California Energy Commission (CEC). 2023. 2021 Power Content Label: PG&E. Website: https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure/power-content-label/annual-power-content-2. Accessed March 25, 2023.
[23] Ibid.

The General Plan contains the following policies related to energy conservation.[24]

Policy LU-5.4 Require water and energy conservation and efficiency in both new construction and retrofits**.**

Action LU-5.4A Require all new development, including major rehabilitation, renovation, and redevelopment, to adopt best management practices for water use efficiency and demonstrate specific water conservation measures.

Action LU-5.4B Require all new development, including major rehabilitation, renovation, and redevelopment, to incorporate feasible and appropriate energy conservation and green building practices, such as building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.

Action LU-5.4C Update the Citywide Design Guidelines to strengthen energy conservation and green building provisions.

In addition, Action SAF-4.1A, as part of Policy SAF-4.1 related to Air Quality (summarized in Section 2.3 Setting), requires the installation of Energy Star-certified appliances.

The proposed project would comply with existing State energy standards and with energy conservation policies contained in the General Plan. As such, the proposed project would not conflict with State or local renewable or energy efficiency objectives. Impacts would be less than significant.

The proposed project's compliance with Title 24 standards and other applicable regulations would ensure that the proposed project would not conflict with any of the General Plan energy conservation policies related to the proposed project's building, mechanical systems, or indoor and outdoor lighting.

Although not required to reduce significance related to energy impacts, implementation of MM GHG-1a through MM GHG-1f would further reduce operational energy consumption by requiring electric landscape and material handling equipment, reducing vehicle fuel consumption by limiting or prohibiting vehicle idling which would further reduce operational fuel consumption.

Mitigation Measures

No mitigation required.

[24] City of Stockton 2018. Envision Stockton 2040 General Plan. Website: http://www.stocktonca.gov/files/Adopted_Plan.pdf. Accessed March 21, 2023.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.7 Geology and Soils *Would the project:*				
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?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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 wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Environmental Evaluation

Setting

This section is based in part on a Geotechnical Exploration prepared by ENGEO Incorporated on June 20, 2022.[25] The study is included as Appendix D of this Draft IS/MND.

[25] ENGEO Incorporated. June 20, 2022. Geotechnical Exploration.

The City is not listed by the California Geological Survey (CGS) as a city affected by an Alquist-Priolo Earthquake Fault Zone.[26] The Hayward Fault, a major earthquake fault in the San Francisco Bay region, lies roughly 40 miles southwest of the City. The Greenville Fault lies approximately 22 miles from the City. An earthquake of moderate to high magnitude generated within the nearby San Francisco Bay Area could cause significant ground shaking at the project site. The degree of shaking would depend on the magnitude of the event, the duration of the event, the distance to the zone of rupture (i.e., hypocenter), and local geologic conditions.

Landslides are gravity-driven movements of earth materials that can include rock, soil, unconsolidated sediment, or combinations of such materials. CGS has not mapped any landslide hazard zones in the City or in its immediate vicinity.[27]

Expansive soils can change dramatically in volume depending on moisture content. When wet, these soils can expand; conversely, when dry, they can contract or shrink. Sources of moisture that can trigger this shrink-swell phenomenon include seasonal rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soil can develop wide cracks in the dry season, and changes in soil volume have the potential to damage concrete slabs, foundations, and pavement. Special building/structure design or soil treatment are often needed in areas with expansive soils. Based on a Countywide map of expansive soils published by the San Joaquin County Geographical Information Systems Unit, the project site appears to be underlain by expansive soils.[28]

Would the project:

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.

Less than significant impact. No designated Alquist-Priolo Earthquake Fault Zones have been mapped in the City or its immediate vicinity. Additionally, no other active faults are located within the City or its immediate vicinity. Therefore, ground rupture is unlikely at the project site.[29]

The nearest earthquake fault to the City is the Greenville Fault, located approximately 22 miles southwest of the City. As previous noted, the maximum forecasted earthquake on this fault is magnitude 6.0 and the probability of such a seismic event occurring by the year 2036 is approximately 3 percent.[30] The Hayward Fault, a major earthquake fault in the San Francisco Bay

[26] California Geological Survey (CGS), 2017. Cities and Counties Affected by Alquist-Priolo Earthquake Fault Zones as of January 2010, http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps. Accessed April 1, 2023.
[27] Ibid.
[28] San Joaquin County Geographic Information Systems. 2022. Expansive Soils 1999. Website: https://sjmap.org/mapdocs/FrontCounter_Expansive_Soils.pdf. Accessed April 1, 2023.
[29] ENGEO Incorporated. June 20, 2022. Geotechnical Exploration.
[30] City of Stockton. 2040 General Plan Update and Utility Master Plan Supplements Draft Environmental impact Report. Website: http://www.stocktonca.gov/files/EnvisionStockton2040GP_DEIR.pdf. Accessed April 1, 2023.

region, lies roughly 40 miles west-southwest of the City and has a higher likelihood of have a large seismic event. However, the location of the project site well east of major earthquake faults creates a less than significant impact.

ii) Strong seismic ground shaking?

Less than significant impact. The nearest earthquake fault to the City is the Greenville Fault, located approximately 22 miles southwest of the City. As previous noted, the maximum forecasted earthquake on this fault is magnitude 6.0 and the probability of such a seismic event occurring by the year 2036 is approximately 3 percent.[31] The Hayward Fault, a major earthquake fault in the San Francisco Bay region, lies roughly 40 miles west-southwest of the City and has a higher likelihood of have a large seismic event. However, the location of the project site well east of major earthquake faults would help reduce impacts related to ground shaking.[32]

An earthquake of moderate to high magnitude generated by the Great Valley fault could cause considerable ground shaking at the site. To mitigate the shaking effects, structures should be designed using the 2022 California Building Standards Code (CBC) requirements.[33] Specifically, the proposed project would be required to comply with Title 24, Part 2 (CBC 3.7-20 Chapter 3: Setting, Impacts, and Mitigation Measures) of the CBC and the California Public Resources Code, Division 2, Chapter 7.8 (the Seismic Hazards Mapping Act), as well as applicable local regulations. This would ensure that the potential adverse impacts from seismic ground shaking are minimized. Therefore, impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. ENGEO performed a liquefaction analysis to estimate the liquefaction susceptibility of the project site. The results indicated that there are potentially liquefiable soil layers below a depth of 37 feet and 50 feet at the project site. However, ENGEO concluded that, given the relative thickness of non-liquefiable surface soil, the risk of surface disruption is low. Therefore, the likelihood of substantial adverse effects to the project site due to seismically-triggered liquefaction is considered low and the impact caused by the proposed project would be less than significant.

iv) Landslides?

Less than significant impact. Because of the relatively level topography throughout the City and at the project site, and lack of steep slopes, the probability of earthquake-induced landslides is very low. Furthermore, the CGS has not mapped any landslide hazard zones in the City or in its immediate vicinity.[34] Therefore, impacts would be less than significant.

[31] City of Stockton. 2040 General Plan Update and Utility Master Plan Supplements Draft Environmental impact Report. Website: http://www.stocktonca.gov/files/EnvisionStockton2040GP_DEIR.pdf. Accessed April 1, 2023.
[32] City of Stockton. 2040 General Plan Update and Utility Master Plan Supplements Draft Environmental impact Report. Website: http://www.stocktonca.gov/files/EnvisionStockton2040GP_DEIR.pdf. Accessed April 1, 2023.
[33] ENGEO Incorporated. June 20, 2022. Geotechnical Exploration.
[34] City of Stockton. 2040 General Plan Update and Utility Master Plan Supplements Draft Environmental impact Report. Website: http://www.stocktonca.gov/files/EnvisionStockton2040GP_DEIR.pdf. Accessed April 1, 2023.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. The project site is currently vacant and undeveloped. The proposed project would require ground-disturbing activities such as grading, excavation, and other earthmoving activities prior to and during construction. These activities would expose surface soils to wind and precipitation, which could cause soil erosion and loss of topsoil if measures are not taken to prevent erosion and runoff during site construction. Projects that disturb one or more acres of soil are required to obtain the General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit), issues by the California State Water Resources Control Board (State Water Board). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must list BMPs the proposed project would implement to control erosion and prevent the conveyance of sediments off-site.

The proposed project would comply with the CBC and with required erosion control measures including those outlined in Stockton Municipal Code Chapter 15.48 Grading and Erosion Control. Compliance with the CBC and Municipal Code would ensure that the proposed project would not result in substantial erosion or loss of topsoil. With the implementation of the conditions of the Construction General Permit as well as compliance with the CBC and Municipal Code, erosion impacts resulting from project construction would remain less than significant.

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?

No impact. As discussed in Impact 2.7(a)(iii) and 2.7(a)(iv), the proposed project would not result in risks associated with seismically induced liquefaction or from landslides.

Lateral spreading is a failure within a nearly horizontal soil zone (possibly due to liquefaction) that causes the overlying soil mass to move toward a free face or down a gentle slope. Since groundwater is on the order of 26 feet below the surface it is our opinion that the potential for lateral spreading is negligible.[35] Furthermore, the Geotechnical Investigation concluded, based on topographic and lithologic data, that the risk of subsidence is considered low to negligible at the site. Compliance with the CBC, which requires that a site-specific ground motion study be performed in accordance with Section 11.4.8 of American Society of Civil Engineers (ASCE) 7-16, would ensure that the soil would be stable. There would be no impacts.

c) 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 with mitigation incorporated. The Geotechnical Exploration concluded that there are potentially expansive soils near the surface of the project site. These soils exhibit moderate to high shrink/swell potential. Expansive soils can change dramatically in volume depending on

[35] ENGEO Incorporated. June 20, 2022. Geotechnical Exploration.

moisture content. It can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations.

The Geotechnical Exploration recommends several methods to reduce damage to structures resulting from volume changes associated with expansive soil. These recommendations are included as MM GEO-1. Compliance with existing State and local laws and regulations, such as the CBC and the City's Municipal Code, and the City's grading and building permit process, would further ensure that the impacts associated with development on expansive soil are minimized to the maximum extent possible. Consequently, the overall impact from implementation of the proposed project as it relates to this hazard would be less than significant with mitigation incorporated.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No impact. The proposed project would connect to an existing wastewater facility and sanitary sewer system and, therefore, would not use septic tanks or alternative wastewater disposal systems. No septic tanks or alternative wastewater disposal systems are proposed. Therefore, no impacts would occur as a result of the capacity of the soils on the project site to support septic tanks or alternative wastewater disposal systems.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than significant with mitigation incorporated. Paleontological records search results were provided by Dr. Kenneth L. Finger, PhD through the University of California Museum of Paleontology (UCMP) database Natural History Museum (Appendix D). The purpose of the paleontological records search was to determine whether the presence of known paleontological resources exist within the project site or within a 0.5-mile radius of the project site. The results of the records search indicated that the project site is located on Pleistocene Modesto Formation (Qm), a sedimentary unit with the potential to yield significant paleontological resources. The records search reveals that the Modesto Formation has a high sensitivity but low paleontological potential for significant paleontological resources. Because the proposed project would require ground-disturbing activities such as grading and excavation on previously undisturbed soils, the potential exists for previously unknown paleontological resources to be uncovered during excavations of the project site. As such, paleontological monitoring of all subsurface construction activities in the Modesto Formation is recommended. This is included as MM GEO-2. With incorporation of MM GEO-2, impacts would be less than significant.

Mitigation Measures

MM GEO-1 The proposed project shall adhere to the site preparation, grading, foundation support, earthwork, and other recommendations of the Geotechnical Exploration for the project site prepared by ENGEO Incorporated on June 20, 2022.

MM GEO-2 All construction-related earth-disturbing activities that would impact previously undisturbed sediments on the project site shall be monitored closely by a qualified Paleontologist to recover any fossil remains discovered quickly and professionally while not impeding development. Should any significant paleontological resources (e.g., bones, teeth,) be unearthed, all construction activities shall be diverted at least 15 feet from the find until a professional Paleontologist has assessed it and, if deemed significant, salvaged the fossil(s) in a timely manner. Collected fossils shall be deposited in an appropriate repository, such as the University of California Museum of Paleontology (UCMP), where they would be properly curated and made available for future research.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.8 Greenhouse Gas Emissions *Would the project:*				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐

Environmental Evaluation

The analysis in this section is based, in part, on the Air Quality, GHG Emissions, and Energy Report prepared by FCS, which is included as Appendix A.

Setting

Since the City of Stockton does not currently have a qualified GHG Reduction Plan, and the SJVAPCD's other pathways for determining significance are not appropriate, this Greenhouse Gas Impact Analysis will rely on the CEQA Guidelines directly for determining significance of the proposed project with respect to GHG impacts.

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine whether a project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the proposed project must be evaluated.

City of Stockton General Plan and General Plan EIR

The following policies from the Community Health, Transportation Strategies and Safe Community elements of the City's General Plan, Envision Stockton 2040[36] are relevant to the control of GHG emissions from the proposed project. There are no General Plan EIR GHG measures directly applicable to development projects. It is noted that several policies and actions related to Air Quality, as shown in Section 2.4.3, Local Setting, are also repeated here for GHG. This overlapping applicability stems from strategies which target emissions criteria pollutants (such as NO_X and DPM) from the combustion of fossil fuels but which also have co-benefits of reducing GHG emissions of CO_2.

[36] City of Stockton. 2022. Envision Stockton 2040 General Plan. December 4.

City Policies and Actions encourage the development of EV infrastructure, building energy efficiency and green building practices, and programs to facilitate ride sharing and practices that reduce vehicle use.

Action CH-5.1B Maintain and implement the City of Stockton Climate Action Plan (CAP) and update the CAP to include the following:

- Updated Community-wide GHG Emissions Inventory,
- 2030 GHG Emissions reduction target, consistent with SB 32,
- Estimated 2030 GHG emission reduction benefits of States programs,
- Summary of the City's progress toward the 2020 local GHG emissions reduction target,
- New and/or revised GHG reduction strategies that, when quantified, achieve the 2030 reduction target, and continue emission reductions beyond 2030, and
- New or updated implementation plan for the CAP.

Policy TR-3.2 Require new development and transportation projects to reduce travel demand and greenhouse gas emissions, support electric vehicle charging, and accommodate multi-passenger autonomous vehicle travel as much as feasible.

Action TR-3.2A Amend the parking requirements in the Development Code to encourage shared parking, require preferential parking for rideshare vehicles, and allow reduced parking requirements to support transit, bicycling, and walking.

Action TR-3.2B Require commercial, retail, office, industrial, and multifamily residential development to provide charging stations and prioritized parking for electric and alternative fuel vehicles.

Policy LU-5.4 Require water and energy conservation and efficiency in both new construction and retrofits.

Action LU-5.4A Require all new development, including major rehabilitation, renovation, and redevelopment, to adopt best management practices for water use efficiency and demonstrate specific water conservation measures.

Action LU-5.4B Require all new development, including major rehabilitation, renovation, and redevelopment, to incorporate feasible and appropriate energy conservation and green building practices, such as building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.

Policy SAF-4.1 Reduce air impacts from mobile and stationary sources of air pollution.

Action SAF-4.1A Require the construction and operation of new development to implement best practices that reduce air pollutant emissions, including:

- Use of low-emission and well-maintained construction equipment, with idling time limits.
- Development and implementation of a dust control plan during construction.
- Installation of electrical service connections at loading docks, where appropriate.
- Installation of Energy Star-certified appliances.
- Entering into Voluntary Emissions Reduction Agreements with the San Joaquin Valley Air Pollution Control District.

Action SAF-4.1C Limit heavy-duty off-road equipment idling time to meet the California Air Resources Board's idling regulations for on-road trucks.

Policy SAF-4.2 Encourage major employers to participate in a Transportation Demand Management (TDM) program that reduces vehicle trips through approaches such as carpooling, vanpooling, shuttles, car-sharing, bike-sharing, end-of-trip facilities like showers and bicycle parking, subscription bus service, transit subsidies, preferential parking, and telecommuting.

Measures specifically applicable to industrial facilities and warehouse include provisions for reducing emissions during construction, as well as design features specific to warehouses such as the electrification of docks. Provisions for electrification of docks eliminate emissions immediately for facilities that have trucks with TRUs. Provisions for future electrification paves the way for the phase-in of ZEV trucks, replacing diesel trucks which are currently a large portion of GHG emissions in the State.

City of Stockton Climate Action Plan

The City of Stockton adopted a CAP in August 2014 for the development and implementation of policies and programs to reduce GHG emissions within the City. The primary purpose of the CAP was to complete an inventory of GHG emissions associated with community activity and recommend strategies to reduce GHG emissions.[37] The CAP is based on the directives of AB 32 also known as the Global Warming Solutions Act of 2006, a Statewide reduction goal to reduce GHG emissions levels back to 1990 levels by the year 2020.

While the City has set forth goals Action CH-5.1B to update community-wide GHG emission inventory, create 2030 GHG emission reduction targets and strategies consistent with SB32, and update and maintain its CAP, this work is still in progress (as of April 2023).

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

[37] City of Stockton. 2022. 2014 Climate Action Plan. August.

b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant impact with mitigation. The proposed project's GHG emissions impact determination is based on the extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Implementation of the proposed project would contribute to global climate change through direct emissions of GHG from on-site area sources and vehicle trips generated by the proposed project, and indirectly through off-site energy production required for on-site activities, water use, and waste disposal.

GHG Emissions from Project

Table 8 and Table 9 present the proposed project's GHG emissions, as predicted using CalEEMod, for informational purposes. These emissions are provided to show (1) the magnitude of the proposed project's GHG emissions relative to overall local and regional levels, and (2) the breakdown of emissions from the project by category (e.g., mobile, stationary source, building electrical energy, building natural gas etc.). The results were obtained using CalEEMod default values for various sectors and do not capture nuanced emission reductions due to the project's waste reduction measures, water conservation, or improvements in energy efficiency beyond the Title 24 2022 standards since these are not included in the CalEEMod emission model. Moreover, many assumptions used in the modeling such as the operational testing hours for the emergency fire pump, or the air conditioning and heating requirements for the warehouse are also extremely conservative and likely to overestimate the GHG burden of the proposed project.

Modeling for transportation and VMT for calculation of carbon dioxide equivalent (CO_2e) were based on the proposed project's unmitigated emissions using CalEEMod defaults. VMT reductions from Transportation Demand Measures may result in up to a 38 percent reduction in VMT.[38] The greatest reductions would be due to the project's accessibility to the airport, other major industrial centers and its proximity to downtown Stockton and the Port of Stockton, and from a required Commuter Trip Reduction (CTR) Program. The proposed project would implement multiple strategies aimed at reducing drive-alone travel and encouraging alternative modes of transportation.

Construction Emissions

Total GHG emissions generated during all phases of construction were combined and are presented in Table 8. The SJVAPCD does not recommend assessing the significance of construction-related emissions. However, other jurisdictions, such as the South Coast Air Quality Management District (South Coast AQMD) and the Sacramento Metropolitan Air Quality Management District (Sacramento Metro AQMD), have concluded that construction emissions should be included since they may remain in the atmosphere for years after construction is complete. The total emissions generated from construction were therefore amortized over the life of the development (30 years) and this annualized value was added to the operational emissions. Table 8 presents the amount of GHG emissions during construction.

[38] Advanced Mobility Group. 2022. Traffic Impact Study for Industrial Development @ 6505 South McKinley Avenue East, Stockton, California. March.

Table 8: Construction Greenhouse Gas Emissions

Construction Year	Total MT CO_2e per year
2024	362
Amortized over 30 years	***12***
Notes: Because of rounding, total MT CO_2e may be marginally different from CalEEMod output. MT CO_2e = metric tons of carbon dioxide equivalents Source: CalEEMod output (Appendix A).	

Operational Emissions

Operational or long-term emissions occur over the life of the project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation and area sources, such as landscaping activities.

Reported operational emissions are considered to represent unmitigated project conditions. Many project design features such as those related to water-efficient landscape ordinances, updated 2022 Energy and 2022 California Green Building Standards Code (CALGreen) would reduce GHG emissions to levels below the estimates in CalEEMod, as quantitative inputs for these updated operational assumptions are not included within its database yet. The operational run incorporates mitigation measures related to ZEV material handling equipment at the facility and off-road operational equipment (e.g., battery electric vehicle [BEV] forklifts) are zero. Project VMT reductions from TDM reductions of 39 percent were estimated for the proposed project based on VMT and with these mitigation measures, VMT was less than significant. Thus, the contribution of GHG emissions with respect to the project's VMT would not be considered significant.

Full assumptions and model outputs are provided in Appendix A and results of this analysis for 2025 (the first full year of proposed project operations) are presented in Table 9.

Table 9: Unmitigated Project Operational Greenhouse Gases 2025

Source	Emissions (MT CO_2e per year)	
	2025	% of Total
Area (Landscaping)	2.7	0.2%
Energy–Natural Gas	61	4.1%
Energy–Electrical	198	13.5%
Mobile	1,068	72.6%
Solid Waste	54	4.8%
Water/Wastewater	71	0.3%
Stationary	5	0.8%
Amortized Construction Emissions	12	0.2%

Source	Emissions (MT CO_2e per year)	
	2025	% of Total
Total	**1,472**	**100**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
Source of 2022 emissions: CalEEMod output (Appendix A).

It should be noted that MM GHG-1 for ZEV material handling equipment was included in the model and no emissions were predicted for forklifts. The project's reduction of GHG emissions from this sector is ahead of any State or local regulatory mandate and would be considered a reduction from business-as-usual in a quantitative GHG emissions analysis. A warehouse of 179,000 square feet could have, on average, 22 forklifts in operation[39] (each utilizing one 8-gallon LPG tank per day, 250 working days per year for an estimated emissions impact of 11.5 MT per year CO_2 per forklift). The project's commitment to BEV forklifts, therefore, represents an emission reduction of approximately 250 MT CO_2e per year.

Best Management Practices for Warehouses

There are several resources outlining BMPs for warehouses, including the California Office of the Attorney Generals Guidance for Best Practices to comply with CEQA[40] and the ARB Concept Paper for the Freight Handbook.[41] There is considerable commonality among the various guidance documents, which urge facilities to commit to investments in zero-emission infrastructure at the project design stage; deploy zero-emission technologies and to incorporate contractual language requiring tenants to utilize zero-emission technologies to the maximum extent possible.

Design features and best management strategies, to minimize and reduce GHG from the project include:

- Provisions for all ZEV material handling equipment (e.g., forklifts and pallet jacks).
- Use to be restricted to dry storage.
- Use of compliant Low-Global Warming Potential (GWP) Refrigerants.
- Warehouse building to be equipped with solar-ready rooftop infrastructure.
- Heat pump for space Conditioning in Single-Zoned Office Spaces (Title 24 Part 6 § 140.4(a).2.).
- Water-Efficient Landscaping.
- Low-Flow water fixtures.
- Energy-Efficient light-emitting-diode (LED) Lighting.
- Electrical Infrastructure to support ZEV Material Handling equipment.

[39] South Coast Air Quality Management District (South Coast AQMD). 2014. High-Cube Warehouse Trip Rate Study for Air Quality Analysis. Website: https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/high-cube-warehouse. Accessed March 19, 2023.

[40] California Office of the Attorney General. 2022. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Website: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf. Accessed March 19, 2023.

[41] California Air Resources Board (ARB). 2020. California Sustainable Freight Initiative: Concept Paper for the Freight Handbook. Website: https://ww2.arb.ca.gov/resources/documents/concept-paper-freight-handbook. Accessed March 18, 2023.

- Electrical Infrastructure ready to support future ZEV Medium Heavy-Duty Truck (MHDT) and Heavy Heavy-Duty Truck (HHDT).

Consistency with Local GHG Reduction Plans

The City of Stockton has a CAP that was published in 2014. The CAP addresses the goals of AB 32 and a reduction plan for 2020 goals. As such, it does not address post-2020 reductions required by Senate Bill (SB) 32 and AB 1279 that would put City emissions on trajectories for year 2030 and 2045 goals. However, the City, as part of its General Plan has both a Policy and Action Plan (CH-5.1B) that provides for an update of the previous plan and the development of new goals and reductions measures to address the SB 32 2030 target. However, the updated plan is not available at the time of this analysis was prepared (April 2023).

Consistency with 2017 and 2022 Scoping Plans

A project comparison for consistency with measures for the 2017 and 2022 Scoping Plan updates addresses alignment with the State's planning goals and milestones under SB 32 and AB 1279, respectively.

An evaluation of the proposed project's consistency with the Scoping Plan serves as a roadmap for evaluating a project's current design, and to determine whether it complies with current policies and is in compliance with planned reduction measures for GHG emissions. The comparison of a project design to Scoping Plan proposals is not by itself a metric for determining project-level significance, but a step in showing how the project supports current regulations and is aligned with future GHG reduction strategies in development stages. The proposed project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law and to the extent that they are applicable to the proposed project.

Table 10 and Table 11 summarize the measures included 2017 and 2022 Scoping Plans, respectively, and analyzes project consistency compared to these elements.

Table 10: Proposed Project Consistency with 2017 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Project Consistency
SB 350 50 percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	**Not applicable.** This measure would apply to utilities and not to individual development projects. The proposed project would purchase electricity from a utility subject to the SB 350 Renewable Mandate and the Renewables Portfolio Standard (RPS) requirements. SB 100 has increased the 2030 RPS standards to 60 percent by 2030, superseding the increase required by SB 350.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	**Not applicable**. This measure applies to existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency over time. The proposed project would comply with the applicable Title 24

Scoping Plan Measure	Project Consistency
	Energy Efficiency Standards in effect at the time building permits are received.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Not applicable.** This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the project site would benefit from the standards.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Consistent with mitigation**. The proposed project is industrial in nature and would support truck and freight operations. It is expected that deliveries throughout the State would be made with an increasing number of ZEV delivery trucks, including trips that would be coming to and from the project site. The proposed project would not inhibit the Mobile Source Strategy because the implementation of MM GHG-1f would require the project applicant to include infrastructure for electric vehicle charging stations, into a minimum of 20 percent of all vehicle parking spaces (including parking for trucks), consistent with the applicable California Green Building Standards Code Tier 1 Nonresidential Mandatory Measure. As such, future ZEVs could access the project site to charge batteries as part of normal goods delivery operations.
Sustainable Freight Action Plan. The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero-emission operation and maximize near-zero-emission freight vehicles and equipment powered by renewable energy by 2030.	**Consistent with mitigation.** This measure applies to owners and operators of trucks and freight operations. The proposed project is industrial in nature and would support truck and freight operations. The proposed project would implement MMs GHG-1a-c and GHG1-f, which would require the project applicant to include infrastructure for electric vehicle charging stations, including for trucks, into a minimum of 20 percent of all vehicle parking spaces (including parking for trucks), consistent with the applicable California Green Building Standards Code Tier 1 Nonresidential Mandatory Measure. Additionally, MMs GHG-1a and GHG-1b would require (1) that all on-site off-road and on-road service equipment be zero-emission or all electric and (2) that all project buildings would be designed to support the use of zero-emission or all electric service equipment. These measures would support the sustainable Freight Action Plan by providing electric vehicle charging infrastructure and zero-emission support equipment.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Consistent.** The proposed project would not include major sources of black carbon. This measure revolves around ARB's SLCP Reduction Strategy that was released in April 2016 as a result of SB 650. SB 650 required the State to develop a strategy to reduce

Scoping Plan Measure	Project Consistency
	emissions of SLCPs. DPM reductions have come from strong efforts to reduce on-road vehicle emissions. Car and truck engines used to be the largest sources of anthropogenic black carbon emissions in California, but the State's existing air quality policies will virtually eliminate black carbon emissions from on-road diesel engines within 10 years. These policies are based on existing technologies.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	**Not applicable.** The proposed project does not include the development of a Regional Transportation Plan.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Not applicable.** The proposed project is not one targeted by the cap-and-trade system regulations, and, therefore, this measure does not apply to the project. However, the post-2020 Cap-and-Trade Program indirectly affects people and entities who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, State, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the Governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not applicable**. The project site is in a built up urban area and would not be considered natural or working lands.
Source: California Air Resources Board (ARB). 2017. California's 2017 Climate Change Scoping Plan. November.	

Table 11: Proposed Project Consistency with 2022 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoring Plan Measure	Project Consistency
Light-Duty Vehicles: Smart Growth/Reduce Vehicle Miles Traveled. VMT per capita reduced 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045.	**Consistent.** VMT impacts for the proposed project are less than significant and the project demonstrates a 39 percent reduction in VMT from TDM measures as quantified by CAPCOA methods (2009).
Deploy ZEVs. Medium Heavy and Heavy Heavy-Duty Trucks. This measure is supported by Executive Order N79-20 and plans in the AB 74 ITS Report: 100 percent of MD/HDV sales are ZEV by 2040.	**Consistent.** Medium heavy and heavy heavy-duty trucks would be compliant with truck Fuel Economy Standards: California Phase II GHG Standards and would transition to ZEV by 2045. Infrastructure for the proposed project would be designed to support this transition to ZEV.

Scoring Plan Measure	Project Consistency
	The Scoping Plan does not rely upon on VMT reductions from the freight and truck transportation sector.
Decarbonize buildings. All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed Statewide by 2030.	**Consistent.** The proposed project is consistent with the AB 197 commercial timeline. Consistent with decarbonization strategies, the warehouse building proposed as part of the project would be equipped with solar-ready rooftop infrastructure.
Low Carbon Fuels for Transportation. Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen.	**Consistent with mitigation.** Off-road construction equipment would utilize renewable diesel in compliance with the In-Use Off-Road Rule. On-road diesel trucks would also utilize these fuels consistent with the Low Carbon Fuel Standard (LCFS). The proposed project would implement MMs GHG-1a-c and GHG1-f, which would require the project applicant to include infrastructure for electric vehicle charging stations, including for trucks, into a minimum of 20 percent of all vehicle parking spaces (including parking for trucks), consistent with the applicable CALGreen Tier 1 Nonresidential Mandatory Measure. Additionally, MMs GHG-1a and GHG-1b would require (1) that all on-site off-road and on-road service equipment be zero-emission or all electric and (2) that all project buildings would be designed to support the use of zero-emission or all electric service equipment. These measures would support the sustainable Freight Action Plan by providing electric vehicle charging infrastructure and zero-emission support equipment.
Low Carbon Fuels for Fuels for Buildings and Industry. In 2030s renewable natural gas (RNG) blended in pipeline, ramping up to 2040. Dedicated hydrogen pipelines constructed to serve certain industrial clusters.	**Consistent.** The proposed design of the building would not provide natural gas connections; therefore, it is not anticipated that the proposed project would utilize natural gas. Natural gas, if it were to be utilized by the proposed project, would contain this RNG blend as implemented by the Scoping Plan and the energy providers.
Coordinate supply of liquid fossil fuels with declining CA fuel demand. Phase-out oil and gas extraction operations by 2045. Carbon Capture and Sequestration (CCS) on majority of petroleum refining operations by 2030. Interim goals are to reduce petroleum production reduced in line with its demand.	**Not applicable.** The proposed project is not related to the petroleum industry.
Generate clean electricity. Electric sector GHG target of 38 MMTCO2e in 2030 and 31 MMTCO2e7 in 2045. This GHG target is determined to meet the loads associated with the scenario and corresponds to meeting the 2021 SB 100 Joint Agency Report's 100 percent of retail sales with eligible renewable and zero-carbon resources definition.	**Not applicable**. The proposed project would benefit indirectly from these goals; however, there are no actions related to the proposed project itself.

Scoring Plan Measure	Project Consistency
Decarbonize industrial energy supply. Electrification goals by industry sector specific to Food Industry, Agriculture, and Chemical and Allied Products and Pulp and Paper Industry for milestone years 2030 and 2045. Other Industrial Manufacturing: 0 percent energy electrified by 2030 and 50 percent by 2045. Construction Equipment: 25 percent energy demand electrified by 2030 and 75 percent by 2045. Retire all combined heat and power facilities by 2040.	**Consistent with mitigation.** Construction equipment used for the proposed project would comply with ARB off-road regulations meeting milestones for electrification as required by regulations as promulgated. Starting in 2024, amendments to the off-road In-Use Diesel Rule require use of renewable diesel consistent with the 2022 Scoping Plan and implementing the LCFS. The proposed design of the building would not provide natural gas connections.
Reduce non-combustion emissions. This involves two strategies targeting methane and hydrofluorocarbon (HFCs). • Increase capture of methane and from landfill and dairy digester and from the oil and gas infrastructure components. • Introduction of Low GWP refrigerants introduced as building electrification increases mitigating HFC emissions.	**Consistent.** The proposed project would use low GWP refrigerants consistent with current California Significant New Alternatives Policy (SNAP) regulations.
Compensate for remaining emissions. This measure uses Carbon Dioxide Removal (CDR) to compensate for remaining emissions.	**Not applicable.** This measure relates to remaining emissions and is not applicable at the individual project level.
Source: California Air Resources Board (ARB). 2022. Scoping Plan for Achieving Carbon Neutrality. November.	

Given that the proposed project would incorporate MM GHG-1a through MM GHG-1f and would be consistent with all current regulatory requirements as well as SB 32 and AB 1279 planning measures as outlined in the ARB 2017 and 2022 Scoping Plan updates, GHG impacts associated with the proposed project would be less than significant with mitigation.

Considering the proposed project's design features, the requirement to incorporate MM GHG-1a through MM GHG-1f, and the progress being made by the State toward reducing emissions in key sectors such as transportation, industry, and electricity, the proposed project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment. Therefore, with mitigation, GHG emissions would result in a less than significant impact. Impacts for GHG would be less than significant with implementation of MM GHG-1a though MM GHG-1f.

Mitigation Measures

MM GHG-1a All buildings shall be designed to provide infrastructure to support use of electric-powered forklifts and/or other interior vehicles.

MM GHG-1b Only electric-powered off-road equipment (e.g., forklifts, indoor material handling equipment, etc.) shall be utilized on-site for daily warehouse and business operations. The project developer/facility owner shall disclose this requirement to all tenants/business entities prior to the signing of any lease agreement. In addition, the limitation to use only electric-powered off-road equipment shall be included in all leasing agreements.

MM GHG-1c All landscaping equipment used at the facility shall be electric or battery powered. The design of the building should provide for outlets on the outside of buildings or in other accessible areas to facilitate the use of electrically powered landscape equipment.

MM GHG-1d All buildings shall be designed to facilitate future retrofit of all current natural gas systems and appliances to electric replacements.

MM GHG-1e The warehouse use will be limited to dry storage.

MM GHG-1f Prior to the issuance of a building permit, the Community Development Department, Planning Division shall confirm that the Project is designed to include the following:

The buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed to supply power for the future installation of electric vehicle (EV) truck charging stations on the site. Conduit should be installed from the electrical room to tractor trailer parking spaces in a logical location(s) on the site determined by the project applicant during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology becomes commercially available and the buildings are being served by trucks with electric-powered engines.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.9 Hazards and Hazardous Materials *Would the project:*				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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 which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
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?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Environmental Evaluation

Setting

Hazards analyzed in this section include hazardous materials, wildfires, and hazards based on proximity to airport and airstrip operations. Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed of, or otherwise managed.

A hazardous waste Is any hazardous material that Is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater that have concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20–24 contain technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

The analysis of potential hazardous material impacts relies primarily upon a Phase I Environmental Site Assessment (Phase I ESA) prepared by Terracon Consultants, Inc. on April 18, 2022, included in this report as Appendix E. The Phase I ESA identified a 300-gallon aboveground storage tank (AST), but determined that this does not represent an REC (recognized environmental site condition) (defined below) to the project site. Trash piles and concrete debris piles were discovered on-site and were identified as recognized environmental site conditions.

The project site has consisted of French Camp Slough in the northern portion of the site and vacant land in the mid-1910s. By the mid-1930s through the early 1950s the site consisted of French Camp Slough in the northern portion of the site and row crops. Apparent row crops continued on the site from the late 1950s through the early 1980s. The site has remained vacant from the mid-1980s to the present.

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant impact. Construction activities would potentially require the routine transport, use, and disposal of small amounts of hazardous materials such as diesel fuels, lubricants, paints, asphalt, and solvents, which are required during construction. Handling and transportation of these materials could result in the exposure of workers or residents to hazardous materials. Project operation may include the storage of some hazardous materials in the form of typical household cleaning products. During construction and operation, the proposed project would be required to comply with all applicable local, State, and federal safety codes and regulations related to transporting, using, or disposing hazardous materials, including Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation, and Liability Act; federal Clean Air Act; and the Occupational Safety and Health Administration (OSHA) that regulates worker safety hazards. Construction activities that involve hazardous materials would be governed by several agencies, including California Environmental Protection Agency (Cal/EPA), the California Department of Transportation (Caltrans), California Division of Occupational Safety and Health (Cal/OSHA), California Department of Toxic Substances Control (DTSC), Sonoma County Department of Health Services-Environmental Health & Safety Division, as well as applicable local regulations. Compliance with the provisions of these agencies would ensure that the routine transport, use, or disposal of hazardous materials does not create a significant hazard to the public. Therefore, impacts would be less than significant.

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?

Less than significant with mitigation incorporated. An REC is defined by American Society for Testing Materials (ASTM) Standard Practice E1527-21 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

As described above, the project site was used for agricultural purposes from the mid-1930s through the mid-1980s. Most currently used agricultural chemicals do not persist for extended periods of time in the environment if applied appropriately; however, some agricultural chemicals can persist in the environment, especially if misapplied. The application of pesticides to agricultural fields can leave trace amounts of the compounds in the soil that may accumulate overtime due to long-term applications. The site's long-term agricultural use (~50 years) represents a REC to the site.

During the site reconnaissance, Terracon observed one approximately 300-gallon AST on the southwestern portion of the site. Terracon inspected the inside of the AST and observed water inside the tank. Staining, noxious odors, or evidence of a release was not observed in the vicinity of the observed AST. Based on the site observations, the AST does not represent a REC to the site.

During the site reconnaissance, Terracon observed trash piles, consisting of typical municipal litter, used tires, car parts, plastic, wood, concrete, abandoned vehicles, were observed on the northern portion of the site. Staining, noxious odors, or evidence of hazardous materials disposal were not observed. Based on-site observations, the debris materials did not appear to be hazardous in nature and do not represent a REC.

During the site reconnaissance, soil and concrete debris piles were observed on the northern portion of the site. Based on unknown origins of the soil and concrete debris piles, the debris represents a REC to the site.

Based on the scope of services, limitations, and conclusions of this assessment, Terracon recommends further investigation, which is included as MM HAZ-1. With incorporation of MM HAZ-1, including subsequent testing and completion of any required remediation, impacts would be less than significant.

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

Less than significant impact. The French Camp Elementary School is located approximately 0.21 mile south the project site. The proposed project consists of the construction of a warehouse building and associated office space. The tenant for the building has not been identified. Because of the nature of the proposed project, it is not likely that hazardous or acutely hazardous materials, substances, or waste would be emitted from the project. Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Impacts would be less than significant.

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

No impact. As part of the Phase I ESA, Terracon reviewed selected federal and State environmental regulatory databases. The site was not identified on the environmental regulatory databases. The surrounding properties listed in the database report appended to the Phase I ESA do not appear to represent RECs to the site at this time based upon regulatory status, apparent topographic gradient, and/or distance from the site. Therefore, no impact would occur.

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?

Less than significant impact. The Stockton Metropolitan Airport is located approximately 1 mile east of the project site. According to the Airport Land Use Compatibility Plan (ALUCP) for the Environs of the Stockton Metropolitan Airport, the project site is located within the Airport Influence Area.[42] Noise exposure contours were prepared in October 2017 to depict long range average annual noise exposure conditions. The project site is not located within the 2038 long range Community Noise Equivalent Level (CNEL) noise exposure contours of 60 CNEL or higher.[43]

In addition to the cumulative noise metric, CNEL, a single event noise contour was also modeled. A commonly used method for determining the potential impact of single events on residential areas is to use sleep disturbance. The Federal Interagency Committee on Aviation Noise (FICAN) recommends using a 10 percent awakening value associated with indoor sound exposure levels (SEL) of 80 decibels (dB). Exhibit 2G in the ALUCP illustrates the FICAN data collected regarding sleep disturbance. The project site is not located within the SEL Noise Exposure Contour.[44]

The project site is located within the Traffic Pattern (Zone 7a) Safety Zone.[45] Zone 7a allows for a maximum nonresidential density of 450 persons per acre.[46] The proposed project would comply with this density limit. Although the tenant for the warehouse has not been identified, the proposed project will comply with CBC occupancy rates, which would cap the occupancy of the building at 391 employees. Zone 7a has a 10 percent open land requirements are intended to be applied with respect to an entire zone.[47] This is typically accomplished as part of a community general plan or a specific plan but also applies to development projects that are 10 acres or more.[48] The project site is 11.70 acres and X percent of the project would remain open space. Warehousing and office uses are

[42] San Joaquin Council of Governments (SJCOG). May 2016. Amended February 2018. Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport. Exhibit 1C Stockton Metropolitan Airport – Airport Influence Area.
[43] San Joaquin Council of Governments (SJCOG). May 2016. Amended February 2018. Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport. Exhibit 2F: Long Range CNEL Noise Exposure Contours.
[44] San Joaquin Council of Governments (SJCOG). May 2016. Amended February 2018. Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport. Exhibit 1C Stockton Metropolitan Airport – Airport Influence Area. Exhibit 2G SEL Noise Exposure Contours
[45] San Joaquin Council of Governments (SJCOG). May 2016. Amended February 2018. Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport. Exhibit 1C Stockton Metropolitan Airport – Airport Influence Area. Exhibit 3A Safety Zone Map
[46] San Joaquin Council of Governments (SJCOG). May 2016. Amended February 2018. Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport. Table 3A Safety Criteria Matrix.
[47] Ibid.
[48] Ibid.

not listed under prohibited uses for Zone 7a.[49] Airspace review is required for objects greater than 100 feet in height.[50] The proposed warehouse building would not exceed more than 100 feet and therefore would not require airspace review. Therefore, the proposed project would be compliant with the ALUCP and impacts would be less than significant.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. The project consists of the construction of a warehouse building and associated office space in a developed area of the City. Emergency preparedness is managed by the City's Office of Emergency Services (OES) for disaster preparedness, readiness, City departments response, and mitigation.[51] The City adopted its most recent version of its Emergency Operations Plan (EOP) in June 2012. The EOP addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The EOP establishes the emergency management organization required to mitigate any significant emergencies and identifies roles and responsibilities required to protect the health and safety of Stockton residents and property. In addition, the EOP establishes operations concepts associated with a field response to emergencies.[52] The EOP recommends that all businesses develop comprehensive emergency plans but does not require them. Adequate emergency access to the project site would be provided by two 35-foot-wide driveways along South McKinley Avenue at the north and south ends of the project site and continue around the perimeter of the proposed building. Therefore, impacts would be less than significant.

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

Less than significant impact. Figure 4.8-1 of the General Plan illustrates that there are no High or Very High Fire Hazard Severity Zones (FHSZs) in the City and its SOI. However, approximately 945 acres classified Moderate FHSZ are scattered throughout the City and its SOI. The project site is not located in any of the FHSZ areas. It is located in an urbanized area and is not adjacent to wildlands. Therefore, impacts would be less than significant.

Mitigation Measures

MM HAZ-1 Prior to project approval, the project applicant shall contract a qualified firm to complete a Phase II Environmental Site Assessment (Phase II ESA) at the project site. The Phase II ESA shall further investigate the debris pile on-site through soil sampling. The project applicant shall implement all measures recommended by the Phase II ESA prior to issuance of grading permits.

[49] San Joaquin Council of Governments (SJCOG). May 2016. Amended February 2018. Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport. Table 3A Safety Criteria Matrix.
[50] Ibid.
[51] City of Stockton. 2019. Emergency Preparedness. Website: http://www.stocktonca.gov/government/departments/fire/emerge.html. Accessed April 1, 2023.
[52] City of Stockton. June 2012. Emergency Operations Plan.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.10 Hydrology and Water Quality *Would the project:*				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
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:	☐	☐	☒	☐
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Environmental Evaluation

Setting

Groundwater

The project site is located at the San Joaquin Valley Groundwater Basin (Basin), which is about 5,809 square miles. More specifically, the project site is located in the Rock Creek-French Camp Slough Subbasin, consisting of about 473 square miles.

However, the project site receives water from COSMUD. COSMUD obtains its water from the San Joaquin River, the Eastern San Joaquin Groundwater Subbasin, and from the Stockton East Water District (SEWD). Groundwater comprised about one-third of the City's water supplies as of 2015, but it is forecast to comprise 25 percent by 2040.[53]

The Eastern San Joaquin Subbasin is identified as a critically overdrafted groundwater basin. Average groundwater use in the Eastern San Joaquin Subbasin is about 809,321 acre-feet per year, of which approximately 95 percent is for agricultural uses and 5 percent for municipal and industrial uses. Historically, groundwater elevations have declined about 40 to 60 feet, averaging approximately 1.7 feet per year.[54]

Hydrology

The major drainage pattern in the City is westerly from the Sierra Nevada, and then northerly through the San Joaquin Valley to the San Joaquin Delta. The drainage pattern in the City includes the San Joaquin River, which flows northerly through the southern and western parts of the City. Several tributaries extend east from the San Joaquin River, including French Camp Slough, which runs west of the project site.

Storm Drainage

The project site is currently made up of pervious surfaces, a fallow, previously cultivated field. There is a stormwater drainage ditch along the eastern edge of the project site along South McKinley Avenue. Under Section 402 of the Clean Water Act, the EPA has established regulations under the National Pollutant Discharge Elimination System (NPDES) program to control direct stormwater discharges from construction activities disturbing 1 acre or more of land.

The Municipal Separate Storm Sewer System (MS4) Permit in effect for Stockton and San Joaquin County is Order No. R5-2015-0024, which was issued by the Central Valley RWQCB in 2015. Municipal Code Chapter 15.48 requires development and implementation of a SWPPP for development projects over 1 acre of land. The SWPPP shall incorporate an effective combination of BMPs customized to the site using up-to-date standards and practices as identified in the California BMP Handbooks or equivalent pre-approved by the City. Furthermore, Municipal Code Chapter 13.20 requires implementation of a Storm Water Quality Control Plan (SWQCP) for project operation.[55] An SWQCP is triggered when 5,000 square feet of land is disturbed and addresses stormwater volume reduction, stormwater treatment, and trash reduction.

Flooding

The project site is located primarily in an area with a 0.2 percent annual chance flood. The strip of land at the west of the project site adjacent to French Camp Slough has a 1 percent annual chance flood.

[53] City of Stockton. 2018. Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft EIR. June.
[54] Ibid.
[55] City of Stockton. 2023. Stockton, California Municipal Code, Charter, and Civil Service Rules. Chapter 13.20.

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than significant impact. Because construction activities would disturb over 1-acre, the proposed project would be required to prepare and implement a SWPPP in accordance with applicable federal and State requirements and under its Municipal Regional Stormwater NPDES Permit (MRP). The SWPPP would identify BMPs that are intended to prevent erosion during construction activity.

The proposed project would develop a 184,166-square-foot building on an 11.7-acre project site. This would result in an increase of impervious areas on the project site from 0 square feet to 373,200 square feet. The proposed project could create sources of polluted runoff due to car leaks and exhaust from cars circulating the project site. However, most runoff from the project site would be directed to an underground mechanical stormwater treatment process and discharge water into the existing ditch north of the project site, which eventually leads to French Camp Slough. The mechanical treatment process would be designed to treat stormwater volumes of up to 21,000 cubic feet and would prevent polluted runoff from degrading nearby surface waters.

The proposed project would comply with the aforementioned policies and code requirements, as well as the preparation and implementation of a SWQCP for project operation. An SWQCP is triggered when 5,000 square feet of land is disturbed and addresses stormwater volume reduction, stormwater treatment, and trash reduction. This could include installation of landscaping and an underground mechanical stormwater treatment system to ensure that stormwater runoff would not exceed pre-project conditions and that water quality standards and waste discharge requirements are met.[56] As such, implementation of the proposed project is not expected to substantially degrade surface or groundwater quality. Therefore, impacts to water quality would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than significant impact. The project site would be served by COSMUD. As such, the percentage of groundwater used at the project site would be determined by COSMUD. The City and San Joaquin Valley region are implementing several policies and programs in order to reduce the regions reliance on groundwater. While the proposed project would create an additional 373,200 square feet of impervious surfaces, which could reduce opportunities for groundwater recharge, the proposed project would direct stormwater runoff to an underground mechanical stormwater treatment, which would assist with groundwater recharge. Therefore, impacts would be less than significant.

[56] City of Stockton. 2023. Stockton, California, Municipal Code, Charter, and Civil Service Rules. Chapter 13.20.

c) Substantially alter the existing drainage pattern of 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;

Less than significant impact. Grading and site preparation for the proposed project would create new drainage patterns, including surface runoff being directed to the underground mechanical stormwater treatment system and eventually into the existing ditch north of the project site, which eventually leads to French Camp Slough. The mechanical treatment process would be designed to treat stormwater volumes of up to 21,000 cubic feet and would prevent polluted runoff from degrading nearby surface waters. Runoff over exposed soils could result in soil erosion. However, as discussed above, Municipal Code Chapter 15.48 requires that all developments prepare a SWPPP containing BMPs pursuant to NPDES requirements. Areas of 1 or more acres of disturbance must prepare and implement a SWPPP for the prevention of erosion during construction. Therefore, compliance with these policies would ensure that impacts would be less than significant.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less than significant impact. The project site is located primarily in an area with a 0.2 percent annual chance flood. The strip of land at the west of the project site adjacent to French Camp Slough has a 1 percent annual chance flood. While the proposed project would create an additional 373,200 square feet of impervious surfaces, increasing surface runoff during flood events, stormwater at the project site would be directed to an underground mechanical treatment process and discharge water into the existing ditch north of the project site, which eventually leads to French Camp Slough. The mechanical treatment process would be designed to treat stormwater volumes of up to 21,000 cubic feet, which would provide adequate capacity for rain events. This would ensure that project runoff would not exceed existing conditions. Therefore, impacts would be less than significant.

(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

Less than significant impact. As described above, compliance with Municipal Code Chapter 15.48 would reduce sources of polluted runoff during construction to a less than significant level.

Municipal Code Chapter 13.20 requires implementation of a SWQCP for project operation.[57] An SWQCP is triggered when 5,000 square feet of land is disturbed and addresses stormwater volume reduction, stormwater treatment, and trash reduction. During project operation, the proposed underground mechanical stormwater treatment system would have adequate capacity to support flows from the project site in the event of a storm event, as explained above. Sidewalks and gutters would be constructed along McKinley Avenue and would direct stormwater runoff from the street to proposed stormwater pipes in McKinley Avenue. These construction and operation features would

[57] City of Stockton. 2023. Stockton, California, Municipal Code, Charter, and Civil Service Rules. Chapter 13.20.

ensure that the stormwater runoff would not exceed pre-project conditions, and that there would be no additional sources of polluted runoff. Therefore, impacts would be less than significant.

(iv) impede or redirect flood flows?

Less than significant impact. The project site is located primarily in an area with a 0.2 percent annual chance flood. The strip of land at the west of the project site adjacent to French Camp Slough has a 1 percent annual chance flood.

While the proposed project would create an additional 373,200 square feet of impervious surfaces, increasing surface runoff during flood events, stormwater at the project site would be directed to an underground mechanical stormwater treatment facility, which has the capacity to treat 21,000 cubic feet of stormwater, adequate capacity for rain events. This would ensure that project runoff would not exceed existing conditions. Therefore, impacts would be less than significant.

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

Less than significant impact. The project site is not near the coast and is not located in a tsunami or seiche zone. As described above, the project site is located in FEMA Flood Zone X, meaning it is outside of the 500-year flood zone and protected by a levee from a 100-year flood. As such, it is not likely that the project site would flood. Additionally, project features such as the underground mechanical stormwater treatment system would reduce any flooding risks.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant impact. The City of Stockton published is Stormwater Quality Control Criteria Plan in 2020.[58] The plan outlines standards for new development, site design controls, source controls, volume reduction measures, treatment controls, and control measure maintenance as well as the process to comply with City and County Standards. As described above, the proposed project would limit impacts to water quality during project construction by creating and implementing a SWPPP with incorporated BMPs. Per the Stormwater Quality Control Criteria Plan requirements, the applicant would be required to submit their stormwater quality control and maintenance plan to the City prior to the issuance of grading permits. Furthermore, Municipal Code Chapter 13.20 requires implementation of a SWQCP for project operation.[59] An SWQCP is triggered when 5,000 square feet of land is disturbed and addresses stormwater volume reduction, stormwater treatment, and trash reduction.

Furthermore, the City is subject to the Eastern San Joaquin Groundwater Basin Groundwater Management Plan.[60] The proposed project would get water from COSMUD, which utilizes groundwater. Therefore, COSMUD determines how much groundwater is used at the project site and the proposed project itself would not have a direct impact on groundwater usage. It would be the

[58] City of Stockton and County of San Joaquin. 2020. Stormwater Quality Control Criteria Plan. August.
[59] City of Stockton. 2023. Stockton, California Municipal Code, Charter, and Civil Service Rules. Chapter 13.20.
[60] San Joaquin County Department of Public Works. 2004. Eastern San Joaquin Groundwater Basin Groundwater Management Plan. September.

responsibility of COSMUD to implement the Eastern San Joaquin Groundwater Basin Groundwater Management Plan where applicable. Therefore, impacts resulting from the proposed project would be less than significant.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.11 Land Use and Planning *Would the project:*				
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?	☐	☐	☒	☐

Environmental Evaluation

Would the project:

a) Physically divide an established community?

No impact. The physical division of an already established community typically refers to the construction of a linear feature, such as an interstate highway, railroad tracks, or removal of a means of access, such as a bridge, which would impact mobility within an existing community and an outlying area. The proposed project does not propose construction of any roadway or other structures that would physically divide any portion of the community.

The surrounding area is designated as Industrial, Open Space/Agriculture, and Low Density Residential. The project site is surrounded by a manufacturing plant to the north; South McKinley Avenue and a logistics center and a distribution center to the east; French Camp Slough, a warehouse building and lot, and a single-family residence to the south; and French Camp Slough and vacant land to the west. The proposed project would consist of the development of a warehouse facility on a site that is currently undeveloped. The project site currently has an Industrial land use designation in the General Plan. The proposed project would be in the I-L Zone upon annexation into the City, which allows for warehouse uses and supporting office uses. Therefore, there would be no.

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?

Less than significant impact. The project site is designated Industrial by the General Plan. The Industrial land use designation allows for a wide variety of industrial uses, including the proposed warehousing and office uses. The maximum allowable FAR for the Industrial land use designation is 0.6. The FAR of the proposed project would be approximately 0.4, which is consistent with the maximum allowable FAR for the Industrial land use designation. Upon annexation into the City, the project site would be zoned I-L, which also allows for warehouse uses and supporting office uses. The proposed project would be required to follow the I-L zoning district standards outlined in Municipal Code Section 16.24.130. Furthermore, per Municipal Code Chapter 16.120, the proposed

project would undergo Design Review prior to the issuance of building permits, to ensure consistency with Stockton Municipal Code and Citywide Design Guidelines. Therefore, impacts would be less than significant.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.12 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?	☐	☐	☒	☐

Environmental Evaluation

Setting

The California Department of Conservation Division of Mines and Geology classifies lands in the City of Fresno and along the San Joaquin River Corridor into three different Mineral Resource Zones (MRZ):

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.

A majority of the of the City and its SOI have been designated with MRZ-1 mineral classification.[61]

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?

Less than significant impact. As described above, a majority of the City and its SOI has an MRZ-1 mineral classification, meaning it is unlikely that these areas contain significant mineral deposits. Therefore, it is unlikely that the proposed project would result in the loss of availability of a known mineral resources that would be of value to the region and the residents of the State. Impacts would be less than significant.

[61] City of Stockton. 2040 General Plan Update and Utility Master Plan Supplements Draft Environmental Impact Report.

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?

Less than significant impact. As described above, a majority of the City and its SOI have an MRZ-1 mineral classification, meaning it is unlikely that these areas contain significant mineral deposits. Therefore, it is unlikely that the proposed project would result in the loss of availability of a locally-important mineral resources recovery site. Therefore, a less than significant impact would occur.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.13 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Environmental Evaluation

Setting

This analysis is based on the Noise Impact Analysis Report prepared by FCS, dated March 5, 2023, to determine the off-site and on-site noise impacts associated with the proposed project.

Characteristics of Noise

Noise is generally defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep. Sound levels are usually measured and expressed in dB, a unit of measurement that indicates the relative intensity of a sound. 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The standard unit of measurement of the loudness of sound is the dB. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments. While a change of 5 A-weighted decibel (dBA) is the minimum readily perceptible change to the human ear in outdoor environments. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense, 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness.

Since the human ear is not equally sensitive to sound at all frequencies, the dBA was derived to relate noise to the sensitivity of humans, it gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for several various sound level metrics, including the day/night sound level (L_{dn}) and the CNEL, both of which represent how humans are more sensitive to sound at night. Day-Night Level (DNL) is like the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and DNL are within one dBA of each other and are normally exchangeable. In addition, the equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period and L_{max} is the highest exponential time-averaged sound level that occurs during a stated time period.

Common sources of noise in urban environments include mobile sources, such as traffic, and stationary sources, such as mechanical equipment or construction operations. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on each construction site and, therefore, would change the noise levels as construction progresses. Construction-period noise levels are higher than background ambient noise levels, but they eventually cease once construction is complete.

Impact Analysis

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?

Less than significant impact.

Construction Noise Impacts

For purposes of this analysis, a significant impact would occur if construction activities would generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The City has not adopted construction-related noise thresholds of significance for CEQA consideration. The General Plan also does not contain quantitative noise standards that are specific or applicable to construction activities. Municipal Code Section 16.60.030(A) prohibits construction activities from occurring between the hours of 10:00 p.m. and 7:00 a.m. when the noise causes a disturbance across a residential property line, but it is not anticipated that construction for the proposed project would occur during these hours. The Municipal Code does not establish quantitative standards for construction noise. Thus, to assess the significance of the proposed project's construction noise impacts, the following criteria are adopted:

- Construction activities would result in noise levels in excess of 60 dBA L_{eq} at the property lines of nearby residential land uses.

Residential land uses are the nearest noise-sensitive receptors to the project site. A small residential neighborhood is located approximately 450 feet southwest of the project site along South McKinley Avenue. The 60 dBA L_{eq} criteria reflects the General Plan's "normally acceptable" land use and noise compatibility for residential land uses. Therefore, the criteria measures whether the proposed project's noise levels would be considered "normally acceptable" for residential land uses.

Construction Equipment Operational Noise

Construction of the proposed project would generate noise during the approximately 8-month schedule of site preparation, grading, building construction, paving, and other construction activities. The proposed project is anticipated to utilize a standard five-day work week, and construction would occur during standard daytime hours, which are generally between 7:00 a.m. and 5:00 p.m. Construction would not occur during the nighttime hours specified in Municipal Code Section 16.60.030(A) (i.e., 10:00 p.m. to 7:00 a.m.). Therefore, construction would not result in violations of this regulation.

Noise from grading activities is typically the foremost concern when evaluating a project's construction noise impact, as grading activities often require extensive use of heavy-duty, diesel-powered earthmoving equipment. For the proposed project, grading would have the greatest—and noisiest—construction vehicle requirements, as multiple grading vehicles would be required to grade the approximate 11.7-acre project site. Other construction phases would have reduced vehicle requirements. For example, building construction could at times require a crane truck, several construction forklifts, and skid steer loaders. These vehicles are much less powerful than the types of heavy-duty graders and scrapers that would be required to grade the project site, and consequently have lower operational noise levels. Given this consideration, the following analysis assesses noise impacts that may result from the proposed project's grading activities.

Grading for the proposed project is estimated to last approximately four weeks. The bulk of grading activities would be characterized by extensive use of graders and scrapers, which would be utilized across the project site to level the site and establish proper slopes and drainages. These are mobile vehicles that would operate by driving across the project site, grading the land as they go. Their construction noise levels at surrounding residential land uses would be higher when they operate closer to the project site's boundaries that are nearest to residential land uses, and lower when they operate farther away. As such, on average, daily noise levels from these vehicles at the nearest residential land uses are likely to be no greater than 58.8 dBA L_{eq} on any given grading workday. At other, farther residential land uses, noise levels would be further reduced. Noise levels would not exceed the 60 dBA L_{eq} threshold criteria for residential land uses. As a result, construction-related noise impacts to residential land uses would be considered less than significant.

Construction-related Traffic Noise

Haul trips, construction worker vehicle trips, and other construction-related trips would occur over the course of the proposed project's construction. Haul trips typically have the greatest potential to result in substantial off-site noise increases along nearby roadways. However, the project site is anticipated to be balanced, meaning that it would not require any haul trips to export or import fill material. Construction worker vehicle trips and vendor deliveries would generate intermittent noise

as these vehicles drive by roadside sensitive receptors, but they would not be capable of sustaining noise levels in excess of 60 dBA L_{eq}. As a result, noise from the proposed project's construction vehicles would be considered less than significant.

Off-site Mobile Source Operational Noise Impacts

For the purposes of this analysis, a significant impact would occur if the proposed project's off-site mobile sources (i.e., vehicle traffic) would generate a substantial permanent increase in ambient noise levels surrounding the proposed project and any nearby roadways. The City has not adopted mobile operational-related noise thresholds of significance for CEQA consideration, but the City's General Plan contains policies that would apply to the proposed project's mobile source operational noise impacts. General Plan Policy SAF-2.5A prohibits new industrial land uses from exposing existing noise-sensitive land uses to noise levels in excess of 70 dBA CNEL. Municipal Code Section 16.60.040 establishes a more stringent 65 dBA L_{dn} standard for noise-sensitive land uses. As such, the following analysis adopts the stricter Code-based 65 dBA L_{dn} standard for assessment of the proposed project's mobile source operational noise impacts.

According to the Traffic Impact Study (TIS) prepared by Advanced Mobility Group, the proposed project would generate an estimated 378 daily vehicle trips, including 40 AM peak-hour trips and 44 PM peak-hour trips.[62] The applicant anticipates that of these daily vehicle trips, approximately 20 would consist of heavy-duty truck trips. Individually, this level of traffic would not correspond with roadway noise levels in excess of 65 dBA L_{dn}, which is approximately the noise level of a busy arterial roadway.

As proposed project-related traffic would not generate daily noise levels in excess of 65 dBA L_{dn}, the proposed project's mobile source operational noise impact would be considered less than significant.

On-site Operational Noise Impacts

For purposes of this analysis, a significant impact would occur if the proposed project's on-site noise sources (i.e., parking lot operations, on-site truck loading, etc.) would generate a substantial permanent increase in ambient noise levels surrounding the proposed project.

The City has not adopted operational-related noise thresholds of significance for CEQA consideration. The following criteria to determine significance are based on the City's applicable General Plan and Municipal Code noise standards, or whichever is more stringent for the given receptor or noise source. The proposed project's noise impact from on-site operational sources would be considered significant if any of the following were to occur:

- On-site operational sources would expose adjoining industrial land uses to noise levels in excess of 80 dBA L_{max} or 70 dBA L_{dn}.

[62] Advanced Mobility Group. 2022. Traffic Impact Study for Industrial Development @ 6505 South McKinley Avenue East, Stockton, California. Accessed March 9, 2023.

- On-site operational sources would expose nearby residential land uses to noise levels in excess of 75 dBA L_{max} or 55 dBA L_{eq} during daytime hours between 7:00 a.m. and 10:00 p.m., or 65 dBA L_{max} or 45 dBA L_{eq} during nighttime hours between 10:00 p.m. and 7:00 a.m.

The proposed project would generate noise from a variety of on-site noise sources, such as parking lot activities, new exterior mechanical equipment sources, and truck loading and unloading. Potential impacts from these noise sources are discussed below.

Parking Lot Activities

The proposed project's parking facilities and the intermittent noises associated with them (e.g., doors slamming, engines starting, etc.) would have a nominal effect on surrounding exterior noise levels. According to Federal Transit Administration (FTA) equations for the prediction of parking facility noise impacts, a facility with an hourly activity of 44 vehicles (equivalent to the proposed project's maximum hourly trip generation) would be expected to result in a noise level of just 43 dBA L_{eq} at a reference distance of 50 feet. Thus, nearby industrial and noise-sensitive land uses would not be exposed to parking-related noise levels in excess of the threshold criteria.

Mechanical Equipment Operations

At the time of preparation of this analysis, details were not available pertaining to the proposed rooftop mechanical ventilation systems for the project; therefore, a reference noise level for typical rooftop mechanical ventilation systems was used. Noise levels from commercially available rooftop mechanical ventilation equipment range from 50 dBA to 60 dBA L_{eq} at a distance of 25 feet. Thus, industrial land uses adjoining the project site would not be exposed to noise levels in excess of the minimum 70 dBA L_{dn} criteria as a result of this equipment. Residential land uses that are over 400 feet from the project site would experience noise levels that are well below 30 dBA L_{eq} and likely inaudible altogether. Thus, nearby industrial and noise-sensitive land uses would not be exposed to mechanical equipment operational noise levels in excess of the threshold criteria.

Truck Loading Activities

Noise would also be generated by truck loading and unloading activities at the loading docks along the south side of the proposed project. Typical maximum noise levels from truck loading and unloading activity are 70 dBA L_{max} as measured at 50 feet. These maximum noise levels include noise from associated truck loading/unloading activity, including trucks maneuvering, truck trailer loading, truck trailer unloading, backup alarms or beepers, and truck docking noise.

The nearest adjoining industrial uses are located over 100 feet from the proposed project's loading areas and thus would be exposed to loading/unloading noise levels that are well below the minimum 70 dBA L_{dn} criteria as a result.

At the nearest residential land uses that are over 450 feet away, maximum noise levels from unloading/loading activities would attenuate to below 50 dBA L_{max}. Because the proposed project is anticipated to generate approximately 20 truck trips per day, such unloading/loading activities would be intermittent and would not be expected to cause sustained noise levels in excess of 45 dBA L_{eq} at residential land uses, because noise generated by these activities would not be continuous. Thus,

nearby industrial and noise-sensitive land uses would not be exposed to truck loading/unloading-noise levels in excess of the threshold criteria.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. This section analyzes both construction and operational groundborne vibration and noise impacts. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. Groundborne noise is generated when vibrating building components radiate sound, or noise generated by groundborne vibration. In general, if groundborne vibration levels do not exceed levels considered to be perceptible, then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

A significant impact would occur if the proposed project would generate groundborne vibration or groundborne noise levels in excess of established standards. Municipal Code Section 16.32.100 prohibits the generation of ground vibration that "is perceptible without instruments by the average person at any point along or beyond the property line of the parcel containing the activities, cause discomfort or annoyance to reasonable persons of normal sensitivity or which endangers the comfort, repose, health or peace of residents whose property abuts the property lines of the parcel, and interferes with the operations of equipment and facilities of adjoining parcels." However, vibrations from temporary construction or demolition activities and motor vehicle operations are exempt from this regulation. Therefore, the FTA's vibration impact criteria are utilized for the purpose of this analysis. The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment Manual.[63]

Short-term Construction Vibration Impacts

Construction of the proposed project would require a variety of large, steel-tracked earthmoving vehicles. Of the variety of equipment used during construction, the large vibratory rollers that are anticipated to be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Large vibratory rollers produce groundborne vibration levels ranging up to 0.201 inch per second (in/sec) peak particle velocity (PPV) at 25 feet from the operating equipment.

The nearest off-site structure to the project construction footprint is a barn structure located south of the project site. The façade of this closest structure would be located approximately 270 feet from the construction footprint where the heaviest construction equipment would potentially operate. At this distance, groundborne vibration levels would range up to 0.005 in/sec PPV from operation of the types of equipment that would produce the highest vibration levels. This is well below the FTA's Construction Vibration Impact Criteria of 0.2 in/sec PPV for this type of structure, a building of nonengineered timber construction. Therefore, project construction activities would not generate

[63] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. Accessed September.

groundborne vibration or groundborne noise levels in excess of established standards, and the impact to off-site receptors from short-term groundborne vibration associated with construction would be less than significant.

Operational Vibration Impacts

Implementation of the proposed project would not include any new permanent sources that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments beyond the boundary line of the project property. Additionally, there are no active sources of groundborne vibration in the project vicinity that would produce vibration levels that would be perceptible without instruments within the project site. Therefore, the proposed project would not generate groundborne vibration or groundborne noise levels in excess of established standards and there would be no impact related to operational groundborne vibration.

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?

No impact. The project site is not located within the vicinity of a private airstrip nor public airport. The nearest airport, Stockton Metropolitan Airport, is located 1.2 miles east of the project site. According to the airport's noise exposure map, the project site is located well outside of the 60 dBA CNEL airport noise contours.[64] Therefore, aircraft noise associated with nearby airport activity would not expose people residing or working near the project site to excessive noise levels. On this basis, implementation of the proposed project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for the proposed land use development, and no impact would occur. Moreover, the proposed project is not a noise-sensitive land use; its development at the project site would not present a land use and noise compatibility issue.

Mitigation Measures

None required.

[64] San Joaquin County. 2018. San Joaquin County's Aviation System Stockton Metropolitan Airport, Airport Land Use Compatibility Plan. February.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.14 Population and Housing *Would the project:*				
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?	☐	☐	☐	☒

Environmental Evaluation

Setting

According to the California Department of Finance (CDF), the estimated population of the City in January 2022 was 322,489. [65] This represents a 0.43 percent decrease from the 2021 population of 323,884.[66] The General Plan is projected to attract an additional 132,200 residents from 2018 levels, bringing the total population to 452,800 by the year 2040.[67] The General Plan specifies that the City has approximately 100,300 homes with an average of 3.23 people per household.

Would the project:

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)?

Less than significant impact. Unplanned direct population growth would occur if the project produced a population growth not anticipated and evaluated by the City of Stockton in its General Plan. The proposed project would not include residential uses and therefore is not anticipated to create a population increase. While some employees could relocate to the City for employment at the proposed project, it is unlikely that a significant number of employees would do so.

Furthermore, the proposed project would generate temporary employment opportunities during construction. These employees would be temporary and limited to the project construction period. Given that the temporary construction-period spans approximately nine months, the local labor pool

[65] California Department of Finance (CDF). 2022. E-4 Population Estimates for Cities, Counties, and State, 2021-2022, with 2020 Census Benchmark. Website: https://dof.ca.gov/forecasting/demographics/estimates/e-4-population-estimates-for-cities-counties-and-the-state-2021-2022-with-2020-census-benchmark/. Accessed April 1, 2023.

[66] 1 - (322,489/323,884) = .0043, or .43%

[67] City of Stockton. 2018. Envision Stockton 2040 Draft EIR. Website: http://www.stocktonca.gov/files/EnvisionStockton2040GP_DEIR.pdf. Accessed April 1, 2023.

would be expected to satisfy labor demands of the project. As a result, construction workers would not require permanent relocation, resulting in population growth in the City.

Thus, the proposed project would not induce significant indirect population growth. Impacts would be less than significant.

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

No impact. The project site is currently vacant and undeveloped and does not contain any residential structures. Therefore, the proposed project would not displace any people our housing. No impact would occur.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.15 Public Services *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:*				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

Environmental Evaluation

Setting

Fire

The project site is currently within the French Camp-McKinley Fire Protection District. Should the project site be annexed, the Stockton Fire Department (SFD) would provide fire protection services. SFD operates 13 stations and is staffed by 182 sworn fire personnel and 35 civilian employees.[68] There are five divisions within the SFD: Engine and Truck Company, Training Division, Communications Division, Hazardous Materials (Haz Mat) Division, Swift Water and Dive Rescue Team, and Urban Search and Rescue Team.[69]

The average response time from Station 5 to a fire call is approximately 6.5 minutes, which is typical for stations located on the City's periphery. The City is currently exploring the options for construction and staffing of an additional South Stockton fire station to improve Fire Department services and response times to the South Stockton area, including new industrial development. The station is expected to be financed by a Community Facilities District under which a special tax would be imposed upon new development within the district. The closest fire station to the project site is Stockton Fire Station 5, located approximately 1.9 miles northwest at 3499 Manthey Road.

Police

Law enforcement services to the project site are currently provided by the San Joaquin County Sheriff's Department. Upon annexation of the project site, law enforcement services would be provided by the Stockton Police Department (SPD). SPD is divided into six divisions: Field Operations Division, Special Operations Division, Investigations Division, Technical Services Division,

[68] City of Stockton. 2022. Fire Department. Website: http://www.stocktonca.gov/government/departments/fire/default.html. Accessed June 21, 2022.
[69] City of Stockton. 2022. Neighborhood Fire Stations. Website: http://www.stocktonca.gov/government/departments/fire/neighb.html. Accessed April 1, 2023.

Administrative Services Division, and Department support sections. For the year 2020-2021, SPD handled 654,463 requests for service with an average response time of 5 minutes or less.[70,71] As of 2018, the average response time for priority one calls in Stockton was 5 to 6 minutes.[72] The SPD is staffed by 485 sworn personnel and 227 civilian support employees.[73] The closest police station to the project site is located at 7000 Michael Canlis Boulevard approximately 1.5 miles southwest of the project site.

Schools

The project site is located within the jurisdiction of the Manteca Unified School District (MUSD) and the Stockton Unified School District (SUSD). SUSD operates 54 schools with approximately 40,000 students.[74] The closest school to the project site is the French Camp School, located approximately 0.21 mile south of the site at 241 Fourth Street. The second closest school to the project site is Great View Elementary, located 1.65 miles northwest of the site at 4223 McDougald Boulevard.

Parks

The City of Stockton Community Services Department maintains and operates 66 neighborhood, community, and regional parks.[75] The General Plan calls for at least 2 acres of neighborhood parks per 1,000 residents and 3 acres of community parks and regional parks per 1,000 residents by 2040.[76] The City currently has 215 acres of neighborhood parks and 411 acres of community park, and 180 acres of regional parks. To meet the goal outline in the General Plan, the City must add 430 acres of neighborhood parks,[77] 557 acres of community parks,[78] and 790 acres of regional parks by 2040.[79] The closest park to the site is William Long Park, located approximately 1.70 miles northwest of the project site.

Other Public Facilities

Other public facilities include libraries, community recreation centers, public infrastructure, and hospitals. Library services are provided by Stockton-San Joaquin County Public Library system. The closest library to the project site is Weston Ranch Branch Library, located approximately 2 miles northwest of the project site at 1453 West French Camp Road.

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[70] City of Stockton. 2018. Envision Stockton 2040 General Plan. Website: http://www.stocktonca.gov/files/Adopted_Plan.pdf. Accessed April 1, 2023.

[71] City of Stockton. 2022. FY 2022-23 Proposed Annual Budget. Proposed budget. http://www.stocktonca.gov/files/2022-23_Proposed_Budget_Book.pdf

[72] City of Stockton. 2018. 2040 General Plan Update and Utility Master Plan Supplements Draft Environmental Impact Report.

[73] Stockton Police Department (SPD). 2020. Strategic Plan 2020-2022. Website: http://ww1.stocktonca.gov/-/media/Stockton-Website/Departments/Police-Homepage/Images/Docs/SPD-Strategic-Plan-2020_2022-Final-Draft.pdf?la=en&hash=8C5CFC572E581225C2AF4B0679590C59593CCE00. Accessed April 1, 2023.

[74] Stockton Unified School District (SUSD). 2022. SUSD Fast Facts. Website: https://www.stocktonusd.net/site/Default.aspx?PageID=356. Accessed April 1, 2023.

[75] City of Stockton. 2022. Parks and Community Centers. Website: http://www.stocktonca.gov/discover/pcc.html. Accessed April 1, 2023.

[76] City of Stockton. 2018. Envision Stockton 2040 General Plan. Website: http://www.stocktonca.gov/files/Adopted_Plan.pdf. Accessed April 1, 2023.

[77] [(322,489/1000) x 2] - 215 = 430

[78] [(322,489/1,000) x 3] - 411 = 557

[79] [(322,489/1,000) x 3] - 180 = 790

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:

a) Fire protection?

Less than significant impact. The proposed project consists of the construction of a warehouse building and associated office space in a developed area of the City. Adequate emergency access to the project site would be provided by two 35-foot-wide driveways along South McKinley Avenue at the north and south ends of the project site and continue around the perimeter of the proposed building. Construction of the proposed project could increase demand for fire protection services. To address increases, Municipal Code Section 16-17.260, the project applicant would be required to pay a Public Facilities Fee. Payment of these fees would be used to ensure that SFD could maintain service levels given any indirect population increase associated with the proposed project.[80] Therefore, impacts would be less than significant.

b) Police protection?

Less than significant impact. The proposed project consists of the construction of a warehouse building and associated office space in a developed area of the City. Construction of the proposed project could increase demand for police. However, in compliance with Municipal Code Section 16-17.260, the project applicant would be required to pay a Public Facilities Fee. Payment of these fees would be used to ensure that SPD could serve the proposed project and any associated increase in population.[81] Therefore, with the payment of required Public Facilities Fees, impacts would be less than significant impact.

c) Schools?

Less than significant impact. District-wide, MUSD student enrollment in kindergarten to sixth grade exceeds available capacity, but the high school enrollment does not do so. The MUSD collects required school impact fees and coordinates with residential developers to ensure that sufficient capacity exists within the school system to accommodate the indirect student population generated by development of the project.

The proposed project consists of the construction of a warehouse building and associated office space in a developed area of the City. The proposed project contains warehouse and office uses and does not propose any residential units. Therefore, any increase in population is unlikely or would be negligible. Additionally, the project applicant would be subject to a Developer Fee Rate from SUSD of

[80] City of Stockton. 2022. Public Facility Fees. Website: https://www.stocktonca.gov/government/departments/communityDevelop/cdPff.html. Accessed April 1, 2023.
[81] Ibid.

$0.61 per square foot of development [82] With payment of the required impact fees, impacts to school facilities would be less than significant.

d) Parks?

Less than significant impact. The proposed project consists of the construction of a warehouse building and associated office space in a developed area of the City. This could increase the demand for park use in the vicinity of the project site. Furthermore, as described in Section 2.14, Population and Housing, the proposed project does not propose any residential units and an increase in population is unlikely. As noted above, the project applicant would be required to pay the Public Facility Fees. Payment of these fees would be used to help the City meet its goals of 2 acres of neighborhood parks and 3 acres of community and regional parks per resident by 2040. Therefore, impacts would be less than significant.

e) Other public facilities?

Less than significant impact. The project consists of the construction of a warehouse building and associated office space in a developed area of the City. Other public facilities include libraries, community recreation centers, public infrastructure, and hospitals. Library services are provided by Stockton-San Joaquin County Public Library system. The closest library to the project site is Weston Ranch Branch Library, located approximately 2 miles northwest of the proposed project site at 1453 West French Camp Road. The closest hospital to the site is San Joaquin General Hospital, located approximately 3,918 feet southwest of the project site at 500 West Hospital Road. As described in Section 2.14, Population and Housing, the proposed project does not propose any residential units and an increase in population is unlikely or would be negligible. The Public Facility Fees are used to increase the service area and capacity of nearly all public facilities and would help cover the cost of any required additional facilities. Therefore, payment of required development fees would result in a less than significant impact.

Mitigation Measures

None required.

[82] Stockton Unified School District (SUSD). 2022. Developer Fees Rates & Reports. Website: https://www.stocktonusd.net/Page/402. Accessed April 1, 2023.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.16 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Environmental Evaluation

Setting

The City of Stockton Community Services Department maintains and operates 66 neighborhood, community, and regional parks.[83] The General Plan calls for at least 2 acres of neighborhood parks per 1,000 residents and 3 acres of community parks and regional parks per 1,000 residents.[84] The closest park to the site is William Long Park, located approximately 1.70 miles northwest of the proposed project site at 4535 Woodchase Lane. The closest community center is Taft Community Center, located 1.73 miles northwest of the project site at 398 Downing Avenue.

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?

Less than significant impact. The proposed project could increase the use of existing neighborhood and regional parks and facilities. As described above, the proposed project contains warehouse and office uses, and does not propose any residential units. Therefore, an increase in population that would increase the use of parks is unlikely. Additionally, prior to issuance of a building permit, the project applicant will be required to pay a Public Facilities Fee, which would be used to build additional public facilities, including parks when necessary.[85] As described above, there are multiple parks available for use in the vicinity of the project site. As a result, the proposed project would be served by adequate recreational facilities and would not substantially increase physical deterioration of a recreational facility. Therefore, impacts would be less than significant.

[83] City of Stockton. 2022. Parks and Community Centers. Website: http://www.stocktonca.gov/discover/pcc.html. Accessed April 1, 2022.
[84] City of Stockton. 2018. Envision Stockton 2040 General Plan. Website: http://www.stocktonca.gov/files/Adopted_Plan.pdf. Accessed April 1, 2023.
[85] City of Stockton. 2022. Public Facility Fees. Website: https://www.https://www.stocktonca.gov/government/departments/communityDevelop/cdPff.html. Accessed April 1, 2023.

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 proposed project contains warehouse and office uses and does not propose any residential units. Therefore, an increase in population that would increase the use of parks is unlikely. As described above, there are multiple parks available for use in the vicinity of the project site. The closest park to the site is William Long Park, located approximately 1.70 miles northwest of the proposed project site, and the closest community center is Taft Community Center, located 1.73 miles from the project site. Furthermore, prior to issuance of a building permit, the project applicant would be required to pay a Public Facilities Fee, which would be used to help increase the service areas of and build additional public facilities, including and parks when necessary.[86] The proposed the proposed project does not include the construction of expansion of any recreational facilities that could have an adverse physical effect on the environment. As such, no impact would occur.

Mitigation Measures

None required.

[86] City of Stockton. 2022. Public Facility Fees. Website: https://www.stocktonca.gov/government/departments/communityDevelop/cdPff.html. Accessed April 1, 2023.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.17 Transportation *Would the project:*				
a) Conflict with a program plan, ordinance or policy of 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) 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?	☐	☐	☒	☐

Environmental Evaluation

Setting

The following analysis is based on the TIS dated February 21, 2022, prepared by Advanced Mobility Group and included in Appendix G.[87]

Street Network

The following transportation facilities provide access to the project site.

Regional Roadways

I-5 is major north–south freeway connecting San Diego to the south and Seattle to the north. In the project area, I-5 extends southward from Stockton as an eight-to-six-lane divided freeway. I-5 connects to I-205, approximately 8 miles to the south of Stockton. I-205 connects to I-580, 13 miles to the west of the connection between I-5 and I-205. I-205 and I-580 provide access to regional employment centers in Pleasanton, San Ramon, and the rest of the San Francisco Bay Area.

Near the project site, I-5 is a six-lane freeway. Primary access to the project site from I-5 is provided via interchanges at French Camp Road and West Mathews Road. The interchange of I-5/French Camp Road is configured as a partial cloverleaf with northwest/southeast loops. The interchange of I-5/West Mathews Road is configured as a tight diamond interchange.

SR-99 is located approximately three miles to the east of I-5 near the project area. SR-99 is a north–south freeway that provides access to Sacramento to the north and Bakersfield to the south. Residents rely primarily on SR-99 for access to the Central Valley (cities like Fresno, Modesto, and

[87] Advanced Mobility Group. 2022. Traffic Impact Study for Industrial Development @ 6505 South McKinley Avenue East, Stockton, California. March 9.

Merced). Near the project site, SR-99 is a six-lane freeway. Primary access to the project site is provided via an interchange at Arch Airport Road/Arch Road.

Local Roadways

South McKinley Avenue East is a two-lane north–south local street adjacent to the proposed project. The roadway starts from South El Dorado Street to the north and ends at French Camp Road to the south. Two-way left-turn lane is available adjacent to the project frontage. Sidewalk is available on the southbound side ending at the first proposed project driveway east of the project site. The speed limit is 35 miles per hour (mph).

El Dorado Street is a four-lane north–south major arterial roadway that provides connections from downtown Stockton to the southern portion of the City. It is located west of the project site and serves as a major transit route in Stockton. The roadway is proposed as a Class IV facility near the project site as part of the 2017 Stockton Bicycle Master Plan. The speed limit is 45 mph near the project site.

French Camp Road is a two to four-lane minor arterial roadway to the west of the project site that connects Weston Ranch to South McKinley Road and provides a connection to I-5. Traffic coming from the north (Stockton and Sacramento) on I-5 will use this road to get to the project site. Class II facilities are available to the west of the intersection with I-5. The speed limit is 30 mph near the project site.

Arch Airport Road is a three to six-lane east–west major arterial roadway that connects French Camp Road in the west to Arch Road in the east. It serves as a connection between I-5 and SR-99. Traffic coming from the north (Stockton and Sacramento) on SR-99 will use this roadway to get to the proposed project. Class I facilities are available on near the project site on the Arch Airport Road overpass between French Camp Road and Sperry Road. The speed limit is 45 mph.

Sperry Road is a two to four-lane east–west minor arterial roadway that connects South McKinley Avenue East in the west to Arch Airport Road in the east. The speed limit is 35 mph near the project site.

Arch Road is a two to four-lane east–west arterial roadway to the east of the project site that connects Arch Airport Road to Austin Road and provides access to SR-99 and the Burlington Northern Santa Fe (BNSF) Stockton Intermodal Facility. Traffic coming from the south (Tracy, Manteca, Bay Area) on SR-99 will use this road to get to the project site. The speed limit is 30 mph.

West and East Mathews Road is a two to four-lane east–west arterial roadway that connects from Ash Street in the east to South Wolfe Road in the east and provides a connection to I-5. Traffic coming from the south (Tracy, Manteca, Bay Area) on I-5 will use this road to get to the project site. It is located west of the project site and serves as a transit route in Stockton. The speed limit is 25 mph.

Ash Street is a two-lane local road that connects French Camp Road and East Mathews Road. The speed limit is 25 mph.

Harland Road is a two-lane local road that extends from French Camp Road and to the southern city limits. The speed limit is 25 mph.

As noted above:

- Sidewalks are provided on the southbound side of South McKinley Avenue.
- Class I bicycle facilities are located on the Arch Airport Road overpass between French Camp Road and Sperry Road.[88]
- A Class II bicycle facility is located on French Camp Road west of its intersection with I-5.[89]
- A Class IV bicycle facility is located on El Dorado Street.[90] They are proposed on Sperry Road, Arch Airport Road east of Airport Way, and French Camp Road from I-5 SB On/Off Ramp intersection to Arch Airport Road overpass.

Transit Service

Transit service within the study area is provided by San Joaquin Regional Transit District. There are several bus stops located within the vicinity of the project area provided by the Number 510 local bus service line. The El Dorado and French Camp stop on the 510 bus line is located approximately 0.8-mile from the project site.

Study Intersections

1. French Camp Road/I-5 Southbound Ramp
2. French Camp Road/I-5 Northbound Ramp
3. French Camp Road/Arch Airport Road
4. French Camp Road/El Dorado Street
5. Arch Airport Road/Airport Way
6. McKinley Avenue/Sperry Road
7. Arch Airport Road/SR 99 Single Point
8. French Camp Road/South McKinley Avenue
9. French Camp Road/Ash Street
10. Ash Street/Harland Road
11. East Matthews Road/El Dorado Street
12. East Matthews Road/I-5 Northbound Ramp
13. East Matthews Road/I-5 Southbound Ramp

[88] A Class I Bikeway is a Bike Path provides a separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian crossflow minimized.

[89] A Class II Bikeway is a Bike Lane provides a restricted right-of-way and is designated for the use of bicycles with a striped lane on a street or highway. Vehicle parking and vehicle/pedestrian crossflow are permitted.

[90] A Class IV Bikeway isa Separated Bikeway/Cycle Track provides a cycle track or protected bike lane for the exclusive use of bicycles, physically separated from motor traffic with a vertical feature.

Regional Regulations

Caltrans Standards

Facilities under the jurisdiction of Caltrans include freeway segments, ramps, ramp terminals, and arterials. Caltrans is responsible for the maintenance and operation of State routes and highways. In Stockton, Caltrans facilities include I-5 and SR-99. Although Caltrans has not designated a Level of Service (LOS) standard, Caltrans' Guide for the Preparation of Traffic Impact Studies indicates attempts to maintain LOS of a State highway facility between the LOS "C/D" threshold. When existing State highway facilities are operating at higher LOS than noted above, 20-year forecasts or general plan buildout analysis for the facility should be considered to establish equitable project contributions to local development impact fee programs that address cumulative traffic impacts. CEQA no longer requires an LOS analysis. However, an LOS analysis is provided in the TIS included in Appendix G.

County Standards

SJCOG is responsible for the County's Congestion Management Program (CMP). SJCOG is responsible for designated county roadways and intersections of regional significance. The minimum acceptable LOS for CMP designated roadways and intersections is LOS D4. Therefore, the TIS uses LOS D as the minimum acceptable standard and mitigation measures are recommended where service levels are below LOS D along roadways and intersections designated in the CMP. CEQA no longer requires an LOS analysis. However, an LOS analysis is provided in the TIS included in Appendix G.

Local Regulations

General Plan Goal TR-4: Effective Transportation Assessments

Ensure that traffic related-related impacts of proposed land uses are evaluated and mitigated.

Policy TR-1.1 Ensure that roadways safely and efficiently accommodate all modes and users, including private, commercial, and transit vehicles, as well as bicycles and pedestrians and vehicles for disabled travelers.

Policy TR-4.1 Utilize Level of Service (LOS) information to aid understanding of potential major increase to vehicle delay at key intersections.

Action TR-4.1A Strive for Level of Service (LOS) D or better for both daily roadway segment and peak-hour intersections operations, except for the following additional exceptions in the project area roadways:

- French Camp Road, I-5 to Val Dervin Parkway–LOS F (Because of the physical constraints that limit the improvements that could be constructed.)

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less than significant impact. This section assesses whether the proposed project is consistent with applicable regional and local transportation programs, plans ordinances, and policies that were summarized in the Regulatory Framework, above.

Transit Facilities

As described above, the project site is located 0.8-mile from the nearest 510 bus stop. As such, employees taking the 510 bus stop could reasonably walk to the project site. The proposed project would not conflict with General Plan policies related to transit service.

Bicycle Facilities

As described above, there is a Class I bicycle facility located on the Arch Airport Road overpass 1.3 miles from the project site, a Class II bicycle facility on French Camp Road 1.7 miles from the project site, and a Class IV bicycle facility located on El Dorado Street. Class IV bicycle facilities are proposed on Sperry Road, Arch Airport Road, and French Camp Road in the City's Circulation Element. A Class I bicycle path is currently located along portions of Sperry Road.

There are no bicycle facilities at close walking distance from the project site. According to the Stockton Bicycle Master Plan, there are no plans for future bicycle facilities near the project site. The proposed project will not decrease safety or access to the surrounding area, so it will have no impact on bicycle facilities.

Pedestrian Facilities

As described above, there are existing sidewalks to the north of the project site on South McKinley Avenue. The width of the sidewalks are 8 feet. However, there is a sidewalk gap along South McKinley Avenue adjacent to the project site. The proposed project would install sidewalk along this gap. Therefore, the proposed project would be compliant with General Plan Policy TR-1.1 and access to pedestrian facilities from the project site is expected to be adequate.

The proposed project would not conflict with policies in the General Plan or the Stockton Bicycle Master Plan. Therefore, impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Less than significant impact. Vehicle Miles Traveled (VMT) analysis for the proposed project was completed using the General Plan model for the base Cumulative Year and the Cumulative Plus Project Analysis. The City's VMT threshold for office land use is 15 percent below the Citywide average for home-based work VMT per employee. The VMT threshold for other land uses is on a case-by-case basis.

Based on the Institute of Transportation Engineers (ITE) Trip Generation, the estimate daily trips generated by the proposed project would be approximately 378 daily trips.

One of the Traffic Analysis Zones (TAZ) near the area, TAZ 232, contains similar industrial and office land use as the proposed project. The City of Stockton VMT guidelines stipulated use of home-based work (HBW) VMT for the proposed project. The VMT per employee from TAZ 232 was used to

represent the No Build (NB) condition. The VMT per employee for the With Project (WP) condition was then estimated (project TAZ 276). The estimated VMT per employee for the NB and WP is summarized in Table 12 below.

Table 12: VMT per Employee Summary

	TAZ	VMT/HBW	EMP	VMT per Employee
2015 NB	232	8271	401	20.6
2015 WP	276	4782	216	22.1
2040 NB	232	9496	439	21.6
2040 WP	276	4773	216	22.1

Notes:
EMP = employees
NB = No Build condition
TAZ = Traffic Analysis Zones
VMT/HBW = Home Based Work
WP = With Project condition
Source: Advanced Mobility Group. 2022. Traffic Impact Study for Industrial Development @ 6505 South McKinley Avenue East, Stockton, California. March 9.

The City's significance thresholds for daily VMT are 18.56 for the year 2015 and 15.78 for the year 2040. The NB scenario daily VMT per employee estimate without the proposed project was approximately 21.6 for the year 2040. The WP scenario daily VMT per employee estimate was approximately 22.1. The VMT per employee estimate for 2040 in the WP is approximately 40 percent higher than the threshold required by the City. As such, the project would be required to implement several TDM strategies in order to reduce VMT per employee. These TDM strategies and considerations are included in MM TRANS-1. Based on CAPCOA research, the location of the project within an area that is within close proximity to the airport, Downtown Stockton and the Port of Stockton, in combination with the other industrial centers in the vicinity, could reduce VMT by approximately 13 percent. The total anticipated VMT reduction from this and the other TDM strategies would be 38 percent, as shown in Table 13.

Table 13: TDM Reduction Measures

TDM Measure/Strategy	Estimated VMT Reduction	Description
Land Use/Location		
Destination Accessibility	13%	4.2 miles from Downtown/Job Center
Neighborhood/Site Enhancements		
Pedestrian Network Improvements	2%	Project provides pedestrian improvements on-site and connecting off-site
Provide Electric Vehicle Parking	2%	Project provides electric vehicle (EV) charging stations and EV only parking

TDM Measure/Strategy	Estimated VMT Reduction	Description
Commuter Trip Reduction (CTR)		
Required CTR Program	21%	Includes TDM Coordinator, rideshare program, encourage alternative work schedules, trip reduction marketing
Freight Transport Management	4%	Freight Transport Management Program would be used
Price Workplace Parking	2%	Project will implement workplace parking pricing
Total TDM Reduction	38%	–
Notes: * Measures are referenced in "Quantifying Greenhouse Gas Mitigation Measures" report in CAPCOA		

With implementation of MM TRANS-1, impacts would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than significant with mitigation incorporated. Collisions reported at study intersections near the project frontage on S McKinley Avenue were obtained from the Statewide Integrated Traffic Records System (SWITRS) database for a period of five years from January 2017 to December 2021. There were 21 crashes reported in this area, with no fatal or severe injuries. The total collisions at the two nearest intersections on French Camp Road/S McKinley Avenue and South McKinley Avenue/Sperry Avenue are one (1) and zero (0) respectively. This is not considered high. As such, the Transportation Impact Analysis (TIA) determined that existing corridor conditions and collision patterns would not necessitate any potential improvement countermeasures at this time.

Access to the project site would be provided by two driveways along South McKinley Avenue. At driveways, a clear line of site should be provided between the vehicle waiting at the driveway and the approaching vehicle. The vehicle waiting to either cross, turn left, or turn right, through the driveway should have sufficient time to make that maneuver without requiring the through traffic to drastically alter their speed.

The recommended sight distance standards include a stopping site distance of 250 feet for a design speed of 35 mph. Field observations conducted for the TIS found that this site distance of both proposed driveways would be compliant with this standard.

In addition, based on Municipal Code Section 16.36.140, the required sight area dimension is a 30 feet by 30 feet sight triangle from the corner of the property line. Any improvements, vegetation, or other obstructions within that sight triangle area must be less than 30 inches from the ground. Sight Distance at both driveways is adequate since all landscaping on South McKinley Avenue would be maintained below 30 inches high.

Furthermore, the TIS evaluates project truck circulation. As a vehicle approach the project site from French Camp Road to the south on South McKinley Avenue East, the vehicle would encounter a horizontal curve on the road that leads to the driveway. Any vehicle driveway northbound might meet a large truck waiting on the median to enter the driveway. Because of the horizontal curve, a fast driving vehicle might not be able to stop in time and could rear end a large truck. As such, MM TRANS-2 requires that trucks only be allowed to exit and not enter the southernmost project driveway.

Because collision risk in the area is low and site distance and truck circulation would be adequate, impacts would be less than significant with mitigation incorporated.

d) Result in inadequate emergency access?

Less than significant impact. The project consists of the construction of a warehouse building and associated office space in a developed area of the City. Emergency preparedness is managed by the City's OES for disaster preparedness, readiness, City departments response, and mitigation.[91] The City adopted its most recent version of its EOP in June 2012. The EOP addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The EOP establishes the emergency management organization required to mitigate any significant emergencies and identifies roles and responsibilities required to protect the health and safety of Stockton residents and property. In addition, the EOP establishes operations concepts associated with a field response to emergencies.[92] The EOP recommends that all businesses develop comprehensive emergency plans but does not require them. Adequate emergency access to the project site would be provided by two 35-foot-wide driveways along South McKinley Avenue at the north and south ends of the project site and continue around the perimeter of the proposed building. Furthermore, the TIS evaluated truck circulation at the project site and determined that it would be adequate with implementation of MM TRANS-2. Therefore, it can be assumed that large emergency vehicles would be able to circulate the project site safely. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM TRANS-1 Transportation Demand Management

The project shall implement the following Transportation Demand Management (TDM) strategies as detailed in the Transportation Impact Analysis (TIA):

1. Pedestrian Network Improvements.
   Provide a safe and accessible pedestrian network that links the project site to other areas. The proposed project would provide design elements that enhance walkability and connectivity, including low-speed internal roadways. The

[91] City of Stockton. 2019. Emergency Preparedness. Website: http://www.stocktonca.gov/government/departments/fire/emerge.html. Accessed April 1, 2023.
[92] City of Stockton. June 2012. Emergency Operations Plan.

proposed project will also close the City's sidewalk gap and provide a connection to the City's existing sidewalk network.

2. Electric Vehicle Parking and Neighborhood Electric Vehicle (NEV) Network
   The project will provide NEV parking, charging facilities, striping, and signage.
3. Commuter Trip Reduction Program
   The proposed project would implement a Commuter Trip Reduction (CTR) program. The following strategies would be implemented as part of the program:
   a. Implement a Commuter Trip Reduction Program
      i. TDM Coordinator:
         This person would be responsible for implementing and managing the proposed project's TDM plan, ensure all employees are aware of all available transportation options, and serve as the point of contact for all employees to answer any TDM-related questions. The following services would be provided by the TDM Coordinator:
         - Provide information packets to all new employees.
         - Set up and maintain an on-site and/or online TDM board/kiosk with information on non-auto transportation alternatives and promotional programs.
         - Provide trip planning assistance to employees considering an alternative mode, including carpool/vanpool ride-matching and bicycle buddy matching services.

         The appointed Transportation Coordinator would provide transportation information packets to all new residents and employees upon move-in. The packets would include local and regional bikeway maps, bicycling resources, local and regional transit maps, locations of nearest transit stops, local and regional transit schedules of adjacent routes, trip planning resources, ride-matching/sharing programs, and contact information for the Transportation Coordinator. The new tenant information packets would also be made available to employees via the on-site and/or online TDM board.

      ii. TDM Marketing/TDM board
         The TDM Coordinator will maintain an on-site TDM board with information on transportation alternatives. The information provided should contain information on:
         - Local and regional transit routes
         - Ride-matching services and any available discount/incentive programs
         - Trip planning resources in San Joaquin County and the City of Stockton
         - Safety tips for cyclists and pedestrians

         To be effective, the coordinator will need to update the board with up-to-date information, commuter alerts, and new proposed TDM measures or incentives. Along with this board, the TDM Coordinator will also need to continuously promote TDM measures through marketing. Marketing can be accomplished through the following measures:

- Yearly survey of employees on their modes of transportation to work
- Marketing campaigns/events to encourage alternative travel modes
- Produce courses/guides that promote the benefits of alternative transportation

iii. Ride Sharing/Carpooling

TDM Coordinator would set up a ride sharing/carpooling program that can increase vehicle occupancy and reduces the number of vehicles driving the same trip, resulting in decreased TDM. To encourage carpooling, the proposed project would provide a designated on-site passenger loading space and provide an on-site and/or online message board for coordinating rides.

The coordinator would also provide information on the Van Go! Rideshare service as part of the TDM Board and the new employee guide. This service can be used throughout San Joaquin County and is booked through an online website or mobile application. Up to three people in the group can use this service with the first 5 miles driven costs $4 per person. Any additional miles after those first five miles using the service cost $0.50 per person.

iv. Alternative Work Schedule Program

TDM Coordinator would setup an alternative work schedules program that can help reduce peak-period commute and accommodate ride sharing. Alternative work schedules include:

- Flextime: Employees can work within a given time period rather than a rigid schedule. For example, a company typically working from 8:00 to 4:30 can have some employees work from 7:30 to 4:00 and others from 9:00 to 5:30.
- Compressed Work Week: Employees work longer but fewer days. They can do a 4/40 schedule (four 10-hour work weeks), or a 9/80 schedule (9-hour work days and a day off every two weeks).

a. Price Parking Program

A Price Parking Program is meant to charge employees for parking at the work site instead of providing free parking. By charging for parking, employees will be encouraged to find alternative modes of transportation to work. The revenue received by the price parking program would be used to fund parts of the CTR program.

The parking program would charge daily parking instead of monthly parking to increase parking prices and decrease accessibility of employees paying parking. Employees would pay through an electronic pay box. Guests and employees who only drive occasionally would pay through the TDM Coordinator at the front office/counter.

b. Freight Transport Management

A Freight Transport Management Program would be implemented to mitigate truck traffic and would be coordinated by a Logistics

Manager. This manager can improve fright transportation efficiency with the following measures:

- Improve scheduling and routing to reduce freight vehicle mileage and empty backhauls.
  The Logistics Manager can schedule freight deliveries making sure that they deliver as much shipment as possible. This will reduce the number of freight trips with half hauls or trips with empty backhauls.
- Organize regional delivery systems so fewer vehicle trips are needed to distribute goods.
  The Logistics Manager can contact regional warehouses to allow sharing of resources and freight consolidation. If two warehouses within the same area are delivering similar products, they can coordinate and share a single truck instead of using two trucks for the delivery.
  Implement weight distance charges.
  A special impact fee would be charged to freight based on the number of miles traveled.
- Change freight delivery times to reduce congestion.
  The Logistics Manager would schedule more truck deliveries between the off-peak hours instead of peak hours.

MM TRANS-2 The proposed project shall only allow trucks to exit and not enter from the southernmost project driveway in order to prevent collisions.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.18 Utilities and Service Systems *Would the project:*				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater 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?	☐	☐	☒	☐

Environmental Evaluation

Setting

Water

The project area is served by COSMUD. COSMUD obtains its water from the San Joaquin River, the Eastern San Joaquin Groundwater Subbasin and from the SEWD. Surface water from the San Joaquin River is diverted at the Intake Pump Station on Empire Tract in the Sacramento-San Joaquin Delta and treated at the City's Delta Water Treatment Plant (DWTP), with supplemental surface water from the Mokelumne River diverted and conveyed by Woodbridge Irrigation District (WID), and treated at the City's DWTP, when the City's supplies from the San Joaquin River are curtailed. Water provided by SEWD is treated surface water from the New Melones (Stanislaus River) and New Hogan (Calaveras River) Reservoirs.[93]

[93] City of Stockton Municipal Utilities Department. 2021. Water Master Plan Update. January.

Wastewater

The Stockton RWCF provides primary, secondary, and tertiary treatment of municipal wastewater collected from the City. The project site does not currently have access to a wastewater line.

Stormwater

The project site is currently entirely pervious surfaces.

Solid Waste

The project site is in the Waste Management service area for waste pickup services. Solid waste collected by Waste Management is taken to the Forward Landfill in Manteca or the North County Landfill in Lodi. Construction and demolition material and some commercial loads are processed at the East Stockton Transfer Station. Residuals form the East Stockton Transfer Station are disposed at Forward Landfill.[94]

Electricity and Gas

PG&E would provide electricity and gas to the project site.

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than significant impact.

Water

The project site is currently within the service are for the Stockton potable water system, and connection to the system will be available upon annexation. The proposed project would install a 16-inch water line parallel to the existing water lines in South McKinley Avenue. Prior to issuance of building permits, the applicant would be required to submit information regarding new on-site infrastructure and any modifications to the existing water infrastructure. The applicant would be required to pay a water service connection fee to COSMUD. Any construction of water infrastructure would be required to comply with the utility construction BMPs established from an SWPPP. COSMUD adopted their Water Master Plan Update (WMPU) in January 2021. The WMPU outlines strategies and plans to increase water delivery capacity in order to meet the anticipated demand in COSMUDs service area. As such, impacts would be less than significant.

Wastewater

The proposed project would extend a 10-inch sanitary sewer line connecting to a 24-inch sanitary sewer line extending approximately 2,400 feet north of the project site near the intersection at Sperry Road (Exhibit 6). Arch Airport Road and South McKinley Avenue, approximately 2,000-feet north of the project site. On-site sewer lines would be installed to provide service to future development, and the on-site system would connect to the proposed sewer extension. An on-site

[94] City of Stockton. June 2018. Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft EIR.

pump station would be included in the proposed extension. The proposed project would be required to pay a sewer connection fee. Impacts related to this extension of the sanitary sewer line are evaluated as off-site improvements in all Sections 2.1 through 2.19 of this document. Furthermore, the applicant would be required to pay a sewer hook-up fee. As such, impacts would be less than significant.

Stormwater

The proposed project would create pervious surfaces on a large portion of the project site, which would cause increased stormwater runoff, and require the construction of stormwater control infrastructure. The proposed project would direct stormwater to an underground mechanical stormwater treatment facility including two parallel underground storage pipes, where water quality treatment would occur. Then, water would be directed to the existing ditch north of the project site, which eventually leads to French Camp Slough. The mechanical treatment process would be designed to treat stormwater volumes of up to 21,000 cubic feet. Furthermore, the proposed project would construct a sidewalk and gutter to collect stormwater runoff from McKinley Avenue. The street runoff would be direct to proposed storm pipes within McKinley Avenue. Therefore, impacts would be less than significant.

Electricity and Natural Gas

The project site would be serviced by PG&E for electricity and gas. The proposed project site would connect to existing overhead electricity lines at South McKinley Avenue. The proposed design of the building does not provide a natural gas service connection.

For the reasons described above impacts would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than significant impact. The proposed project would develop 179,000 square feet of warehouse space and 5,000 square feet of office space on a vacant site. This would result in an increase in potable water usage at the project site. Table 14 below shows COSMUD's supply and demand projections through the year 2040 for normal, single dry, and multiple dry years.

Table 14: Water Supply Demand Comparison for Normal, Single Dry, and Multiple Dry Years in the COSMUD Service Area

COSMUD Water Supply/Demand	2025	2030	2035	2040
Normal Year				
Supply	75,700	75,700	92,100	92,100
Demand	36,856	39,217	41,749	44,465
Difference	*38,844*	*36,483*	*50,351*	*47,635*
Single Dry Year				
Supply	69,700	69,700	86,100	86,100

COSMUD Water Supply/Demand	2025	2030	2035	2040
Demand	36,856	39,217	41,749	44,465
Difference	*32,844*	*30,483*	*44,351*	*41,365*
Multiple Dry Year				
Supply	69,700	69,000	86,100	86,100
Demand	36,856	39,217	41,749	44,465
Difference	*32,844*	*30,483*	*44,351*	*41,635*

Source: City of Stockton. June 2018. Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft EIR.

As shown above, COSMUD is expected to have a surplus water supply through the year 2040, even under the multiple dry year scenario. The projected water demand for the proposed project is 16 acre-feet annually. As such, it can be expected that COSMUD would have enough water supplies to provide the amount of water that would be needed for operation of the proposed project. Impacts would be less than significant.

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?

Less than significant impact. The project site is not presently connected to a wastewater collection and treatment system and contains no individual wastewater disposal systems. Once the project site is annexed into the City, it would be served by the City's existing wastewater collection and treatment system. The proposed project would convert vacant land to 179,000 square feet of warehouse space and 5,000 square feet of office space, which would increase wastewater usage on-site. The RWCF has the capacity to treat 55 million gallons of sewage per day.[95] Currently, the RWCF collects and treats an average of 33 million gallons of wastewater daily (mgd). The General Plan EIR predicts an average dry weather flow of 40.2 mgd for the year 2035 and 46.3 mgd in the year 2045.[96] The proposed project is expected to generate 16 acre-feet or approximately 0.01 mgd per day, which is less than 0.001 percent of the expected dry weather flow in 2035. Therefore, it can be assumed that there is wastewater treatment capacity for the proposed project. Impacts would be less than significant.

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?

Less than significant impact. Significant impacts could occur if the proposed project would exceed the existing permitted landfill capacity or violate federal, State, and local statutes and regulations. As described above, Waste Management would provide solid waste pickup services for the project site. Construction waste would be taken to the East Stockton Transfer Station before being taken to

[95] City of Stockton. Wastewater (Sewer). Website: http://www.stocktonca.gov/government/departments/municipalUtilities/utilSewer.html. Accessed January 31, 2023.
[96] City of Stockton. 2018. Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft EIR. June.

Forward Landfill. Operational Waste would be taken to either Forward Landfill or the North County Landfill & Recycling Center. As shown in Table 15 below, the total remaining capacity between the two landfills is expected to be 60,120,669.

Table 15: Landfill Capacities

Facility	Max Permitted Throughput (tons per day)	Maximum Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)
Forward Landfill	8,668	59,160,000	24,720,669
North County Landfill and Recycling Center	835	41,200,000	35,400,000
Total	**9,503**	**100,360,000**	**60,120,669**

Source: CalRecycle. SWIS Facility/Site Search. Website: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Accessed January 31, 2023.

Because no demolition is required at the project site, the proposed project is not expected to generate a substantial amount of construction water. According to CalRecycle, warehouse uses typically produce 1.42 pounds of waste per 100 square feet per day and office uses typically produce 0.6 pounds per 100 square feet per day. The proposed project would develop 179,000 square feet of warehouse space and 5,000 square feet of office space. Therefore, it can be expected to produce 284.18 pounds of solid waste of 0.14 tons per day.[97] This is less than 0.001 percent of the daily permitted throughput at Forward Landfill and North County Landfill combined, and would thus have a negligible impact on the landfills' capacity. Therefore, there would be sufficient capacity to dispose of waste generated from the proposed project, and impacts would be less than significant.

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Less than significant impact. AB 939 requires local jurisdictions to achieve at least a 50 percent solid waste diversion rate. Stockton Municipal Code Section 8.28.060 requires diversion of at least 50 percent of solid waste generated by construction, demolition, or renovation. AB 1826 requires recycling of organic matter by businesses that generate amounts over 2 cubic yards of solid waste per week. The proposed project would produce approximately 284.18 pounds of solid waste. According to the EPA, 1 cubic yard of uncompacted municipal solid waste is approximately 138 pounds. This means that the proposed project would produce slightly over 2 cubic yards of solid waste.[98] As such, the proposed project would be required to comply with AB 1826 by providing recycling for organic matter. Impacts would be less than significant.

Mitigation Measures

None required.

[97] (179,000 square feet of warehouse space*1.42 pounds of solid waste/100 square feet/1 day) + (5,000 square feet of office space*0.6 pounds of solid waste/100 square feet/ 1 day) = 284.18 pounds of solid waste per day = .14209 tons

[98] United States environmental Protection Agency. 2016. Volume-to-Weight Conversion Factors for Solid Waste. Website: https://www.epa.gov/sites/default/files/2016-04/documents/volume_to_weight_conversion_factors_memorandum_04192016_508fnl.pdf. Accessed February 9, 2022.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.19 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Environmental Evaluation

Setting

A State Responsibility Area (SRA) is an area of the State in which the financial responsibility of preventing and suppressing fires has been determined by the California Department of Forestry and Fire Protection (CAL FIRE) pursuant to Public Resources Code Section 4125, to be primarily the responsibility of the State. A Local Responsibility Area (LRA) is an area designated by CAL FIRE pursuant to Government Code Section 51178 that is not within an SRA and is managed at the local level. The proposed project is located in an LRA.[99]

Figure 4.8-1 of the General Plan illustrates that there are no High or Very High FHSZs in the City and its SOI. However, approximately 945 acres classified Moderate FHSZ are scattered throughout the City and its SOI. The project site is not located in any of the Moderate FHSZ areas.

[99] California Department of Forestry and Fire Protection (CAL FIRE). 2009. Contra Costa County: Very High Fire Hazard Severity Zones in LRA As Recommended By CAL FIRE. Website: https://osfm.fire.ca.gov/media/6660/fhszl_map7.pdf. Accessed April 1, 2023.

Would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. The City adopted its most recent version of its EOP in June 2012. The EOP addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The EOP establishes the emergency management organization required to mitigate any significant emergencies and identifies roles and responsibilities required to protect the health and safety of Stockton residents and property. The EOP recommends that all businesses develop comprehensive emergency plans but does not require them. [100]

The closest fire station to the project site is Stockton Fire Station 5, located approximately 1.9 miles northwest at 3499 Manthey Road. Adequate emergency access to the project site would be provided by two 35-foot-wide driveways along South McKinley Avenue at the north and south ends of the project site and continue around the perimeter of the proposed building. Therefore, impacts would be less than significant.

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?

Less than significant impact. As described above, the project site is not located in a FHSZ. The project site is located in an urbanized area and is relatively flat. Additionally, the proposed project would require the removal of undeveloped lands and vegetation, reducing the risk of wildfires. The proposed project would be reviewed and approved by the SFD for compliance with the California Building, Electrical, Fire, and Mechanical Codes, pursuant to Municipal Code Section 2.68.040.[101] Because the project site is not in an area that is at risk of wildland fires as designated by CAL FIRE, is located near developed areas, and would require removal of undeveloped lands and vegetation, impacts would be less than significant.

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?

Less than significant. The proposed project would consist of new construction on a currently vacant and undeveloped site. The proposed project would connect to existing underground water lines, overhead electric lines, and telephone lines on South McKinley Avenue. The proposed project would require a 4-foot-deep trench for a new sewer line and new water main in South McKinley Avenue, extending approximately 2,400 feet deep north of the site, near the intersection of Sperry Road. However, the new sewer line would be underground in an already urbanized area and would not exacerbate fire risk. Additionally, the proposed project would follow all requirements of the CBC and

[100] City of Stockton. June 2012. Emergency Operations Plan.
[101] City of Stockton. 2022. Stockton, Municipal Code, Charter, and Civil Service Rules. Section 2.78.040 Fire Prevention Division-Established.

Municipal Code Section 2.68.040.[102] Therefore, infrastructure resulting from the proposed project would not exacerbate fire risks. Impacts would be less than significant.

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?

Less than significant impact. As described above, the project site is not located in a FHSZ. The project site is located partially within a FEMA 500-year Flood Zone and partially within a FEMA 100-year Flood Zone.[103] However, as described in Section 2.10, Hydrology and Water Quality, impacts related to flooding would be mitigated to a less than significant level. Furthermore, the project site is relatively flat and, as described in Section 2.7, Geology and Soils, the project site is not subject to landslide risks. Therefore, the proposed project would not be subject to landslides or post-slope fire instability and impacts would be less than significant.

Mitigation Measures

None required.

[102] City of Stockton. 2022. Stockton, Municipal Code, Charter, and Civil Service Rules. Section 2.78.040 Fire Prevention Division-Established.

[103] Federal Emergency Management Agency (FEMA). FEMA's National Flood Hazard Layer (NFHL) Viewer. Website: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed May 16, 2022.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.20 Mandatory Findings of Significance				
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐

Environmental Evaluation

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?

Less than significant impact with mitigation incorporated. The proposed project would have the potential to impact several special-status wildlife species and other SJMSCP-covered species (valley elderberry longhorn beetle, western pond turtle, giant garter snake, tricolored blackbird, burrowing owl, Swainson's hawk, white-tailed kite, loggerhead shrike, song sparrow, least Bell's vireo, longfin smelt, and Delta smelt). However, MM BIO-1 requires that the applicant obtain an SJMSCP permit from SJCOG and implement all requirements and conditions stated in the permit. MM BIO-2a requires a Construction General Permit from the RWQCB and stormwater planning documents to protect water quality and riparian habitat. MM BIO-2b prohibits work within the riparian corridor and creek bed or banks. MM BIO-2c requires establishment of a long-term water quality maintenance plan and permanent fencing around the riparian area. MM BIO-3 requires pre-construction surveys and potential avoidance buffers for the protection of active bird nests.

Implementation of these mitigation measures would protect the listed wildlife species and reduce impacts to a less than significant level.

Furthermore, the proposed project could have an impact on French Camp Slough, which is a protected water through federal and State regulations. However, MMs BIO-2a through MM BIO-2c described above would reduce these impacts to a less than significant level.

The proposed project could harm potential nursery sites for several species in French Camp Slough. However, MM BIO-4 requires roosting bat pre-construction surveys and implementation of any necessary avoidance measures. MM BIO-5 requires minimization of light impacts into French Camp Slough. MM BIO-6 requires submittal of a tree report to the City and, if required by SJCOG, implementation of valley oak woodland mitigation. Implementation of these mitigation measures as well as MM BIO-1 through MM BIO-3 would reduce this impact to a less than significant level.

Lastly, the proposed project has the potential to damage previously undiscovered archaeological resources, human remains, or TCRs. However, MM CUL-1 requires full-time archaeological monitoring during ground disturbance and procedures to follow in case of an inadvertent discovery of archaeological or historic resources. MM CUL-2 outlines procedures for the event of an accidental discovery of human remains. Implementation of these mitigation measures would reduce impacts to a less than significant level.

With implementation of the mitigation measures described above, the proposed project would not 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.

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)?

Less than significant impact with mitigation incorporated. The proposed project could contribute to a cumulative impact on special-status wildlife species and other SJMSCP-covered species. However, implementation of MM BIO-1 through MM BIO-6, as described above, would reduce these impacts to a less than significant level.

Furthermore, the proposed project has the potential to create a significant cumulative impact through direct GHG emissions from on-site area sources and vehicle trips generated by the proposed project, and indirectly through off-site energy production required for on-site activities, water use, and waste disposal. However, MM GHG-1a through MM GHG-1f require various building, equipment, and landscaping features that would reduce impacts to a less than significant level.

The proposed project has the potential to create a significant cumulative impact related to the release of hazardous materials into the environment resulting from disturbance of on-site AST and

soil and concrete debris piles of unknown origins. However, MM HAZ-1 requires the applicant to contract a qualified firm to complete the Phase II ESA and implement all recommended measures. This would reduce the impact to a less than significant level.

Lastly, the proposed project has the potential to create a significant cumulative impact related to VMT. However, MM TRANS-1 requires several TDMs that would reduce impacts to a less than significant level.

With implementation of the MMs described above, the proposed project would not have impacts that are cumulatively considerable.

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

Less than significant impact with mitigation incorporated. Based on the information provided in the Project Description and the responses to Sections 2.1 through 2.19 of this Draft IS/MND, the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly, because the project's potential impacts would be mitigated to a less than significant level. With implementation of all mitigation measures discussed herein, the proposed project would not result in substantial adverse effects on human beings.

Mitigation Measures

Implementation of MM BIO-1, MM BIO-2a through MM BIO-2c, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6, MM CUL-1, MM CUL-2, MM GHG-1a through MM GHG-1f, MM HAZ-1, and MM TRANS-1.

SECTION 3: LIST OF PREPARERS

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EXHIBIT 1

South McKinley Avenue East Industrial Project

Responses to Comments

SECTION 1: RESPONSES TO WRITTEN COMMENTS

1.1 - List of Authors

A list of public agencies, organizations, and individuals that provided comments on the Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) is presented below. Each comment has been assigned a code. Individual comments within each communication have been numbered so comments can be cross-referenced with responses. Following this list, the text of the communication is reprinted and followed by the corresponding response.

Author **Author Code**

Local Agencies

Central Valley Regional Water Quality Control Board ..... CVRWQCB

Organizations

Adams Broadwell Joseph & Cardozo ADAMSBROADWELL-1
Adams Broadwell Joseph & Cardozo ADAMSBROADWELL-2
Adams Broadwell Joseph & Cardozo ADAMSBROADWELL-3
Blum, Collins & Ho LLP..... BLUM-1
Mitchell M. Tsai TSAI-1

1.2 - Responses to Comments

1.2.1 - Introduction

Although a lead agency is not required to provide written responses to comments on proposed Negative Declarations (NDs) or Mitigated Negative Declarations (MNDs) under the California Environmental Quality Act (CEQA), the City of Stockton has evaluated the comments received on the South McKinley Avenue East Industrial Project (State Clearinghouse No. 2024081317) (proposed project) Draft IS/MND and has elected to provide responses to the following significant environmental comments. None of the comments received results in substantial revisions to the Draft IS/MND or the need to recirculate the Draft IS/MND, or triggers the need to prepare an Environmental Impact Report (EIR).

1.2.2 - Comment Letters and Responses

The comment letters reproduced in the following pages follow the same organization as used in the List of Authors.

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CALIFORNIA Water Boards

GAVIN NEWSOM
GOVERNOR

YANA GARCIA
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

30 September 2024

Nicole Moore
City of Stockton
345 North El Dorado Street
Stockton, CA 95202
Nicole.Moore.Ctr@stocktonca.gov

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, SOUTH MCKINLEY AVENUE EAST INDUSTRIAL PROJECT, SCH#2024081317, SAN JOAQUIN COUNTY

Pursuant to the State Clearinghouse's 29 August 2024 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the South McKinley Avenue East Industrial Project, located in San Joaquin County. 1

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38. 2

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by

the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/ 2 CONT

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State. 3

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at: 4

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml 4 CONT

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250. 5

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/ 6

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/ 7

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

7 CONT

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge. 8

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf 9

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/ 10

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter G. Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

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State Agencies

Central Valley Regional Water Quality Control Board (CVRWQCB)

Response to CVRWQCB-1
The comment provides introductory remarks. No response is required.

Response to CVRWQCB-2
The comment summarizes information related to the Basin Plans under the commenting agency's jurisdiction. No response is required.

Response to CVRWQCB-3
The comment summarizes information related to the Antidegradation Policy and states that the environmental review document should discuss potential impacts to surface and groundwater quality. The Draft IS/MND discusses potential impacts related to hydrology and water quality in Section 2.10, pages 100 to 105. No further response is required.

Response to CVRWQCB-4
The comment summarizes information related to the Construction General Permit and preparation of a stormwater pollution prevention plan (SWPPP). The City and applicant acknowledge that preparation of a SWPPP will be required as part of the permitting process prior to the start of construction, as required by Mitigation Measure (MM) BIO-2a. No further response is required.

MM BIO-2a Avoidance and Minimization of Indirect Temporary Impacts to Water Quality and Riparian Habitat

The project applicant shall obtain a Construction General Permit from the Regional Water Quality Control Board (RWQCB). The applicant shall ensure that the project Civil Engineer prepares all required stormwater planning documents consistent with the requirements of the RWQCB (e.g., a Storm Water Pollution Prevention Plan [SWPPP] that complies with current National Pollutant Discharge Elimination System [NPDES]; Best Management Practices [BMPs] to control the pollutants in stormwater runoff, and/or a Storm Water Management Plan [SWMP]) shall be developed and integrated into the project plan.

Response to CVRWQCB-5
The comment summarizes information related to the Clean Water Act Section 404 permit process. As discussed in Section 2.4, Biological Resources of the Draft IS/MND (pages 52 through 66), the proposed project would not affect waters of the United States such that permitting under Section 404 would be required. No further response is required.

Response to CVRWQCB-6
The comment summarizes information related to the Clean Water Act Section 401 permit process.

As discussed in Section 2.4, Biological Resources of the Draft IS/MND (pages 52 through 66), no direct impacts are proposed to French Camp Slough. However, the construction and operation of the proposed project could have indirect impacts on the water quality of French Camp Slough and downstream reaches through sediment and polluted stormwater runoff. Therefore, the proposed project could result in potential impacts on State and federally protected waters.

With implementation of MM BIO-2, the proposed project would implement all water quality protection measures imposed by the San Joaquin Council of Governments (SJCOG) and the RWQCB, and therefore any potential indirect impacts on receiving waters would be reduced to less than significant. No further response is required.

Response to CVRWQCB-7
Refer to Response to CVRWQCB-6. No further response is required.

Response to CVRWQCB-8
The comment summarizes information related to waste discharge requirements. The City and applicant acknowledge that additional permitting through CVRWQCB would be required if construction or groundwater dewatering is proposed. No further response is required.

Response to CVRWQCB-9
The comment summarizes information related to the National Pollutant Discharge Elimination System (NPDES) Permit. The City and applicant acknowledge that preparation of a NPDES will be required as part of the permitting process prior to the start of construction, as required by MM BIO-2a. See also Response to CVRWQCB-4. No further response is required.

Response to CVRWQCB-10
See response to CVRWQCB-9. No further response is required.

September 17, 2024

Via Email and U.S. Mail

Stephanie Ocasio, Director
Community Development Department
City of Stockton
425 N. El Dorado St.
Stockton, CA 95202
Email: planning@stocktonca.gov

City Clerk
Office of the City Clerk
City of Stockton
425 N El Dorado St.
Stockton, CA 95202
Email: City.Clerk@stocktonca.gov

Via Email Only

Nicole Moore, Contract Planner
Email: Nicole.Moore.CTR@stocktonca.gov

Re: Public Records Act Request – South McKinley Avenue East Industrial Project (SCH No. 2024081317)

Dear Ms. Ocasio, City Clerk, and Ms. Moore:

We are writing on behalf of San Joaquin Residents for Responsible Development ("San Joaquin Residents") to request a copy of any and all public records referring or related to the South McKinley Avenue East Industrial Project (SCH No. 2024081317) ("Project") proposed by GO Industrial ("Applicant"). This request includes, but is not limited to, any and all file materials, applications, correspondence, resolutions, memos, notes, analysis, email messages, files, maps, charts, and any other documents related to the Project. 1

This request is made pursuant to the **California Public Records Act** (Government Code §§ 7920.000, *et seq*.). This request is also made pursuant to Article I, section 3(b) of the California Constitution, which provides a Constitutional right of access to information concerning the conduct of government. Article I, section 3(b) provides that any statutory right to information shall be broadly construed to provide the greatest access to government information and further requires that any statute that limits the right of access to information shall be narrowly construed. 2

The proposed Project includes the construction of a 184,166-square foot industrial building for warehouse and office use. The site is currently vacant, previously agricultural, land in San Joaquin County within the sphere of influence of the City of Stockton, which would annex the site as part of the project approval. The site is located at 6505 South McKinley Avenue East. Regional access to the site is provided by Interstate 5 and State Route 99. (APN 193-02-034) 3

We request access to the above records in their original form, as maintained by the agency.[1] Pursuant to Government Code Section 7922.570, if the requested documents are in electronic format, please upload them to a file hosting program such as Dropbox, NextRequest or a similar program. Alternatively, if the electronic documents are 10 MB or less (or can be easily broken into sections of 10 MB or less), they may be emailed to me as attachments. 4

We will pay for any direct costs of duplication associated with filling this request up to $200.[2] However, please contact me with a cost estimate before copying/scanning the materials. 5

Please use the following contact information for all correspondence: 6

U.S. Mail
Alex Stukan
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080-7037

Email
astukan@adamsbroadwell.com

If you have any questions, please call me at (650) 589-1660 or email me at the address above. Thank you for your assistance with this matter.

Sincerely,

Alex Stukan
Paralegal

AES:acp

[1] Gov. Code § 7922.570; *Sierra Club v. Super. Ct.* (2013) 57 Cal. 4th 157, 161-62.
[2] Gov. Code §§ 7922.530, 7922.575; *North County Parents v. Dept. of Education* (1994) 23 Cal.App.4th 144; *County of Los Angeles v. Super. Ct.* (2000) 82 Cal.App.4th 819, 826.

Adams Broadwell Joseph & Cardozo (ADAMSBROADWELL-1)

Response to ADAMSBROADWELL-1-1
This comment relates to commenter's request for documents that was voluntarily withdrawn on November 8, 2024. In withdrawing the records request, commenter specifically acknowledged that relevant documents were available online. Accordingly, the records request is not operative or applicable. Additionally, the City notes that a request for records did not raise any environmental issues or provide comment on the Draft IS/MND and is therefore outside the purview of CEQA. No further response is required.

Response to ADAMSBROADWELL-1-2
This comment relates to a request for documents that was voluntarily withdrawn by commenter on November 8, 2024.

The City notes that all documents incorporated by reference were available for public review pursuant to CEQA's requirements. For the documents referenced in the Draft IS/MND, website addresses are available within the footnotes. No further analysis is warranted.

Response to ADAMSBROADWELL-1-3
This comment consists of introductory information summarizing the commenter's understanding of the proposed project. This summary does not raise any environmental issues related to the proposed project or the Draft IS/MND and no further response is required.

Response to ADAMSBROADWELL-1-4
The comment concerns a request for records that was withdrawn and no longer applicable. The request for records does not raise any environmental issues and is outside the purview of CEQA. No further analysis is warranted.

Response to ADAMSBROADWELL-1-5
The commenter states their willingness to pay for certain duplication costs. This comment does not raise any environmental issues and is outside the purview of CEQA. No response is required.

Response to ADAMSBROADWELL-1-6
The commenter provides contact information. No response is required.

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Of Counsel
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September 17, 2024

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425 N. El Dorado St.
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Via Email Only
Nicole Moore, Contract Planner
Email: Nicole.Moore.CTR@stocktonca.gov

Re: Request for Immediate Access to Documents Referenced in the Mitigated Negative Declaration – South McKinley Avenue East Industrial Project (SCH No. 2024081317)

Dear Ms. Ocasio and Ms. Moore:

We are writing on behalf of San Joaquin Residents for Responsible Development ("San Joaquin Residents") to request ***immediate access*** to any and all documents referenced, incorporated by reference, and relied upon in the Draft Mitigated Negative Declaration ("MND") prepared for the South McKinley Avenue East Industrial Project (SCH No. 2024081317) ("Project") proposed by GO Industrial ("Applicant"). *This request excludes a copy of the MND and its appendices. This request also excludes any documents that are currently available on the City of Stockton's website as of today's date*.[1] 1

The proposed Project includes the construction of a 184,166-square foot industrial building for warehouse and office use. The site is currently vacant, previously agricultural, land in San Joaquin County within the sphere of influence of the City of Stockton, which would annex the site as part of the project approval. 2

[1] Accessed https://www.stocktonca.gov/business/planning___engineering/other_projects_environmental.php#collapse1930b21 on September 16, 2024.

The site is located at 6505 South McKinley Avenue East. Regional access to the site is provided by Interstate 5 and State Route 99. (APN 193-02-034) 2 CONT

Our request for ***immediate access*** to all documents referenced in the MND is made pursuant to the California Environmental Quality Act ("CEQA"), which requires that all documents referenced, incorporated by reference, and relied upon in an environmental review document be made available to the public for the entire comment period.[2] 3

If the requested documents are in electronic format, please upload them to a file hosting program such as Dropbox, NextRequest or a similar program. Alternatively, if the electronic documents are 10 MB or less (or can be easily broken into sections of 10 MB or less), they may be emailed as attachments. We will pay for any direct costs of duplication associated with filling this request up to $200. However, please contact me with a cost estimate before copying/scanning the materials. 4

Please use the following contact information for all correspondence:

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If you have any questions, please call me at (650) 589-1660 or email me at the address above. Thank you for your assistance with this matter.

Sincerely,

Alex Stukan
Paralegal

AES:acp

[2] *See* Public Resources Code § 21092(b)(1) (stating that "all documents referenced in the… negative declaration" shall be made "available for review"); 14 Cal. Code Reg. § 15072(g)(4) (stating that all documents incorporated by reference in the MND . . . shall be readily accessible to the public"); see also *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007) (EIR must transparently incorporate and describe the reference materials relied on in its analysis); *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("[W]hatever is required to be considered in an EIR must be in that formal report. . ."), internal citations omitted.

Adams Broadwell Joseph & Cardozo (ADAMSBROADWELL-2)

Response to ADAMSBROADWELL-2-1

This comment relates to a request for documents that was formally withdrawn on November 8, 2024. In withdrawing the records request, commenter specifically acknowledged that relevant documents were available online. Accordingly, the records request is not operative or applicable. For informational purposes, the City notes that, as discussed in Response to ADAMSBROADWELL1-2, all documents incorporated by reference were available for public review pursuant to CEQA requirements. For the documents referenced in the Draft IS/MND, website addresses are available within the footnotes. No environmental issues related to the proposed are raised in this comment and no further analysis is warranted.

Response to ADAMSBROADWELL-2-2

This comment consists of introductory information summarizing the commenter's understanding of the proposed project. This summary does not raise any environmental issues related to the proposed project and no further response is required.

Response to ADAMSBROADWELL-2-3

CEQA makes a distinction between documents cited in an EIR and those specifically incorporated by reference (*see El Morro Community Ass'n v. Department of Parks & Recreation* (2004) 122 CA4th 1341, n.5.) CEQA Guidelines Section 15150(b) requires that documents incorporated by reference in an EIR be available for inspection together with the EIR. All documents incorporated by reference were available for public review pursuant to CEQA requirements. For the documents referenced in the Draft IS/MND, website addresses are available within the footnote. No further analysis is warranted.

Response to ADAMSBROADWELL-2-4

The commenter states their willingness to pay for certain duplication costs. No response is required.

Response to ADAMSBROADWELL-2-5

The commenter provides contact information. No response is required.

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September 26, 2024

Via Email and Overnight Mail
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Via Email Only
Nicole Moore, Contract Planner
Email: Nicole.Moore.CTR@stocktonca.gov

Re: Request to Extend MND Public Comment Period / Untimely Response to CEQA Reference Request - South McKinley East Industrial Project IS/MND (SCH No. 2024081317)

Dear Ms. Moore and Ms. Ocasio:

On behalf of San Joaquin Residents for Responsible Development ("San Joaquin Residents") we respectfully request that the City of Stockton ("City") extend the public review and comment period on the Mitigated Negative Declaration ("MND") for the South McKinley East Industrial Project (SCH Number 2024081317) ("Project") proposed by GO Industrial ("Applicant")[1] **by at least 30 days** due to the City's failure to provide timely access to the supporting documents for the MND. This request is made pursuant to the California Environmental Quality Act ("CEQA") which requires that "all documents referenced in the draft environmental impact report or negative declaration" be available for review and "readily accessible" during the entire comment period.[2] 1

[1] City of Stockton, Initial Study/Mitigated Negative Declaration for the South McKinley Avenue East Industrial Project (hereinafter "MND") (August 29, 2024) available at https://ceqanet.opr.ca.gov/2024081317
[2] PRC §§ 21092(b)(1) (emphasis added); 14 Cal. Code Regs. ("CCR") § 15072(g)(4).

The Project proposes annexation of the Project site located at 6505 South McKinley Avenue East in San Joaquin County within the sphere of influence of the City of Stockton, and construction of a 184,166 square-foot industrial building for warehouse and office use. 2

The MND was released for public review on August 30, 2024. The public review and comment period currently ends on September 30, 2024.[3] 3

On September 17, 2024, San Joaquin Residents submitted a letter to the City pursuant to CEQA Section 21092(b)(1) requesting ***"immediate access to any and all documents referenced or relied upon***" in the MND ("MND Request").[4] Additionally, on September 17, 2024, San Joaquin Residents submitted a separate letter to the City pursuant to California Public Records Act ("CPRA"), Government Code §§ 6250, et seq. and Article I, section 3(b) of the California Constitution, requesting access to "***any and all public records referring or related***" to the Project ("PRA Request").[5] The MND Request and the PRA Request were sent separately to avoid confusion as to what documents and records were sought. 4

To date, the City has not acknowledged, nor provided documents in response to, the MND Request nor the PRA Request. 5

A. CEQA Violations

CEQA requires that "all documents referenced" – and the CEQA Guidelines require that "all documents incorporated by reference" – in a mitigated negative declaration shall be "readily accessible to the public during the lead agency's normal working hours" during the entire public comment period.[6] Further, a CEQA document may not rely on hidden studies or documents that are not provided to the 6

[3] City of Stockton, Initial Study/Mitigated Negative Declaration for the South McKinley Avenue East Industrial Project (hereinafter "MND") (August 29, 2024) available at https://ceqanet.opr.ca.gov/2024081317

[4] **Exhibit A:** Letter from ABJC re Request for Immediate Access to Documents Referenced in the Mitigated Negative Declaration – South McKinley Avenue East Industrial Project (SCH No. 2024081317) (September 17, 2024).

[5] **Exhibit B:** Letter from ABJC re Public Records Act Request – South McKinley Avenue East Industrial Project (SCH No. 2024081317) (September 17, 2024).

[6] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15072(g)(4); see *Ultramar v. South Coast Air Quality Man. Dist*. (1993) 17 Cal.App.4th 689, 699.

public.[7] **The City is in violation of these requirements because the City has failed to provide San Joaquin Residents with access to the MND reference documents despite a <u>timely request for access that was made over one week ago</u>**. 6 CONT

Without access to these critical MND reference documents during the public comment period on the MND, San Joaquin Residents and other members of the public are precluded from having the meaningful opportunity to comment on the MND that is required by CEQA. The City's failure to make the underlying MND documents available during the entire comment period makes public review particularly burdensome in this case because of the MND's reliance on missing documents for significance determinations and mitigation measures to address the Project's air quality, health risk, and biological resources impacts, for example. Without having access to these documents, San Joaquin Residents and other members of the public are unable to evaluate the accuracy of the City's impact analysis, or the efficacy of the City's proposed mitigation measures. Additionally, the size of the MND and the Project's complexity make it difficult to effectively comment on the MND without the referenced documents by the current comment deadline of September 30, 2024. 7 8

During review of the MND, San Joaquin Residents have identified a number of documents and files that are referenced and relied upon in the MND which <u>are not accompanied by weblinks</u> and to which San Joaquin Residents' has not been provided access in response to the MND Request. These reference documents are critical to understanding and commenting on the MND's analysis of the Project's impacts to several critical resource areas, including, in particular, the analysis of the Project's air quality, health risk, wildfire, and biological impacts. The missing reference documents include, but are not limited to, the following: 9

- All unlocked, native format, CalEEMOD input files used for Project construction and operational emissions analysis, and any other unlocked emissions modeling input files relied on in Appendix A.
- All unlocked, native format, AERMOD and HARP2 input files used for Project construction and operational health risk analysis, and any other unlocked health risk modeling input files relied on in Appendix A. 10

[7] *Santiago City Water District v. City of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").

- City of Stockton and County of San Joaquin. 2020. Stormwater Quality Control Criteria Plan. August.

- San Joaquin County Department of Public Works. 2004. Eastern San Joaquin Groundwater Basin Groundwater Management Plan. September.

- San Joaquin County. 2018. San Joaquin County's Aviation System Stockton Metropolitan Airport, Airport Land Use Compatibility Plan. February.

- City of Stockton. June 2012. Emergency Operations Plan.

- San Joaquin Council of Governments (SJCOG). May 2016. Amended February 2018. Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport.

- California Air Pollution Control Officers Association (CAPCOA). 2009. Health Risk Assessments for Proposed Land Use Projects.

- San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts.

- San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. Final Draft Staff Report -Climate Change Action Plan: Addressing GHG Emissions Impacts under CEQA. November.

- California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological. Resource Impact Analysis. Sacramento, CA. 21 January 2020.

- California State Water Resources Control Board (State Water Board). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. April 2, 2019.

- Baldwin, B. et al. 2012. The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. County of San Bernardino (Bernardino). 2007 (amended 2015).

- Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition.

10 CONT

- Reid, F. 2006. A Field Guide to Mammals of North America, 4th Edition..
- Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition.
- World Health Organization (WHO). 1999. Guidelines for Community Noise.
- United States Environmental Protection Agency (EPA). 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.
- California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol.
- Appendix G, Footnote 4: City email, July 12, 2022.
- Appendix G, Footnote 6: City of Stockton staff email, July 12, 2022.
- Appendix G, Footnote 9: Email from County staff, February 3, 2023.
- The Highway Design Manual, July 1, 2020, Chapter 200 - Geometric Design & Structure Standards, Table 201.1.
- Highway Traffic Data for Urbanized Area Project Planning, NCHRP 255.
- Rodier, Caroline. (2008). A Review of the International Modeling Literature: Transit, Land Use, and Auto Pricing Strategies to Reduce Vehicle Miles Traveled and Greenhouse Gas Emissions. Institute of Transportation Studies, UC Davis, Institute of Transportation Studies, Working Paper Series.
- Litman, Todd. (2009). Transportation elasticities: how prices and other factors affect travel behavior. Victoria Transport Policy Institute.

10 CONT

The courts have held that the failure to provide even a few pages of a CEQA documents for a portion of the CEQA review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional public comment.[8] It is also well settled that an MND may not rely on hidden studies or

11

12

[8] *Ultramar v. South Coast Air Quality Man. Dist*. (1993) 17 Cal.App.4th 689, 699.

documents that are not provided to the public.[9] By failing to make all documents referenced in the MND "readily available" during the current comment period, the City is violating the clear procedural mandates of CEQA, to the detriment of San Joaquin Residents and other members of the public who wish to meaningfully review and comment on the MND. 12 CONT

The City must extend the public comment and review period for the MND to allow for meaningful participation by the public and the detailed consideration of the Project's environmental impacts that CEQA requires. 13

Accordingly, we request that:

1) The City immediately provide San Joaquin Residents with access to all MND reference documents relied upon in the MND, including any construction air quality analysis used to determine the Project's air quality and health risk impacts. 14

2) The City <u>extend the public review and comment period on the MND for at least 30 days from the date on which the City releases these documents for public review</u>.[10] If the missing documents are provided today, we request an extension to October 28, 2024. 15

3) The City refrain from scheduling any hearings related to the Project until the entire set of reference documents relied on in the MND have been released for public review and comment in compliance with CEQA. 16

Given the short time before the current comment deadline, please contact me as soon as possible with your response to this request, but **<u>no later than Friday, September 27, 2024</u>**. 17

[9] *Santiago City Water District v. City of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").
[10] This Project has a 30-day public comment period, pursuant to 14 CCR § 15105(b).

Please feel free to call or email with any questions: Tel: (650) 589-1660, Email: kcarmichael@adamsbroadwell.com. Thank you for your prompt attention and response to this matter. 18

Sincerely,

Kevin Carmichael

KTC:ljl

EXHIBIT A

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September 17, 2024

Via Email and U.S. Mail
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425 N. El Dorado St.
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Via Email Only
Nicole Moore, Contract Planner
Email: Nicole.Moore.CTR@stocktonca.gov

Re: Request for Immediate Access to Documents Referenced in the Mitigated Negative Declaration – South McKinley Avenue East Industrial Project (SCH No. 2024081317)

Dear Ms. Ocasio and Ms. Moore:

We are writing on behalf of San Joaquin Residents for Responsible Development ("San Joaquin Residents") to request ***immediate access*** to any and all documents referenced, incorporated by reference, and relied upon in the Draft Mitigated Negative Declaration ("MND") prepared for the South McKinley Avenue East Industrial Project (SCH No. 2024081317) ("Project") proposed by GO Industrial ("Applicant"). *This request excludes a copy of the MND and its appendices. This request also excludes any documents that are currently available on the City of Stockton's website as of today's date*.[1]

The proposed Project includes the construction of a 184,166-square foot industrial building for warehouse and office use. The site is currently vacant, previously agricultural, land in San Joaquin County within the sphere of influence of the City of Stockton, which would annex the site as part of the project approval.

[1] Accessed https://www.stocktonca.gov/business/planning___engineering/other_projects_environmental.php#collapse1930b21 on September 16, 2024.

The site is located at 6505 South McKinley Avenue East. Regional access to the site is provided by Interstate 5 and State Route 99. (APN 193-02-034)

Our request for ***immediate access*** to all documents referenced in the MND is made pursuant to the California Environmental Quality Act ("CEQA"), which requires that all documents referenced, incorporated by reference, and relied upon in an environmental review document be made available to the public for the entire comment period.[2]

If the requested documents are in electronic format, please upload them to a file hosting program such as Dropbox, NextRequest or a similar program. Alternatively, if the electronic documents are 10 MB or less (or can be easily broken into sections of 10 MB or less), they may be emailed as attachments. We will pay for any direct costs of duplication associated with filling this request up to $200. However, please contact me with a cost estimate before copying/scanning the materials.

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If you have any questions, please call me at (650) 589-1660 or email me at the address above. Thank you for your assistance with this matter.

Sincerely,

Alex Stukan
Paralegal

AES:acp

[2] *See* Public Resources Code § 21092(b)(1) (stating that "all documents referenced in the… negative declaration" shall be made "available for review"); 14 Cal. Code Reg. § 15072(g)(4) (stating that all documents incorporated by reference in the MND . . . shall be readily accessible to the public"); see also *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007) (EIR must transparently incorporate and describe the reference materials relied on in its analysis); *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("[W]hatever is required to be considered in an EIR must be in that formal report. . ."), internal citations omitted.

EXHIBIT B

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DANIEL L. CARDOZO

September 17, 2024

Via Email and U.S. Mail
Stephanie Ocasio, Director
Community Development Department
City of Stockton
425 N. El Dorado St.
Stockton, CA 95202
Email: planning@stocktonca.gov

City Clerk
Office of the City Clerk
City of Stockton
425 N El Dorado St.
Stockton, CA 95202
Email: City.Clerk@stocktonca.gov

Via Email Only
Nicole Moore, Contract Planner
Email: Nicole.Moore.CTR@stocktonca.gov

Re: Public Records Act Request – South McKinley Avenue East Industrial Project (SCH No. 2024081317)

Dear Ms. Ocasio, City Clerk, and Ms. Moore:

We are writing on behalf of San Joaquin Residents for Responsible Development ("San Joaquin Residents") to request a copy of any and all public records referring or related to the South McKinley Avenue East Industrial Project (SCH No. 2024081317) ("Project") proposed by GO Industrial ("Applicant"). This request includes, but is not limited to, any and all file materials, applications, correspondence, resolutions, memos, notes, analysis, email messages, files, maps, charts, and any other documents related to the Project.

This request is made pursuant to the **California Public Records Act** (Government Code §§ 7920.000, *et seq*.). This request is also made pursuant to Article I, section 3(b) of the California Constitution, which provides a Constitutional right of access to information concerning the conduct of government. Article I, section 3(b) provides that any statutory right to information shall be broadly construed to provide the greatest access to government information and further requires that any statute that limits the right of access to information shall be narrowly construed.

The proposed Project includes the construction of a 184,166-square foot industrial building for warehouse and office use. The site is currently vacant, previously agricultural, land in San Joaquin County within the sphere of influence of the City of Stockton, which would annex the site as part of the project approval. The site is located at 6505 South McKinley Avenue East. Regional access to the site is provided by Interstate 5 and State Route 99. (APN 193-02-034)

We request access to the above records in their original form, as maintained by the agency.[1] Pursuant to Government Code Section 7922.570, if the requested documents are in electronic format, please upload them to a file hosting program such as Dropbox, NextRequest or a similar program. Alternatively, if the electronic documents are 10 MB or less (or can be easily broken into sections of 10 MB or less), they may be emailed to me as attachments.

We will pay for any direct costs of duplication associated with filling this request up to $200.[2] However, please contact me with a cost estimate before copying/scanning the materials.

Please use the following contact information for all correspondence:

U.S. Mail
Alex Stukan
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080-7037

Email
astukan@adamsbroadwell.com

If you have any questions, please call me at (650) 589-1660 or email me at the address above. Thank you for your assistance with this matter.

Sincerely,

Alex Stukan
Paralegal

AES:acp

[1] Gov. Code § 7922.570; *Sierra Club v. Super. Ct.* (2013) 57 Cal. 4th 157, 161-62.
[2] Gov. Code §§ 7922.530, 7922.575; *North County Parents v. Dept. of Education* (1994) 23 Cal.App.4th 144; *County of Los Angeles v. Super. Ct.* (2000) 82 Cal.App.4th 819, 826.

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Adams Broadwell Joseph & Cardozo (ADAMSBROADWELL-3)

Response to ADAMSBROADWELL-3-1
The commenter asks for the public review and comment period for the MND to be extended. CEQA requires a minimum public review period for MNDs of 30 days. (Public Resources Code Section [PRC] § 21091(b)). The original public comment period was August 30, 2024 through September 30, 2024. The public comment period was extended an additional 30 days, to October 30, 2024, for a total public review period of 61 days. No further response is required.

Response to ADAMSBROADWELL-3-2
This comment consists of introductory information summarizing the commenter's understanding of the proposed project. This summary does not raise any environmental issues related to the proposed project and no further response is required.

Response to ADAMSBROADWELL-3-3
This comment summarizes the commenter's understanding of the public comment period. This summary does not raise any environmental issues related to the proposed project and no further response is required.

Response to ADAMSBROADWELL-3-4
CEQA makes a distinction between documents cited in an EIR and those specifically incorporated by reference (*see El Morro Community Ass'n v. Department of Parks & Recreation* (2004) 122 CA4th 1341, n.5.) CEQA Guidelines Section 15150(b) requires that documents incorporated by reference in an EIR be available for inspection together with the EIR. All documents incorporated by reference were available for public review pursuant to CEQA requirements. For the documents referenced in the Draft IS/MND, website addresses are available within the footnote. No further analysis is warranted.

Response to ADAMSBROADWELL-3-5
All documents requested were available for public review pursuant to CEQA requirements. For the documents referenced in the Draft IS/MND, website addresses are available within the footnote. No further analysis is warranted.

Response to ADAMSBROADWELL-3-6
The documents were provided to the commenter and/or were otherwise readily accessible in the appendices and footnotes of the EIR during the public comment period. No further response is required.

Response to ADAMSBROADWELL-3-7
Refer to Response to ADAMSBROADWELL-3-6.

Response to ADAMSBROADWELL-3-8
Please refer to Response to ADAMSBROADWELL-3-6. Additionally, the public comment period was extended an additional 30 days, to October 30, 2024, allowing additional time to review the Draft IS/MND and prepare public comments.

Response to ADAMSBROADWELL-3-9
The commenter states that a number of documents cited in the IS/MND were not accompanied by weblinks, and so were not available for review with the IS/MND. Footnotes in the Draft IS/MND refer

to City documents or other agency reports, regulations, policies, etc. For those cited in the Draft IS/MND, website addresses have been provided within the footnote. The commenter requested American Meteorological Society/EPA Regulatory Model (AERMOD), CalEEMod, and HARP2 input files. The City notes that the commenter's requests for documents were formally withdrawn on November 8, 2024, with the acknowledgment that relevant documents were located.

Response to ADAMSBROADWELL-3-10
The commenter provided the list of specific references that are covered by comment ADAMSBROADWELL-3-9, above. No further response is required.

Response to ADAMSBROADWELL-3-11
This comment relates to a request for documents that was formally rescinded on November 8, 2024. The request for records does not raise any environmental issues and is therefore outside the purview of CEQA. No further analysis is warranted.

Response to ADAMSBROADWELL-3-12
This comment relates to a request for documents that was formally rescinded on November 8, 2024. The request for records does not raise any environmental issues and is therefore outside the purview of CEQA. The City notes that all studies that were relied upon were available in the appendices of the document. Therefore, the documents were readily available to the public. No further response is required.

Response to ADAMSBROADWELL-3-13
The public comment period was extended an additional 30 days, to October 30, 2024.

Response to ADAMSBROADWELL-3-14
Refer to Response to ADAMSBROADWELL-3-9.

Response to ADAMSBROADWELL-3-15
Refer to Response to ADAMSBROADWELL-3-13.

Response to ADAMSBROADWELL-3-16
All documents requested were available for public review pursuant to CEQA requirements.

Response to ADAMSBROADWELL-3-17
All relevant documents were available to the public. The commenter's requests for documents were formally rescinded on November 8, 2024. This comment does not identify any issues pertaining to the proposed project's environmental effects and no further response is required.

Response to ADAMSBROADWELL-3-18
This comment is noted.

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LOS ANGELES, CALIFORNIA 90017
(213) 572-0400

September 25, 2024

Nicole Moore
Community Development Department
City of Stockton
345 N. El Dorado Street,
Stockton, CA 95202

Via Email to:
Nicole.Moore.CTR@stocktonca.gov

Subject: Comments on South McKinley Avenue East Industrial Project MND (SCH NO. 2024081317)

Dear Ms. Moore,

Thank you for the opportunity to comment on the Mitigated Negative Declaration (MND) for the proposed South McKinley Avenue East Industrial Project. Please accept and consider these comments on behalf of Golden State Environmental Justice Alliance. Also, Golden State Environmental Justice Alliance formally requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877. 1

1.0 Summary

The project proposes to annex, pre-zone, and develop an 11.7 acre parcel within the City of Stockton Sphere of Influence. Development will consist of a 184,166-square-foot industrial building containing 179,166 square feet of warehouse space and 5,000 square feet of office space on a 508,674-square-foot project site. The building includes 27 truck/trailer loading dock doors and a loading area along the west side of the building. The site provides a total of 192 parking stalls, 150 of which are standard passenger car parking stalls on the east and south sides of the building, and 37 of which are truck/trailer parking stalls on the west side of the building adjacent to the loading area. 2

The project site is located within unincorporated San Joaquin County and has a County land use designation of Mixed-Use. The project site is located within the City of Stockton Sphere of Influence with a General Plan land use designation of Industrial. The MND states that, “the City has pre-zoned the site as Industrial Limited (I-L), which will take effect upon annexation.” The

MND states the following discretionary actions are required to implement the proposed project: Annexation into the City of Stockton and Design Review. 2 CONT

3.0 Project Description

It is notable that the MND does not include a floor plan or elevations for the buildings. The basic components of a Planning Application include a site plan, floor plan, elevations, and a project narrative describing the proposed use in detail. The MND has excluded the proposed floor plans and elevations from public review, which does not comply with CEQA's requirements for adequate informational documents and meaningful disclosure (CEQA § 15121). Including this information is vital as the maximum height limit is 60 feet while Exhibit 6: Site Plan states that the maximum height limit is 100 feet. An EIR must be prepared with these items and information in order to provide an adequate and accurate environmental analysis. 3

The MND states that, "The City has pre-zoned the site as Industrial Limited (I-L), which will take effect upon annexation." However, review of the City's Zoning Map[1] indicates that the project site does not have a pre-zoning designation. Additionally, the application file (P23-0125[2]) for the project indicates that it includes Pre-Zoning and Site Plan Review applications that were not included for analysis in the MND. The Project Description is deficient and does not accurately describe"the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" (CEQA § 15378). An EIR must be prepared to include information and analysis of the required Pre-Zoning and Site Plan Review actions in order to provide an adequate and accurate environmental analysis. 4

The MND and Project Description is also deficient in that it does not discuss the City's Municipal Service Review (MSR)[3] at any point. Notably, it excludes that the project site is within the City 5

[1] https://stocktonca.mapgeo.io/datasets/properties?abuttersDistance=100&latlng=37.89236%2C-121.26851&previewId=19302034-102126&themes=%22%5B%5C%22zoning%5C%22%5D%22&zoom=16
[2] https://aca-prod.accela.com/STOCKTON/Default.aspx
[3] https://www.sjlafco.org/files/62a876ed2/stockton---august-2020.pdf

of Stockton's Sphere of Influence but is outside the adopted 2030 Planning Horizon Area defined in the City's MSR as depicted in Figure 2-7: 10 Year Planning Horizon Annexation Areas of the MSR. The MSR will need to be modified by LAFCo to incorporate the proposed project within the MSR 10-year Horizon.

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CONT

2.3 Air Quality, 2.6 Energy, and 2.8 Greenhouse Gas Emissions

Please refer to attachments from SWAPE for a complete technical commentary and analysis. 6

The MND does not include meaningful analysis of relevant environmental justice issues in reviewing potential impacts, including cumulative impacts from the proposed project. This is in conflict with CEQA Guidelines Section 15131 (c), which requires that "Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. If information on these factors is not contained in the EIR, the information must be added to the record in some other manner to allow the agency to consider the factors in reaching a decision on the project." This is especially significant as the surrounding community is highly burdened by pollution. According to CalEnviroScreen 4.0[4], CalEPA's screening tool that ranks each census tract in the state for pollution and socioeconomic vulnerability, the proposed project's census tract (6077003803) ranks in the 99th percentile for overall pollution burden, meaning that it is among the most polluted census tracts in the state. For example, the project census tract ranks in the 51st percentile for ozone burden, the 54th percentile for particulate matter (PM) 2.5 burden, the 57th percentile for diesel PM burden, and the 53rd percentile for traffic impacts. All of these environmental factors are attributed to heavy truck activity in the area. Ozone can cause lung irritation, inflammation, and worsening of existing chronic health conditions, even at low levels of exposure[5]. Exhaust fumes contain toxic chemicals that can damage DNA, cause cancer, make breathing difficult, and cause low weight and premature births[6]. The very small particles of diesel PM can reach deep into the lung, where they can contribute to a range of health problems. These include irritation to the eyes, throat and nose, heart and lung disease, and lung cancer[7]. 7

The census tract ranks among the most severely impacted in several areas that impact water quality. The census tract ranks in the 98th percentile for groundwater threats. People who live near contaminated groundwater may be exposed to chemicals moving from the soil into the air inside their homes[8]. Accordingly, the census tract ranks in the 95th percentile for drinking water impacts, which indicates that it ranks with the worst quality drinking water in the state. Poor communities and people in rural areas are exposed to contaminants in their drinking water more often than people in other parts of the state[9]. 8

[4] CalEnviroScreen 4.0 https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40
[5] OEHHA Ozone https://oehha.ca.gov/calenviroscreen/indicator/air-quality-ozone
[6] OEHHA Traffic https://oehha.ca.gov/calenviroscreen/indicator/traffic-density
[7] OEHHA Diesel Particulate Matter https://oehha.ca.gov/calenviroscreen/indicator/diesel-particulate-matter
[8] OEHHA Groundwater Threats https://oehha.ca.gov/calenviroscreen/indicator/groundwater-threats
[9] OEHHA Drinking Water https://oehha.ca.gov/calenviroscreen/drinking-water

The census tract ranks in the 85th percentile for hazardous waste facility impacts. Hazardous waste generators and facilities contribute to the contamination of air, water and soil near waste generators and facilities can harm the environment as well as people[10]. The census tract also ranks in the 88th percentile for solid waste facility impacts. Solid waste facilities can expose people to hazardous chemicals, release toxic gases into the air (even after these facilites are closed), and chemicals can leach into soil around the facility and pose a health risk to nearby populations[11]. 9

The census tract also bears more impacts from cleanup sites than 84% of the state. Chemicals in the buildings, soil, or water at cleanup sites can move into nearby communities through the air or movement of water[12]. 10

Further, the census tract is a diverse community including 58% Hispanic, 11% African-American, and 9% Asian-American residents, whom are especially vulnerable to the impacts of pollution. The community has a high rate of low educational attainment, meaning 89% of the census tract over age 25 has not attained a high school diploma, which is an indication that they may lack health insurance or access to medical care. The community also has a high rate of poverty, meaning 79% of the households in the census tract have a total income before taxes that is less than the poverty level. Income can affect health when people cannot afford healthy living and working conditions, nutritious food and necessary medical care[13]. Poor communities are often located in areas with high levels of pollution[14]. Poverty can cause stress that weakens the immune system and causes people to become ill from pollution[15]. Living in poverty is also an indication that residents may lack health insurance or access to medical care. Medical care is vital for this census tract as it ranks in the 89th percentile for incidence of cardiovascular disease and 84th percentile for incidence of asthma. The community also has a high rate of linguistic isolation, meaning 49% of the census tract speaks little to no English and faces further inequities as a result. 11

Additionally, the project census tract (6077003803) and the census tracts adjacent to the project site (6077002800 (north), 6077002402 (north), 6077002300 (north), 6077005131 (east), 6077003700 (east), and 6077003802 (west)) are identified as SB 535 Disadvantaged Communities[16]. This indicates that cumulative impacts of development and environmental 12

[10] OEHHA Hazardous Waste Generators and Facilities https://oehha.ca.gov/calenviroscreen/indicator/hazardous-waste-generators-and-facilities
[11] OEHHA Solid Waste Facilities https://oehha.ca.gov/calenviroscreen/indicator/solid-waste-sites-and-facilities
[12] OEHHA Cleanup Sites https://oehha.ca.gov/calenviroscreen/indicator/cleanup-sites
[13] OEHHA Poverty https://oehha.ca.gov/calenviroscreen/indicator/poverty
[14] Ibid.
[15] Ibid.
[16] OEHHA SB 535 Census Tracts https://oehha.ca.gov/calenviroscreen/sb535

impacts in the area are disproportionately impacting these communities. The negative environmental, health, and quality of life impacts resulting form a saturation of the industrial, warehousing, and logistics industry in the area have become distinctly inequitable. The severity of significant and unavoidable impacts particularly on these Disadvantaged Communities must be included for analysis as part of an EIR. Each section of an EIR must include the specific analysis of each environmental impact on the Disadvantaged Communities, including cumulative analysis and irreversible environmental effects.

12 CONT

The State of California lists three approved compliance modeling softwares[17] for non-residential buildings: CBECC-Com, EnergyPro, and IES VE. CalEEMod is not listed as an approved software. The CalEEMod modeling does not comply with the 2022 Building Energy Efficiency Standards and under-reports the project's significant Energy impacts and fuel consumption to the public and decision makers. Since the MND did not accurately or adequately model the energy impacts in compliance with Title 24, it cannot conclude the project will generate less than significant impacts and a finding of significance must be made. An EIR with modeling using one of the approved software types must be prepared and circulated for public review in order to adequately analyze the project's significant environmental impacts. This is vital as the MND utilizes CalEEMod as a source in its methodology and analysis, which is clearly not an approved software.

13

2.9 Hazards and Hazardous Materials

The project site is within Traffic Pattern (Zone 7a) Safety Zone of the Stockton Metropolitan Airport Land Use Compatibility Plan (SM ALUCP)[18]. Zone 7a has a maximum nonresidential density of 450 persons per acre. The MND states that, "although the tenant for the warehouse has not been identified, the proposed project will comply with CBC occupancy rates, which would cap the occupancy of the building at 391 employees." The MND has not provided the source calculation of CBC occupancy rates to determine that the project would generate 391 employees or less within the building. Additionally, Zone 7a has a 10 percent open land requirement. The MND states that this, "applies to development projects that are 10 acres or more. The project site is 11.70 acres and X percent of the project would remain open space." The MND is inadequate as an informational document as it has not provided the percentage of the project site that would remain as open space. An EIR must be prepared to include this information in order to provide an adequate environmental analysis.

14

[17] California Energy Commission 2022 Energy Code Compliance Software https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-1

[18] https://www.sjcog.org/DocumentCenter/View/1318/2016-Stockton-Metropolitan-Airport-ALUCP---Amended-February-2018?bidId=

The MND concludes the project is consistent with the SM ALUCP. However, it has excluded information regarding the statutorily required SJCOG Airport Land Use Commission review. SM ALUCP ALUCP Section 3.1.6.1: Actions Which Require ALUC Review states that, "As required by state law, the following types of actions shall be referred to the ALUC prior to their approval by the local jurisdiction: (a) The adoption or approval of any amendment to a general or specific plan affecting the property within an airport influence area (PUC Section 21676(b)). The project proposes an amendment to the City's General Plan Land Use Map to incorporate the project site within the City limits. 15 16

Additionally, California PUC PUC Section 21676(b)[19] requires that prior to the amendment of a General Plan, the ALUC shall review the plan, ordinance, or regulation for consistency with the ALUCP. Section 3.1.6.3 of the SM ALUCP also requires that Major Land Use Actions including "3.1.6.3 (a)(3) Any proposed expansion of the sphere of influence of a city or special district, 3.1.6.3 (a)(4) Proposed pre-zoning associated with future annexation of land to a city, and 3.1.6.3 (a)(5) Any discretionary development proposal for projects having a building floor area of 20,000 square feet or greater unless only ministerial approval (e.g., a building permit) is required," must be reviewed by the SJCOG ALUC, and the proposed project meets these descriptions. Therefore, SJCOG Airport Land Use Commission review is required for the proposed project. An EIR must be prepared to include a finding of significance as it does not comply with PUC Section 21676(b) and SM ALUCP Sections 3.1.6.1 and 3.1.6.3(a)(3) - (5) and therefore has not provided any meaningful evidence to conclude the project will not result in a safety hazard or excessive noise for people residing or working in the Project area. 17

2.11 Land Use and Planning

The MND concludes that the project will have less than significant impacts because, "per Municipal Code Chapter 16.120, the proposed project would undergo Design Review prior to the issuance of building permits, to ensure consistency with Stockton Municipal Code and Citywide Design Guidelines." The MND does not provide any list of the Municipal Code or Citywide Design Guidelines requirements or analysis of the project's compliance or noncompliance with the requirements. Deferring this environmental analysis required by CEQA to after the public review phase is improper mitigation, deferred mitigation, and does not comply with CEQA's requirement for meaningful disclosure and adequate informational documents (CEQA § 15121 18

[19] California Airport Planning Land Use Handbook Section 1.3.4. ALUC Review https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/californiaairportlanduseplanninghandbook-a11y.pdf

and PRC 21003(b)). An EIR must be prepared with this information and analysis in order to provide an adequate and accurate environmental analysis. 18 CONT

The MND's less than significant impact conclusion is not supported by meaningful evidence or any analysis, including a consistency analysis with General Plan policies, in violation of CEQA's requirements for meaningful disclosure (CEQA § 21003(b)). The MND is inadequate as an informational document and an EIR must be prepared with technical analysis and a consistency analysis with all General Plan policies, including but not limited to the following: 19

1. Policy LU-5.3 Define discrete and clear city edges that preserve agriculture, open space, and scenic views.
2. Policy LU-5.2 Protect natural resource areas, fish and wildlife habitat, scenic areas, open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development.
3. Action TR-1.1A Direct truck traffic to designated truck routes that facilitate efficient goods movement and minimize risk to areas with concentrations of sensitive receptors, such as schools, for example by disallowing any new truck routes to pass directly on streets where schools are located, and vulnerable road users, like pedestrians and bicyclists.
4. Policy TR-2.2 Connect housing and employment development in areas with good transit access through open and inclusive processes where appropriate.
5. Action TR-2.2A Require major new development to incorporate and fund design features to promote safe and comfortable access to transit, such as a circulation network that facilitates efficient and connected bus travel, clear pedestrian and bicycle routes connecting origins and destinations to transit stops, sheltered bus stops, park-and-ride facilities, and highly visible transit information and maps.
6. Action TR-2.2B Obtain input from community residents, non-profit organizations, and local and regional transit operators on major new development projects, and support transit operators by ensuring major projects are designed to support transit and provide fair share funding of the cost of adequate transit service and access.
7. Policy TR-4.1 Utilize level of service (LOS) information to aid understanding of potential major increases to vehicle delay at key signalized intersections.
8. Action TR-4.1A Strive for Level of Service (LOS) D or better for both daily roadway segment and peak hour intersection operations.
9. Action TR-4.2A To evaluate the effects of new development and determine mitigation measures and impact fees, require projects to evaluate per capita VMT and impacts to transit, bicycle, and pedestrian modes.
10. Policy SAF-2.5 Protect the community from health hazards and annoyance associated with excessive noise levels.
11. Action SAF-2.5A Prohibit new commercial, industrial, or other noise-generating land uses adjacent to existing sensitive noise receptors such as residential uses, schools, health care facilities, libraries, and churches if noise levels are expected to exceed 70 dBA Community Noise Equivalent (CNEL) (decibels on A-weighted scale CNEL) when measured at the property line of the noise sensitive land use.

12. Policy SAF-2.6 Minimize the risk to city residents and property associated with the transport, distribution, use, and storage of hazardous materials.
13. Action SAF-2.6A Restrict transport of hazardous materials within the city to routes that have been designated for such transport.
14. Action SAF-2.6B When appropriate, require new development to prepare a hazardous materials inventory and/or prepare Phase I or Phase II hazardous materials studies, including any required cleanup measures.
15. Action LU-6.2B Do not approve future annexations or City utility connections unless they are consistent with the overall goals and policies of the General Plan and do not adversely impact the City's fiscal viability, environmental resources, infrastructure and services, and quality of life.
16. Policy LU-6.4 Ensure that land use decisions balance travel origins and destinations in as close proximity as possible, and reduce vehicle miles traveled (VMT).
17. Action LU-6.4A Maintain a reasonable balance between potential job generation and local workforce availability with a goal of one job for each employed resident.
18. Action LU-6.4B Maintain a reasonable proximity and balance (i.e., magnitude) between job generating uses, housing opportunities, and resident services and amenities, including transit and active transportation.
19. Action LU-6.5A Require preparation of a fiscal impact analysis for large development projects and proposed annexations to ensure a full accounting of infrastructure and public service costs and to confirm whether revenue enhancement mechanisms are necessary to ensure net fiscal balance or better, and require appropriate fiscal mitigations, when necessary, to ensure the City's ongoing fiscal health and continued viability of the City's General Fund.

19 CONT

Notably, the MND has not included a fiscal impact analysis or City Services Plan to demonstrate consistency with Actions LU-6.2B and LU-6.5A. A City Services Plan must be prepared and included as part of an EIR for public review and comment. Additionally, since approval of the City Services Plan lies with LAFCO and not the lead agency, an EIR cannot provide reasonable assurance that the City Services Plan is adequate or will be approved and therefore the impact will remain significant and unavoidable necessitating a finding of significance in an EIR.

20

The MND also excludes discussion and analysis of the project's location outside of the City's Municipal Services Review (MSR) 10-year Horizon. There is no meaningful evidence to support the project will have less than significant impacts or that adequate public services can be provided within the required timeframes. An EIR must be prepared to state that the project is not consistent with the existing MSR because it is outside of the 10-year Horizon area. Further, an EIR must also be prepared to discuss and analyze the project's location within the French Camp Disadvantaged Urban Community[20] and associated environmental impacts. Additionally, since

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[20] Figure 4-1: Disadvantaged Urban Communities https://www.sjlafco.org/files/62a876ed2/stockton---august-2020.pdf

approval of the revised MSR 10-year Horizon area lies with LAFCO and not the lead agency, an EIR cannot provide reasonable assurance that the revised MSR 10-year Horizon area provides adequate services for the project or will be approved and therefore the impact will remain significant and unavoidable necessitating a finding of significance in an EIR. 22

Notably, Table 2-7: Development Demand Forecast 10-Year and 20-Year Planning Horizons of the 2020 Municipal Service Review[21] states that the maximum industrial development forecast in the General Plan analysis[22] is 6.2 million square feet through 2040. The document allocates 5.3 million square feet to two pending projects - Airpark 599 and Sanchez Annexation Project. The remaining 900,000 square feet in the growth forecast is not enough to cover the proposed 184,166 square foot project and earlier projects Mariposa 1 and 2 (5,396,260 square feet of industrial space). The MND has not included analysis of other industrial projects in the pipeline either, such as the EIR published in October 2021 for the South Stockton Commerce Center[23] to construct 6,091,551 square feet of industrial space. Cumulatively, at least 11,671,977 square feet of industrial space have been approved and/or are in the pipeline and this is not included for analysis. Cumulative development will exceed the General Plan 2040 Growth Forecast for industrial space and a finding of significance must be made in an EIR that includes this information for analysis, including cumulative and growth-inducing impacts. 23

2.14 Population and Housing

The MND utilizes uncertain and misleading language which does not provide any meaningful analysis of the project's impacts to population and employment generation. The MND states that, "While *some* employees could relocate to the City for employment at the proposed project, it is *unlikely* that a significant number of employees would do so," without providing any information about the quantity of jobs generated by the project. The MND states that the project's construction jobs are, "temporary," and, "Given that the temporary construction-period spans approximately nine months, the *local* labor pool would be expected to satisfy labor demands of the project," without providing any quantification of the construction employees required to build the project or the geographic boundaries of the "local" labor pool. The MND relies upon the labor force within an unspecified distance, such as the Stockton-Lodi Metropolitan Statistical Area to fill all of its jobs without providing any discussion of the area's unemployed population in terms of qualification for and/or interest in work in the industrial sector. Relying on the entire workforce of the Stockton-Lodi Metropolitan Statistical Area to fill all of its jobs will significantly increase 24 25 26

[21] 2020 Municipal Service Review https://www.sjgov.org/uploadedfiles/sjc/departments/lafco/msr-soi/stockton%20msr%20aug%202020.pdf
[22] Stockton 2040 General Plan EIR and Technical Memos http://www.stocktonca.gov/files/EnvisionStockton2040GP_DEIR.pdf
[23] South Stockton Commerce Center https://ceqanet.opr.ca.gov/2020090561/3

project VMT, and this must be included in the project's revised VMT analysis. A construction worker employment analysis must also be included to adequately and accurately analyze all potentially significant environmental impacts. In order to comply with CEQA's requirements for meaningful disclosure, an EIR must be prepared to provide an accurate estimate of employees generated by construction and operations of the proposed project. It must also provide demographic and geographic information on the location of qualified workers to fill these positions.

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The U.S. Energy Information Administration[24] provides the following applicable employment generation rate for warehouses:

No Refrigeration Warehouse: 1 employee per 1,226 square feet

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Applying this ratio results in the following calculation:
Non-Refrigerated Warehouse: 184,166 sf/ 1,226 = 151 employees

SJCOG's Population, Household, and Employment Projections[25] notes that the City will add approximately 42,602 jobs between 2020 - 2045. Utilizing the U.S. EIA calculation of 151 employees, the project represents 0.3% of the City's employment growth from 2020 - 2050. A single project accounting for this amount of the projected employment growth over 30 years represents a significant amount of growth, especially given the proposed project site is outside of the 2030 Planning Horizon Area defined in the City's adopted Municipal Service Review and requires an amendment to the Municipal Service Review to include the project site in the 2030 Planning Horizon Area to proceed.

29

Other recent industrial projects such as South Stockton Commerce Center (6,091,551 square feet of industrial development; 2,964 employees) and Mariposa 1 and 2 (5,396,260 square feet of industrial development; 4,403 employees) combined with the proposed project will cumulatively generate 7,518 employees, which is 17.6% of the City's employment growth forecast over 30 years accounted for by only three recent industrial projects. The amount of growth accounted for by cumulative projects multiplies exponentially when other commercial and industrial development activity approved since 2020 are added to the calculation. An EIR must be prepared to include a quantified analysis of the employees generated during project construction and operations. An EIR

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[24] US EIA Commercial Buildings Energy Consumption Survey, Table B1: Summary table: total and means of floorspace, number of workers, and hours of operation, 2018
https://www.eia.gov/consumption/commercial/data/2018/bc/html/b1.php
[25] SJCOG's 2022 RTP/SCS Appendix Q- Population, Household, and Employment Projections
https://www.sjcog.org/DocumentCenter/View/7085/Q-Population-Household-and-Employment-Projections

must also provide a cumulative analysis discussion of projects approved since 2020 and projects "in the pipeline" to determine if the project will exceed SJCOG's employment growth forecast for the City and/or General Plan growth forecasts. 31 CONT

2.17 Transportation

The MND concludes that the daily VMT per employee estimate is 22.1 VMT, which exceeds the applicable threshold of 15.78 VMT per employee by 40%. The MND includes MM TRANS-1 to achieve an alleged 38% VMT reduction. However, the MND has not provided meaningful evidence to support the conclusion that MM TRANS-1 will reduce project generated VMT to below the significance threshold of 15.78 VMT per employee continuously for the life of the project. Since future building tenants are unknown, implementation of trip reduction measures cannot be guaranteed to reduce Project generated VMT to a level of less than significant. It is not possible for the City to ensure that MM TRANS-1 will result in reduced VMT by project employees and be implemented continuously, at all times, throughout the life of the project and maintain a VMT reduction to less than significant levels at all times. The efficacy of the proposed mitigation measures and reduction of VMT impacts below the applicable thresholds cannot be assured and the project's VMT impact is therefore considered significant and unavoidable. An EIR must be prepared to include a finding of significance because there is no possible assurance of the percentage of project employees that would utilize non-automobile travel associated with implementation of MM TRANS-1 and mitigation of the project's VMT impact to less than significant is not feasible. 32 33 34

Further, the MND has underreported the quantity VMT generated by the proposed project operations. The operational nature of industrial/warehouse uses involves high rates of truck/trailer/delivery van VMT due to traveling from large import hubs to regional distribution centers to smaller industrial parks and then to their final delivery destinations. Once employees arrive at work at the proposed project, they will conduct their jobs by driving delivery vans across the region as part of the daily operations as a warehouse, which will drastically increase project-generated VMT. The project's truck/trailer and delivery van activity is unable to utilize public transit or active transportation and it is misleading to the public and decision makers to exclude this activity from VMT analysis. The project's total operational VMT generated is not consistent with the significance threshold and legislative intent of SB 743 to reduce greenhouse gas emissions by reducing VMT. An EIR must be prepared to reflect a quantified VMT analysis that includes all truck/trailer and delivery van activity. 35 36

Further, the MND utilizes a separate Trip Generation calculation for the LOS analysis and VMT analysis. Table 4: Proposed Project Trip Generation within Appendix G: Traffic Impact Analysis 37

concludes the project will generate 486 daily vehicle trips, while the MND states under significance threshold b that "Based on the Institute of Transportation Engineers (ITE) Trip Generation, the estimate daily trips generated by the proposed project would be approximately 378 daily trips." The MND is internally inaccurate and must be revised to utilize the 486 daily trip calculation in the VMT analysis. 37 CONT

The MND has not adequately analyzed the project's potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses; or the project's potential to result in inadequate emergency access. The MND includes "MM TRANS-2: The proposed project shall only allow trucks to exit and not enter from the southernmost project driveway in order to prevent collisions," as required by Appendix G in order to mitigate significant impacts. However, the MND excludes the second statement within Appendix G's mitigation, "Since trucks will be using the northern project driveway to enter, a deceleration lane that is 235 feet long is recommended." An EIR must be prepared to include the construction of 235 foot long truck deceleration lane to serve the northernmost project driveway. 38

Further, there are also no exhibits adequately depicting the onsite turning radius available for trucks maneuvering throughout the site. Several areas of potential conflicts between trucks/trailers and passenger cars exist at the streets adjacent to the project site and throughout the site itself. For example, there is no queuing analysis within the MND, which is vital given that passenger cars can access both driveways while all incoming truck traffic will utilize only the northernmost driveway, which results in increased queuing times. Further, the truck/trailer parking stalls are located immediately adjacent to the truck/trailer loading dock court. These parking stalls may be in use at any time and further restrict truck/trailer movement on the site and present a safety hazard with potential for conflicts between passenger cars and trucks/trailers. The overall site design presents several potential conflicts in maneuvering area for both passenger cars and trucks/trailers that have not been analyzed. An EIR must be prepared to include a finding of significance as the MND has not provided any meaningful evidence to support a less than significant finding. 39 40

The MND states regarding emergency access that, "Adequate emergency access to the project site would be provided by two 35-foot-wide driveways along South McKinley Avenue at the north and south ends of the project site and continue around the perimeter of the proposed building. Furthermore, the TIS evaluated truck circulation at the project site and determined that it would be adequate with implementation of MM TRANS-2. Therefore, it can be *assumed* that large emergency vehicles would be able to circulate the project site safely." This does not comply with CEQA's requirements for adequate informational documents and meaningful disclosure (CEQA § 15121 and 21003(b)). The MND has not provided any details regarding the requirements for emergency access or meaningful analysis of the project's compliance or noncompliance with these 41

requirements. Turning maneuvers, staging requirements, and access demands by the fire apparatus and other emergency vehicles are not the exact same as the turning maneuvers of a standard WB-57 truck/trailer. Deferring this environmental analysis required by CEQA to the construction permitting phase is improper mitigation and does not comply with CEQA's requirement for meaningful disclosure and adequate informational documents. An EIR must be prepared to include a finding of significance as the MND has not provided any meaningful evidence to support a less than significant finding. 41 CONT 42

2.20 Mandatory Findings of Significance

The MND has not provided an adequate cumulative analysis of the proposed project. There is no discussion of the buildout conditions of the City's General Plan or its Municipal Services Review (MSR). The MND also excludes discussion and analysis of the project's location outside of the City's MSR 10-year Horizon. There is no meaningful evidence to support the project will have less than significant impacts or that adequate public services can be provided within the required timeframes. An EIR must be prepared to state that the project is not consistent with the existing MSR because it is outside of the 10-year Horizon area. Further, an EIR must also be prepared to discuss and analyze the project's location within the French Camp Disadvantaged Urban Community[26] and associated environmental impacts. Additionally, since approval of the revised MSR 10-year Horizon area lies with LAFCO and not the lead agency, an EIR cannot provide reasonable assurance that the revised MSR 10-year Horizon area provides adequate services for the project or will be approved and therefore the impact will remain significant and unavoidable necessitating a finding of significance in an EIR. 43 44 45 46

Notably, Table 2-7: Development Demand Forecast 10-Year and 20-Year Planning Horizons of the 2020 Municipal Service Review[27] states that the maximum industrial development forecast in the General Plan analysis[28] is 6.2 million square feet through 2040. The document allocates 5.3 million square feet to two pending projects - Airpark 599 and Sanchez Annexation Project. The remaining 900,000 square feet in the growth forecast is not enough to cover the proposed 184,166 square foot project and earlier projects Mariposa 1 and 2 (5,396,260 square feet of industrial space). The MND has not included analysis of other industrial projects in the pipeline either, such 47 48

[26] Figure 4-1: Disadvantaged Urban Communities https://www.sjlafco.org/files/62a876ed2/stockton---august-2020.pdf
[27] 2020 Municipal Service Review https://www.sjgov.org/uploadedfiles/sjc/departments/lafco/msr-soi/stockton%20msr%20aug%202020.pdf
[28] Stockton 2040 General Plan EIR and Technical Memos http://www.stocktonca.gov/files/EnvisionStockton2040GP_DEIR.pdf

as the EIR published in October 2021 for the South Stockton Commerce Center[29] to construct 6,091,551 square feet of industrial space. Cumulatively, at least 11,671,977 square feet of industrial space have been approved and/or are in the pipeline and this is not included for analysis. Cumulative development will exceed the General Plan 2040 Growth Forecast for industrial space and a finding of significance must be made in an EIR that includes this information for analysis, including cumulative and growth-inducing impacts. 48 CONT

SJCOG's Population, Household, and Employment Projections[30] notes that the City will add approximately 42,602 jobs between 2020 - 2045. Utilizing the U.S. EIA calculation of 151 employees, the project represents 0.3% of the City's employment growth from 2020 - 2050. A single project accounting for this amount of the projected employment growth over 30 years represents a significant amount of growth, especially given the proposed project site is outside of the 2030 Planning Horizon Area defined in the City's adopted Municipal Service Review and requires an amendment to the Municipal Service Review to include the project site in the 2030 Planning Horizon Area to proceed. 49

Other recent industrial projects such as South Stockton Commerce Center (6,091,551 square feet of industrial development; 2,964 employees) and Mariposa 1 and 2 (5,396,260 square feet of industrial development; 4,403 employees) combined with the proposed project will cumulatively generate 7,518 employees, which is 17.6% of the City's employment growth forecast over 30 years accounted for by only three recent industrial projects. The amount of growth accounted for by cumulative projects multiplies exponentially when other commercial and industrial development activity approved since 2020 are added to the calculation. An EIR must be prepared to include a quantified analysis of the employees generated during project construction and operations. An EIR must also provide a cumulative analysis discussion of projects approved since 2020 and projects "in the pipeline" to determine if the project will exceed SJCOG's employment growth forecast for the City and/or General Plan/MSR growth forecasts. 50 51 52 53

Conclusion

For the foregoing reasons, GSEJA believes the MND is flawed and an EIR must be prepared for the proposed project and circulated for public review. Golden State Environmental Justice Alliance requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all 54 55

[29] South Stockton Commerce Center https://ceqanet.opr.ca.gov/2020090561/3
[30] SJCOG's 2022 RTP/SCS Appendix Q- Population, Household, and Employment Projections https://www.sjcog.org/DocumentCenter/View/7085/Q-Population-Household-and-Employment-Projections

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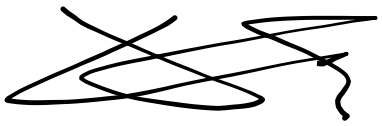
CONT

communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

Sincerely,



Gary Ho
Blum, Collins & Ho LLP

Attachments:
1. SWAPE Technical Analysis

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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September 25, 2024

Gary Ho
Blum, Collins & Ho LLP
707 Wilshire Blvd, Ste. 4880
Los Angeles, CA 90017

Subject: Comments on the South McKinley Avenue East Industrial Project (SCH No. 2024081317)

Dear Mr. Ho,

We have reviewed the August 2024 Initial Study and Mitigated Negative Declaration ("IS/MND") for the South McKinley Avenue East Industrial ("Project") located in the City of Stockton ("City"). The Project proposes to construct 179,166-square-feet ("SF") of industrial space, 5,000-SF of office space, and 192 parking stalls on the 11.7-acre site. 56

Our review concludes that the IS/MND fails to adequately evaluate the Project's air quality and health risk impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project may be underestimated and inadequately addressed. An Environmental Impact Report ("EIR") should be prepared to adequately assess and mitigate the potential air quality and health risk impacts that the project may have on the environment. 57

Air Quality

Failure to Provide Complete CalEEMod Output Files

Land use development projects under the California Environmental Quality Act ("CEQA") typically evaluate air quality impacts and calculate potential criteria air pollutant emissions using the California Emissions Estimator Model ("CalEEMod").[1] 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 CEQA requires that such changes be 58

[1] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide.

justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are used in calculating the Project's air pollutant emissions and demonstrate which default values are changed. Justifications are provided for the selected values. 58 CONT

Review of the Project's CalEEMod output files, provided in the Air Quality Supporting Information ("AQ Report") as Appendix A to the IS/MND, reveals that the files are incomplete. The "Stockton McKinley Avenue Warehouse" model's table of contents indicated that the output files include a "User Changes to Default Data" table as its final section (Appendix A, pp. 130). Upon further review of the output files, it was observed that the table is missing. Instead, a series of lines appear in its place (see excerpt below) (Appendix A, pp. 170). 59

Stockton McKinley Avenue Warehouse Detailed Report, 3/19/2023

Healthy Places Index Score for Project Location (b)	4.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

Appendix A Page 51

47 / 47

Without access to the "User Changes to Default Data", we are unable to verify where changes were made to the model's default values. As a result, an EIR should be prepared to include an updated, verifiable air quality analysis that correctly provides the complete output files for CalEEMod Version 2022.1. 60

Disproportionate Health Risk Impacts of Warehouses on Surrounding Communities

Upon review of the IS/MND, we have determined that the development of the proposed Project may contribute to the disproportionate health risk impacts warehouse pose on community members living, 61

working, and going to school within the immediate area of the Project site. According to the South Coast Air Quality Management District ("SCAQMD"):

> "Those living within a half mile of warehouses are more likely to include communities of color, have health impacts such as higher rates of asthma and heart attacks, and a greater environmental burden."[2]

61 CONT

The disproportionate health effects on communities of color are not confined to the SCAQMD jurisdiction, however. A 2024 study published in *Nature Communications* reveals that this is a nationwide concern, as the expansion of warehouses has significantly increased traffic-related air pollutants in marginalized and minoritized communities across the United States.[3] Another study similarly indicates that "neighborhoods with lower household income levels and higher percentages of minorities are expected to have higher probabilities of containing warehousing facilities."[4] Additionally, a report authored by the Inland Empire-based People's Collective for Environmental Justice and University of Redlands states:

62

> "As the warehouse and logistics industry continues to grow and net exponential profits at record rates, more warehouse projects are being approved and constructed in low-income communities of color and serving as a massive source of pollution by attracting thousands of polluting truck trips daily. Diesel trucks emit dangerous levels of nitrogen oxide and particulate matter that cause devastating health impacts including asthma, chronic obstructive pulmonary disease (COPD), cancer, and premature death. As a result, physicians consider these pollution-burdened areas 'diesel death zones.'"[5]

The San Joaquin Valley Air Pollution Control District ("SJVAPCD") itself admits that it faces significant air quality challenges that affect the numerous disadvantaged communities within its region.[6] It is evident that the continued development of industrial warehouses within these communities poses a significant environmental justice challenge and further contributes to a nationwide trend. However, the acceleration of warehouse development is only increasing despite the consequences on public health. In

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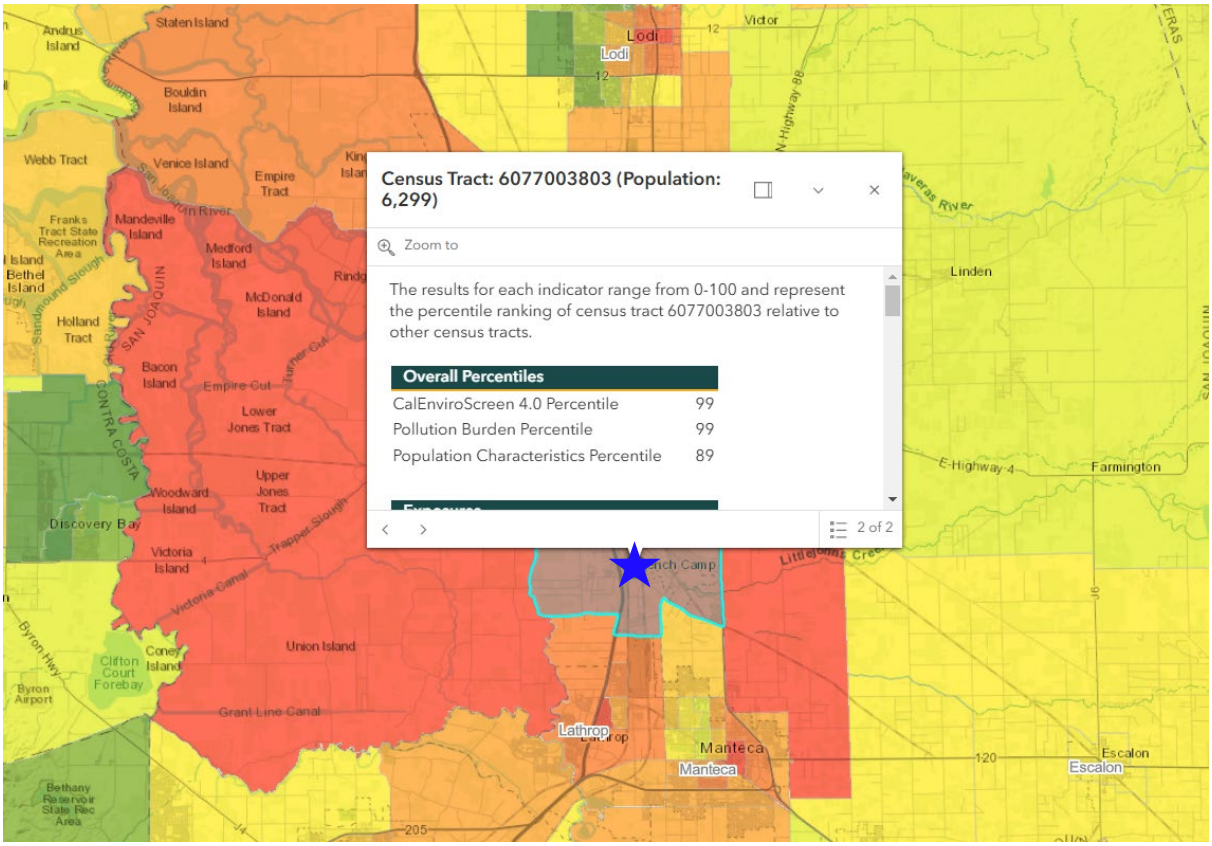
[2] "South Coast AQMD Governing Board Adopts Warehouse Indirect Source Rule." SCAQMD, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/news-archive/2021/board-adopts-waisr-may7-2021.pdf?sfvrsn=9.
[3] "Air pollution impacts from warehousing in the United States uncovered with satellite data." Gaige Hunter Kerr, et al.; June 2024, *available at:* https://doi.org/10.1038/s41467-024-50000-0.
[4] "Location of warehouses and environmental justice: Evidence from four metros in California." Metro Freight Center of Excellence, January 2018, *available at:* https://www.metrans.org/assets/research/MF%201.1g_Location%20of%20warehouses%20and%20environmental%20justice_Final%20Report_021618.pdf, p. 21.
[5] "Warehouses, Pollution, and Social Disparities: An analytical view of the logistics industry's impacts on environmental justice communities across Southern California." People's Collective for Environmental Justice, April 2021, *available at:* https://earthjustice.org/sites/default/files/files/warehouse_research_report_4.15.2021.pdf, p. 4.
[6] "2024 Plan for the 2012 Annual PM2.5 Standard." SJVAPCD, June 2024, *available at:* https://ww2.valleyair.org/media/gw5bacvj/2024-pm25-plan.pdf, p. ES-9.

Southern California, the Inland Empire alone is adding 10 to 25 million SF of new industrial space each year.[7]

63 CONT

San Joaquin County, the setting of the proposed Project, has long borne a disproportionately high pollution burden. When using CalEnviroScreen 4.0, CalEPA's screening tool that ranks each census tract in the State for pollution and socioeconomic vulnerability, we found that the Project's census tract is in the 99th percentile of communities that are disproportionately affected by various sources of pollution (see excerpt below).[8]

64



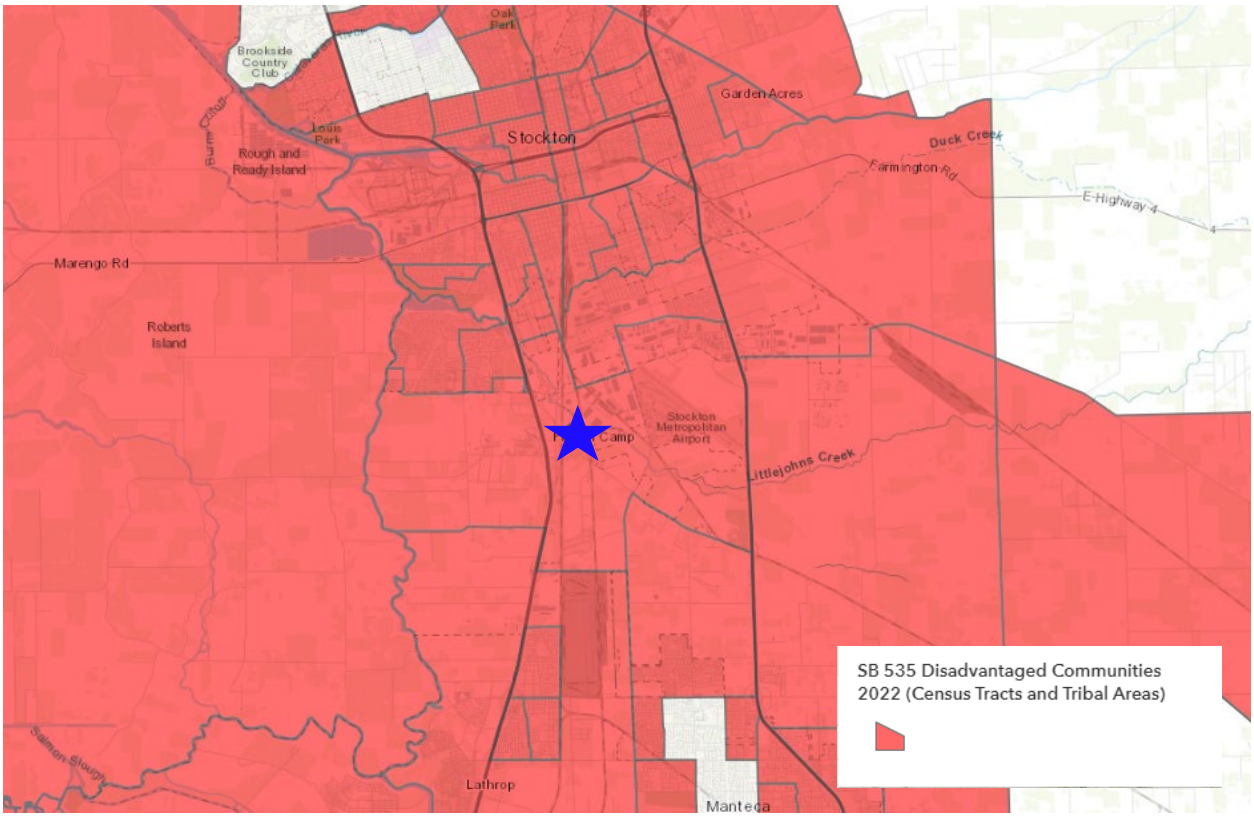
Additionally, according to CalEnviroScreen's SB 535 Disadvantaged Communities Map, the Project site is located in a designated disadvantaged community (see excerpt below).[9]

65

[7] "2020 North America Industrial Big Box Review & Outlook." CBRE, 2020, *available at:* https://www.cbre.com/-/media/project/cbre/shared-site/insights/local-responses/industrial-big-box-report-inland-empire/local-response-2020-ibb-inland-empire-overview.pdf, p. 2.

[8] "CalEnviroScreen 4.0." OEHHA, October 2021, *available at:* https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40, census tract #6071002204.

[9] "SB 535 Disadvantaged Communities (2022 Update)." California Environmental Protection Agency, *available at:* https://experience.arcgis.com/experience/1c21c53da8de48f1b946f3402fbae55c/page/SB-535-Disadvantaged-Communities/



SB 535 provides funding for development projects that provide a benefit to disadvantaged communities. CalEPA has been given the responsibility for identifying those communities based on "geographic, socioeconomic, public health, and environmental hazard criteria."[10] As the Project site is within a disadvantaged community, and the Project's census tract exhibits a high cancer risk, the proposed Project would contribute to the disproportionate health impacts warehouses impose on nearby residents.

66

The proposed Project may exacerbate disproportionate health risks for community members within the immediate area, a concern underscored by the mandates of SB 1000. SB 1000, enacted to address environmental justice considerations, requires local governments to integrate environmental justice elements into their planning processes, particularly focusing on reducing health risks for disadvantaged communities.[11]

67

[10] "Final Designation of Disadvantaged Communities." California Environmental Protection Agency, *available at:* https://calepa.ca.gov/wp-content/uploads/sites/6/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf?emrc=e05e10.

[11] "Environmental Justice in Local Land Use Planning." State of California Department of Justice, *available at:* https://oag.ca.gov/environment/sb1000.

As the Project site is located in an SB 535 disadvantaged community, we recommend reevaluating the Project's cumulative health risks to more effectively align with California Department of Justice ("CA DOJ") guidelines and SB 1000 environmental justice requirements. 68

The U.S. Environmental Protection Agency ("EPA") indicates that ozone, the main ingredient in "smog," can cause several health problems, which includes aggravating lung diseases and increasing the frequency of asthma attacks. The U.S. EPA states: 69

> "Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure. Children are also more likely than adults to have asthma."[12]

Regarding the increased sensitivity of early-life exposures to inhaled pollutants, the California Air Resources Board ("CARB") states: 70

> "Children are often at greater risk from inhaled pollutants, due to the following reasons:
>
> - Children have unique activity patterns and behavior. For example, they crawl and play on the ground, amidst dirt and dust that may carry a wide variety of toxicants. They often put their hands, toys, and other items into their mouths, ingesting harmful substances. Compared to adults, children typically spend more time outdoors and are more physically active. Time outdoors coupled with faster breathing during exercise increases children's relative exposure to air pollution.
>
> - Children are physiologically unique. Relative to body size, children eat, breathe, and drink more than adults, and their natural biological defenses are less developed. The protective barrier surrounding the brain is not fully developed, and children's nasal passages aren't as effective at filtering out pollutants. Developing lungs, immune, and metabolic systems are also at risk.
>
> - Children are particularly susceptible during development. Environmental exposures during fetal development, the first few years of life, and puberty have the greatest potential to influence later growth and development."[13]

A Stanford-led study also reveals that children exposed to high levels of air pollution are more susceptible to respiratory and cardiovascular diseases in adulthood.[14] Given that children are more susceptible to the negative health impacts of air pollutants, and that warehouses release more smog- 71

[12] "Health Effects of Ozone Pollution." U.S. EPA, May 2021, *available at:* https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution.
[13] "Children and Air Pollution." CARB, *available at:* https://ww2.arb.ca.gov/resources/documents/children-and-air-pollution.
[14] "Air pollution puts children at higher risk of disease in adulthood, according to Stanford researchers and others." Stanford, February 2021, *available at:* https://news.stanford.edu/2021/02/22/air-pollution-impacts-childrens-health/.

forming pollution than any other sector, it is necessary to evaluate the specific health risk that warehouses pose to children in the nearby community. 71 CONT

According to the above-mentioned study by the People's Collective for Environmental Justice and University of Redlands, a half mile radius is more commonly used for identifying sensitive receptors. Regarding the proposed Project itself, the IS/MND states: 72

> "The project site is located within the jurisdiction of the Manteca Unified School District (MUSD) and the Stockton Unified School District (SUSD). SUSD operates 54 schools with approximately 40,000 students. The closest school to the project site is the French Camp School, located approximately 0.21 mile south of the site at 241 Fourth Street. The second closest school to the project site is Great View Elementary, located 1.65 miles northwest of the site at 4223 McDougald Boulevard" (p. 120). 73

As discussed, French Camp School is located within half a mile of the Project site. An EIR should be prepared to evaluate the Project's contribution to the disproportionate impacts that warehouses pose on the surrounding communities, including an analysis of the impact on children and people of color who live and attend school in the surrounding area. In order to evaluate the cumulative air quality impact from the several warehouse projects proposed or built in a one-mile radius of the Project site, the analysis should prepare a revised cumulative HRA to quantify the adverse health outcome from the effects of exposure to multiple warehouses in the immediate area in conjunction with the poor ambient air quality in the Project's census tract. This recommendation is consistent with guidance provided by SB 1000 and the CA DOJ.[15] 74

Diesel Particulate Matter Emissions Inadequately Evaluated

The IS/MND concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction Health Risk Analysis ("HRA"). Specifically, the IS/MND estimates that the cumulative maximum cancer risk posed to nearby, existing residential sensitive receptors associated with construction would be 0.8 in one million, respectively, which would not exceed the SJVAPCD significance threshold of 20 in one million (see excerpt below) (p. 48, Table 5). 75

[15] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, September 2022, available at: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf, p. 6.

Table 5: Estimated Health Risks and Hazards During Project Construction at the Maximum Impacted Receptor

Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI[1]
Unmitigated Risk and Hazards	0.8	0.001
Significance Threshold	**20**	**1**
Exceeds Individual Source Threshold?	**No**	**No**

Notes:
$\mu g/m^3$ = micrograms per cubic meter
DPM = diesel particulate matter
HI = hazard index
MIR = Maximally Impacted Sensitive Receptor
PM_{10} = particulate matter, including dust, 10 micrometers or less in diameter
REL = Reference Exposure Level
[1] Chronic non-cancer HI was estimated by dividing the maximum annual DPM concentration (as PM_{10} exhaust) by the REL of 5 $\mu g/m^3$.
[2] Risk is based on Infant Exposure starting in Third Trimester and over the construction period.
Source: Appendix A.
The MIR was determined to be a residence located at 7201 South McKinley Avenue, French Camp, CA 95231, approximately 440 feet from the project site.

75 CONT

Furthermore, the IS/MND states:

> "The General Plan EIR, MM A-5 requires industrial or warehousing land uses that would generate substantial diesel truck travel (i.e., 100 diesel trucks per day or 40 or more trucks with diesel powered TRUs per day based on ARB recommendations for siting new sensitive land uses) to coordinate with the SJVAPCD and determine the appropriate level of HRA required in such cases.
>
> Since the proposed project will generate only 20 truck trips per day, it would not be considered to generate substantial diesel truck traffic. Therefore, an HRA and consultation is not required and health risks from operation of the facility, including DPM emissions from trucks, are considered to be less than significant" (p. 49).

The IS/MND declares that an operational HRA is not necessary based on SJVAPCD standards. The IS/MND's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, however, is unsupported for four reasons.

First, the IS/MND fails to mention or provide the exposure assumptions for the HRA, such as the age sensitivity factors ("ASF") or time at home factors ("TAH")/fraction of time at home ("FAH") values. Until the IS/MND substantiates the use of correct exposure assumptions, the HRA may underestimate the cancer risk posed to nearby, existing sensitive receptors because of Project construction. Furthermore, according to the *Risk Assessment Guidelines* provided by the Office of Environmental Health Hazard

76

Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, the IS/MND's model should have used the following equation:[16]

A. Equation 8.2.4 A: $RISK_{inh\text{-}res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$

7. $RISK_{inh\text{-}res}$ = Residential inhalation cancer risk
8. $DOSE_{air}$ = Daily inhalation dose (mg/kg-day)
9. CPF = Inhalation cancer potency factor (mg/kg-day^{-1})
10. ASF = Age sensitivity factor for a specified age group (unitless)
11. ED = Exposure duration (in years) for a specified age group
12. AT = Averaging time for lifetime cancer risk (years)
13. FAH = Fraction of time spent at home (unitless)

76 CONT

The IS/MND and associated documents fail to provide a dose and risk equation to calculate the Project's construction cancer risks. As such, we cannot verify that the IS/MND's HRA is accurate, and the Project's cancer risks may be underestimated.

Second, the IS/MND relies on guidance provided in the 2005 CARB's *Air Quality and Land Use Handbook* to omit an operational HRA (p. 49). As it is now July 2024, the Project should rely on the most recently updated guidance from the CEQA and the CA DOJ, as demonstrated below.

77

Third, by failing to prepare a quantified operational HRA, the Project is inconsistent with the CEQA requirements to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences."[17] By failing to prepare a quantified construction and operational HRA, the Project is inconsistent with CEQA's requirement to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences."[18]The Project is also inconsistent with the CA DOJ projects prepare a quantitative HRA in accordance with the OEHHA, the organization responsible for providing guidance on conducting HRAs in California.[19]

78

According to the IS/MND, operation of the Project is anticipated to generate about 378 daily vehicle trips, which would generate additional exhaust emissions and expose nearby sensitive receptors to diesel particulate matter ("DPM") emissions (p. 41). The IS/MND, however, fails to evaluate the toxic air contaminant ("TAC") emissions associated with Project operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to

[16] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at*: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-7 Equation 8.2.4.
[17] "Sierra Club v. County of Fresno." Supreme Court of California, December 2018, a*vailable at:* https://ceqaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf.
[18] "Sierra Club v. County of Fresno." Supreme Court of California, December 2018, a*vailable at:* https://ceqaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf.
[19] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, *available at*: https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf, p. 6.

connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the Project is inconsistent with CEQA's requirement to correlate the Project-generated emissions with potential adverse impacts on human health. **78 CONT**

Fourth, while the IS/MND conducts a construction HRA, the IS/MND fails to evaluate the combined lifetime cancer risk to nearby receptors as a result of Project construction and operation together. According to OEHHA guidance, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location."[20] The IS/MND fails to sum the total cancer risks in order to evaluate the combined cancer risk over the course of the Project's total construction and operation. This is unsubstantiated, and an EIR should be prepared in order to quantify the Project's total construction and operational cancer risks to compare to the SJVAPCD threshold of 20 in one million, as referenced by the HRA Report (p. 48). **79**

Screening-Level Analysis Indicates Potentially Significant Health Risk Impact

In accordance with CEQA, projects are required to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences."[21] In order to analyze the Project's potential health risk impacts, we conducted a screening-level risk assessment relying upon AERSCREEN, which is a screening level air quality dispersion model.[22] The model replaced SCREEN3, and AERSCREEN is included in OEHHA and the California Air Pollution Control Officers Associated ("CAPCOA") guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs").[23, 24] A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach should be conducted prior to approval of the Project. **80**

We prepared a preliminary HRA of the Project's operational health risk impact to residential sensitive receptors using the annual $PM_{2.5}$ exhaust estimates from the IS/MND's CalEEMod "Stockton McKinley Avenue Warehouse" model's output files. Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life.[25] Subtracting the 266-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 29.27 years, approximately. The IS/MND's operational CalEEMod emissions indicate that **81**

[20] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4.
[21] "Sierra Club v. County of Fresno." Supreme Court of California, December 2018, a*vailable at:* https://ceqaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf.
[22] "AERSCREEN Released as the EPA Recommended Screening Model," U.S. EPA, April 2011, *available at:* https://www.epa.gov/sites/default/files/2020-10/documents/20110411_aerscreen_release_memo.pdf
[23] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.
[24] "Health Risk Assessments for Proposed Land Use Projects." CAPCOA, July 2009, *available at:* https://www.valleyair.org/transportation/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.
[25] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-18.

operational activities will generate approximately 40 pounds of DPM per year throughout operation. Applying the same equation used to estimate the construction DPM rate, we estimated the following emission rate for Project operation:

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{40\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.000575\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.000575 g/s. Construction and operation were simulated as a 11.7-acre rectangular area source in AERSCREEN, with approximate dimensions of 308- by 154-meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution. The population of Stockton was obtained from U.S. 2022 Census data.[26]

81 CONT

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. The EPA suggests that the annualized average concentration of an air pollutant be estimated by multiplying the single-hour concentration by 10% in screening procedures.[27] The IS/MND states that the nearest sensitive receptor is located 440 feet away from the project site (p. 48). However, review of the AERSCREEN output files demonstrates that the maximally exposed individual receptor ("MEIR") is located approximately 150 meters from the Project site. Thus, the single-hour concentration estimated by AERSCREEN is 0.479 µg/m^3 DPM at approximately 150 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.0479 µg/m^3 for Project operation at the MEIR.[28]

82

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA, as recommended by SJVAPCD.[29] Specifically, guidance from OEHHA and CARB recommends the use of a standard point estimate approach, including high-point estimate (i.e. 95th percentile) breathing rates and age sensitivity factors ("ASF") in order to account for the increased sensitivity to carcinogens during early-in-life exposure and accurately assess risk for susceptible subpopulations such as children.

83

[26] "Stockton." U.S. Census Bureau, 2022, *available at:* https://datacommons.org/place/geoId/0675000.
[27] "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised." U.S. EPA, October 1992, *available at:* https://nepis.epa.gov/Exe/ZyNET.exe/2000F86J.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1991+Thru+1994&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C91thru94%5CTxt%5C00000014%5C2000F86J.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL.
[28] See Attachment B for AERSCREEN output files.
[29] "Update to District's Risk Management Policy to Address OEHHA's Revised Risk Assessment Guidance Document." SJVAPCD, May 2015, *available at:* https://www.valleyair.org/busind/pto/staff-report-5-28-15.pdf.

The residential exposure parameters utilized for the various age groups in our screening-level HRA are as follows:

Exposure Assumptions for Residential Individual Cancer Risk

Age Group	Breathing Rate (L/kg-day)[30]	Age Sensitivity Factor[31]	Exposure Duration (years)	Fraction of Time at Home[32]	Exposure Frequency (days/year)[33]	Exposure Time (hours/day)
3rd Trimester	361	10	0.25	1	350	24
Infant (0 - 2)	1090	10	2	1	350	24
Child (2 - 16)	572	3	14	1	350	24
Adult (16 - 30)	261	1	14	0.73	350	24

83 CONT

For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor ("CPF") in units of inverse dose expressed in milligrams per kilogram per day ($mg/kg/day^{-1}$) to derive the cancer risk estimate. Therefore, to assess exposures, we utilized the following dose algorithm:

$$Dose_{AIR,per\ age\ group} = C_{air} \times EF \times \left[\frac{BR}{BW}\right] \times A \times CF$$

where:

$Dose_{AIR}$ = dose by inhalation (mg/kg/day), per age group
C_{air} = concentration of contaminant in air (µg/m3)
EF = exposure frequency (number of days/365 days)
BR/BW = daily breathing rate normalized to body weight (L/kg/day)
A = inhalation absorption factor (default = 1)
CF = conversion factor (1x10-6, µg to mg, L to m3)

[30] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act." SCAQMD, October 2020, available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19, p. 19; see also "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[31] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-5 Table 8.3.

[32] "Risk Assessment Procedures." SCAQMD, August 2017, available at: http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

[33] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 5-24.

To calculate the overall cancer risk, we used the following equation for each appropriate age group:

$$Cancer\ Risk_{AIR} = Dose_{AIR} \times CPF \times ASF \times FAH \times \frac{ED}{AT}$$

where:

$Dose_{AIR}$ = dose by inhalation (mg/kg/day), per age group
CPF = cancer potency factor, chemical-specific $(mg/kg/day)^{-1}$
ASF = age sensitivity factor, per age group
FAH = fraction of time at home, per age group (for residential receptors only)
ED = exposure duration (years)
AT = averaging time period over which exposure duration is averaged (always 70 years)

Consistent with the 664-day construction schedule, the annualized average concentration for construction was used for the entire third trimester of pregnancy (0.25 years) and the first 1.57 years of the infantile stage of life (0 – 2 years). The annualized average concentration for operation was used for the remainder of the 30-year exposure period, which makes up the latter 0.43 years of the infantile stage of life, as well as the entire child (2 – 16 years) and adult (16 – 30 years) stages of life. The results of our calculations are shown in the table below. **83 CONT**

The Maximally Exposed Individual at an Existing Residential Receptor

Age Group	**Emissions Source**	**Duration** (years)	**Concentration** (ug/m3)	**Cancer Risk**
3rd Trimester	Construction	0.25	*	*
	Construction	*0.48*		***
	Operation	*1.52*	*0.0479*	*1.02E-05*
Infant (0 - 2)	Total	2		1.02-05
Child (2 - 16)	Operation	14	0.0479	1.25E-05
Adult (16 - 30)	Operation	14	0.0479	1.92E-06
Lifetime		**30**		**2.46E-05**

As demonstrated in the table above, the excess cancer risks to infants, children, and adults at the MEIR located approximately 150 meters away, over the course of Project operation, are approximately 10.2, 12.5, and 1.92 in one million, respectively. The excess cancer risk over the course of a residential lifetime (30 years) is approximately 24.6 in one million. When summing the Project's operational cancer risk, as estimated by SWAPE, with the IS/MND's construction-related cancer risk of 0.8 in one million, we estimate an excess cancer risk of 25.4 in one million over the course of a residential lifetime (30 years). **84** **85**

As such, the child and lifetime cancer risks exceed the SJVAPCD threshold of 20 in one million, and would result in a potentially significant impact. 86

Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level HRA is to demonstrate the potential link between Project-generated emissions and adverse health risk impacts. According to the U.S. EPA: 87

> "EPA's Exposure Assessment Guidelines recommend completing exposure assessments iteratively using a tiered approach to 'strike a balance between the costs of adding detail and refinement to an assessment and the benefits associated with that additional refinement' (U.S. EPA, 1992).
>
> In other words, an assessment using basic tools (e.g., simple exposure calculations, default values, rules of thumb, conservative assumptions) can be conducted as the first phase (or tier) of the overall assessment (i.e., a screening-level assessment).
>
> The exposure assessor or risk manager can then determine whether the results of the screening-level assessment warrant further evaluation through refinements of the input data and exposure assumptions or by using more advanced models."

As demonstrated above, screening-level analyses warrant further evaluation in a refined modeling approach. As our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, the future EIR should be prepared to include a refined health risk analysis which adequately and accurately evaluates health risk impacts associated with both Project construction and operation. If the refined analysis similarly concludes that the Project would result in a significant health risk impact, then mitigation measures should be incorporated, as described below in the "Feasible Mitigation Measures Available to Reduce Emissions" section. 88

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

According to CEQA Guidelines § 15096(g)(2):

> "When an updated EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment." 89

The IS/MND is consequently required under CEQA to implement all feasible mitigation to reduce the Project's potential impacts. As demonstrated in the sections above, the Project would result in potentially significant health risk impacts that should be mitigated further.

To reduce the DPM emissions associated with Project construction and operation, we recommend the IS/MND consider several mitigation measures (see list below). 90

The CARB recommends: [34]

- Require all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits, such that, emission reductions achieved are equal to or exceed that of a Tier 4 engine.
- Requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during project construction be battery powered.
- Require all heavy-duty trucks entering the construction site during the grading and building construction phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-oxides of nitrogen (NOx) standard starting in the year 2022.
- Require all construction equipment and fleets to be in compliance with all current air quality regulations.
- Requiring all TRUs entering the project-site be plug-in capable.
- Require future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans.
- Require all heavy-duty trucks entering or on the project site to be zero-emission vehicles, and be fully zero-emission. A list of commercially available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP). Additional incentive funds can be obtained from the Carl Moyer Program and Voucher Incentive Program.
- Restrict trucks and support equipment from idling longer than two minutes while on site.
- Require the installation of vegetative walls or other effective barriers that separate loading docks and people living or working nearby.

90 CONT

In addition to recommending similar mitigation as the above-mentioned measures from CARB, the CA DOJ suggests:[35]

- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the

91

[34] "Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers." CARB, August 2023, *available at*: https://ww2.arb.ca.gov/sites/default/files/2023-08/CARB%20Comments%20-%20NOP%20for%20the%20%20Oak%20Valley%20North%20Project%20DEIR.pdf; Attachment A, p. 5 – 8.
[35] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, September 2022, *available at*: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf, p. 8 – 10.

affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.

91 CONT

Lastly, SCAQMD staff recommends: [36]

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

92

The CalEEMod User's Guide confirms that the methods for mitigating DPM emissions include the use of "alternative fuel, electric equipment, diesel particulate filters (DPF), oxidation catalysts, newer tier engines, and dust suppression."[37]

93

As demonstrated above, we have provided several mitigation measures that would reduce Project-related DPM developed from sources including CARB, the CA DOJ and others. These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently reduce emissions released during Project construction and operation.

94

An EIR should be prepared that includes all feasible mitigation measures, as well as an updated health risk analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to the maximum extent feasible. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's potentially significant emissions are reduced to the maximum extent possible.

95

Disclaimer

SWAPE has received limited discovery regarding this project. 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

96

[36] "Draft Environmental Impact Report (EIR) for the Proposed CADO Menifee Industrial Warehouse Project (Proposed Project)." SCAQMD, April 2024, *available at*: https://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2024/april-2024/RVC240313-05.pdf?sfvrsn=8, p. 3 - 4.
[37] "Calculation Details for CalEEMod." CAPCOA, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-a2020-4-0.pdf?sfvrsn=6, Appendix A, p. 60.

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.

96 CONT

Sincerely,

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

Paul E. Rosenfeld, Ph.D.

Attachment A: Health Risk Calculations
Attachment B: AERSCREEN Output Files
Attachment A: Matt Hagemann CV
Attachment B: Paul Rosenfeld CV

Attachment A

Construction			
2024		**Total**	
Annual Emissions (tons/year)	0.05	Total DPM (lbs)	72.87671233
Daily Emissions (lbs/day)	0.273972603	Total DPM (g)	33056.87671
Construction Duration (days)	266	Emission Rate (g/s)	0.001438356
Total DPM (lbs)	72.87671233	Release Height (meters)	3
Total DPM (g)	33056.87671	Total Acreage	11.7
Start Date	4/1/2024	Max Horizontal (meters)	307.73
End Date	12/23/2024	Min Horizontal (meters)	153.86
Construction Days	266	Initial Vertical Dimension (meters)	1.5
		Setting	Stockton
		Population	321,819
		Start Date	4/1/2024
		End Date	12/23/2024
		Total Construction Days	266
		Total Years of Construction	0.73
		Total Years of Operation	29.27

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.02
Daily Emissions (lbs/day)	0.109589041
Total DPM (lbs)	40
Emission Rate (g/s)	0.000575342
Release Height (meters)	3
Total Acreage	11.7
Max Horizontal (meters)	307.73
Min Horizontal (meters)	153.86
Initial Vertical Dimension (meters)	1.5
Setting	Stockton
Population	321,819

The Maximally Exposed Individual at an Existing Residential Receptor				
Age Group	**Emissions Source**	**Duration** (years)	**Concentration** (ug/m3)	**Cancer Risk**
3rd Trimester	Construction	0.25	*	*
	Construction	*0.48*	*	*
	Operation	*1.52*	*0.0479*	*1.02E-05*
Infant (0 - 2)	Total	2		1.02E-05
Child (2 - 16)	Operation	14	0.0479	1.25E-05
Adult (16 - 30)	Operation	14	0.0479	1.92E-06
Lifetime		**30**		**2.46E-05**

AERSCREEN 21112 / AERMOD 21112 09/20/24
12:00:18

TITLE: SouthMcKinley, Operational

********** AREA PARAMETERS **********

SOURCE EMISSION RATE:	0.575E-03	g/s	0.457E-02	lb/hr
AREA EMISSION RATE:	0.122E-07	g/(s-m2)	0.964E-07	lb/(hr-m2)
AREA HEIGHT:	3.00	meters	9.84	feet
AREA SOURCE LONG SIDE:	307.73	meters	1009.61	feet
AREA SOURCE SHORT SIDE:	153.86	meters	504.79	feet
INITIAL VERTICAL DIMENSION:	1.50	meters	4.92	feet
RURAL OR URBAN:	URBAN			
POPULATION:	321819			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

********** FLOW SECTOR ANALYSIS **********
25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	0.4788	10	150.0	WIN

* = worst case diagonal

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Winter

ALBEDO: 0.35
BOWEN RATIO: 1.50
ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR	MO	DY	JDY	HR
10	01	10	10	01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50

HT	REF TA	HT
10.0	310.0	2.0

********** AERSCREEN AUTOMATED DISTANCES **********
OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	0.3725	2525.00	0.1071E-01

25.00	0.3954	2550.00	0.1056E-01
50.00	0.4162	2575.00	0.1043E-01
75.00	0.4344	2600.00	0.1029E-01
100.00	0.4506	2625.00	0.1016E-01
125.00	0.4655	2650.00	0.1003E-01
150.00	0.4788	2675.00	0.9900E-02
175.00	0.4389	2700.00	0.9776E-02
200.00	0.3160	2725.00	0.9654E-02
225.00	0.2591	2750.00	0.9535E-02
250.00	0.2254	2775.00	0.9419E-02
275.00	0.2003	2800.01	0.9305E-02
300.00	0.1798	2825.00	0.9193E-02
325.00	0.1625	2850.00	0.9170E-02
350.00	0.1480	2875.00	0.9061E-02
375.00	0.1355	2900.00	0.8954E-02
400.00	0.1247	2925.00	0.8849E-02
425.00	0.1154	2950.00	0.8747E-02
450.00	0.1071	2975.00	0.8646E-02
475.00	0.9987E-01	3000.00	0.8548E-02
500.00	0.9337E-01	3025.00	0.8451E-02
525.00	0.8765E-01	3050.00	0.8357E-02
550.00	0.8247E-01	3075.00	0.8264E-02
575.00	0.7777E-01	3100.00	0.8173E-02
600.00	0.7355E-01	3125.00	0.8083E-02
625.00	0.6971E-01	3150.00	0.7996E-02
650.00	0.6618E-01	3175.00	0.7910E-02
675.00	0.6297E-01	3200.00	0.7825E-02
700.00	0.6004E-01	3225.00	0.7742E-02
725.00	0.5732E-01	3250.00	0.7661E-02
750.00	0.5478E-01	3275.00	0.7581E-02
775.00	0.5243E-01	3300.00	0.7502E-02
800.00	0.5026E-01	3325.00	0.7425E-02
825.00	0.4825E-01	3350.00	0.7350E-02
850.00	0.4639E-01	3375.00	0.7275E-02
875.00	0.4465E-01	3400.00	0.7202E-02
900.00	0.4300E-01	3425.00	0.7130E-02
925.00	0.4145E-01	3450.00	0.7060E-02
950.00	0.4000E-01	3475.00	0.6990E-02
975.00	0.3863E-01	3500.00	0.6922E-02
1000.00	0.3734E-01	3525.00	0.6855E-02
1025.00	0.3613E-01	3550.00	0.6789E-02
1050.00	0.3498E-01	3575.00	0.6724E-02
1075.00	0.3390E-01	3600.00	0.6660E-02
1100.00	0.3288E-01	3625.00	0.6597E-02
1125.00	0.3191E-01	3650.00	0.6536E-02
1150.00	0.3098E-01	3675.00	0.6475E-02
1175.00	0.3009E-01	3700.00	0.6415E-02
1200.00	0.2925E-01	3725.00	0.6356E-02
1225.00	0.2845E-01	3750.00	0.6298E-02
1250.00	0.2769E-01	3775.00	0.6241E-02

1275.00	0.2697E-01	3800.00	0.6185E-02
1300.00	0.2628E-01	3825.00	0.6130E-02
1325.00	0.2562E-01	3850.00	0.6076E-02
1350.00	0.2498E-01	3875.00	0.6022E-02
1375.00	0.2437E-01	3900.00	0.5969E-02
1400.00	0.2378E-01	3925.00	0.5917E-02
1425.00	0.2322E-01	3950.00	0.5866E-02
1450.00	0.2269E-01	3975.00	0.5816E-02
1475.00	0.2217E-01	4000.00	0.5766E-02
1500.00	0.2168E-01	4025.00	0.5717E-02
1525.00	0.2120E-01	4050.00	0.5669E-02
1550.00	0.2073E-01	4075.00	0.5621E-02
1575.00	0.2029E-01	4100.00	0.5574E-02
1600.00	0.1986E-01	4125.00	0.5528E-02
1625.00	0.1945E-01	4150.00	0.5483E-02
1650.00	0.1905E-01	4175.00	0.5438E-02
1675.00	0.1867E-01	4200.00	0.5394E-02
1700.00	0.1830E-01	4225.00	0.5350E-02
1725.00	0.1794E-01	4250.00	0.5307E-02
1750.00	0.1759E-01	4275.00	0.5265E-02
1775.00	0.1726E-01	4300.00	0.5223E-02
1800.00	0.1693E-01	4325.00	0.5182E-02
1825.00	0.1662E-01	4350.00	0.5141E-02
1850.00	0.1632E-01	4375.00	0.5101E-02
1875.00	0.1603E-01	4400.00	0.5061E-02
1900.00	0.1574E-01	4425.00	0.5022E-02
1925.00	0.1547E-01	4450.00	0.4983E-02
1950.00	0.1520E-01	4475.00	0.4945E-02
1975.00	0.1494E-01	4500.00	0.4908E-02
2000.00	0.1469E-01	4525.00	0.4871E-02
2025.00	0.1445E-01	4550.00	0.4834E-02
2050.00	0.1421E-01	4575.00	0.4798E-02
2075.00	0.1398E-01	4600.00	0.4762E-02
2100.00	0.1375E-01	4625.00	0.4727E-02
2125.00	0.1353E-01	4650.00	0.4693E-02
2150.00	0.1332E-01	4675.00	0.4658E-02
2175.00	0.1311E-01	4700.00	0.4624E-02
2200.00	0.1291E-01	4725.00	0.4591E-02
2225.00	0.1272E-01	4750.00	0.4558E-02
2250.00	0.1253E-01	4775.00	0.4525E-02
2275.00	0.1234E-01	4800.00	0.4493E-02
2300.00	0.1216E-01	4825.00	0.4461E-02
2325.00	0.1198E-01	4850.00	0.4430E-02
2350.00	0.1181E-01	4875.00	0.4399E-02
2375.00	0.1164E-01	4900.00	0.4368E-02
2400.00	0.1147E-01	4925.00	0.4338E-02
2425.00	0.1131E-01	4950.00	0.4308E-02
2450.00	0.1115E-01	4975.00	0.4278E-02
2475.00	0.1100E-01	5000.00	0.4249E-02
2500.00	0.1085E-01		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

3-hour, 8-hour, and 24-hour scaled
concentrations are equal to the 1-hour concentration as referenced in
SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY
IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	0.4820	0.4820	0.4820	0.4820	N/A

DISTANCE FROM SOURCE 156.99 meters

IMPACT AT THE AMBIENT BOUNDARY	0.3725	0.3725	0.3725	0.3725	N/A

DISTANCE FROM SOURCE 1.00 meters

Attachment C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Matt Hagemann, P.G, C.Hg.
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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. 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) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- 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 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, 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 more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- 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.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

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.

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

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

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

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

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

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

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

Other Experience:

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

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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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. Focus on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years of 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 oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. 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 also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

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, creosote, 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 sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military 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_2O 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:

Rosenfeld P. E., Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution.* **233,** 171.

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

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

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

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

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

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

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

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

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

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

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

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

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd 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 23rd 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 *23rd 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 Conferenc*e. 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 Superior Court of the State of California, County of San Bernardino
Billy Wildrick, Plaintiff vs. BNSF Railway Company
Case No. CIVDS1711810
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company
Case No. 10-SCCV-092007
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.
Case No. 2020-03891
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division
Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad
Case No. 18-LV-CC0020
Rosenfeld Deposition 9-7-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.
Case No. 20-CA-5502
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.
Case No. 19SL-CC03191
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.
Case No. NO. 20-CA-0049
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District
Greg Bean, Plaintiff vs. Soo Line Railroad Company
Case No. 69-DU-CV-21-760
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington
John D. Fitzgerald Plaintiff vs. BNSF
Case No. 3:21-cv-05288-RJB
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois
Rocky Bennyhoff Plaintiff vs. Norfolk Southern
Case No. 20-L-56
Rosenfeld Deposition 8-3-2022

In Court of Common Pleas, Hamilton County Ohio
Joe Briggins Plaintiff vs. CSX
Case No. A2004464
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern
George LaFazia vs. BNSF Railway Company.
Case No. BCV-19-103087
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois
Bobby Earles vs. Penn Central et. al.
Case No. 2020-L-000550
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida
Albert Hartman Plaintiff vs. Illinois Central
Case No. 2:20-cv-1633
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4th Judicial Circuit, in and For Duval County, Florida
Barbara Steele vs. CSX Transportation
Case No.16-219-Ca-008796
Rosenfeld Deposition 3-15-2022

In United States District Court Easter District of New York
Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois
Linda Benjamin vs. Illinois Central
Case No. No. 2019 L 007599
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois
Donald Smith vs. Illinois Central
Case No. No. 2019 L 003426
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois
Jan Holeman vs. BNSF
Case No. 2019 L 000675
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia
Dwayne B. Garrett vs. Norfolk Southern
Case No. 20-SCCV-091232
Rosenfeld Deposition 11-10-2021

In the Circuit Court of Cook County Illinois
Joseph Ruepke vs. BNSF
Case No. 2019 L 007730
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska
Steven Gillett vs. BNSF
Case No. 4:20-cv-03120
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County
James Eadus vs. Soo Line Railroad and BNSF
Case No. DV 19-1056
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al.cvs. Cerro Flow Products, Inc.
Case No. 0i9-L-2295
Rosenfeld Deposition 5-14-2021
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No. 18-L-6845
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail
Case No. 17-cv-8517
Rosenfeld Deposition 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case No. CV20127-094749
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al vs. CNA Insurance Company et al.
Case No. 1:17-cv-000508
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, Plaintiff, vs. Marathon Petroleum, LP, Defendant.
Case No. 1716-CV10006
Rosenfeld Deposition 8-30-2019

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 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. 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. BC646857
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiffs 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., Plaintifs 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 United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case No. 1:19-cv-00315-RHW
Rosenfeld Deposition 4-22-2020

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 No. 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. 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 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 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 No. CACE07030358 (26)
Rosenfeld Deposition December 2014

In the County Court of Dallas County Texas
Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.
Case No. 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 No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.
Civil Action No. 2:09-cv-232-WHA-TFM
Rosenfeld Deposition July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., Plaintiffs, vs. Drummond Company Inc., et al., Defendants
Civil Action No. CV 2008-2076
Rosenfeld Deposition September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., Plaintiffs, vs. Citgo Petroleum Corporation, et al., Defendants.
Case No. 2:07CV1052
Rosenfeld Deposition July 2009

Blum, Collins & Ho LLP (BLUM-1)

Response to BLUM-1-1
The commenter includes a request to be added to the notification list for any subsequent environmental documents, public notices, public hearings, and notices of determination for the proposed project. In response, the commenter will be notified.

Response to BLUM-1-2
This comment consists of introductory information and summarizes the proposed project. No response is required.

Response to BLUM-1-3
The Draft IS/MND includes all elements required by CEQA Guidelines Section 15071. The site plans provided in Exhibit 6 show a building footprint, including square footage of the proposed building, warehouse uses, office uses, and the location of doors and loading docks. Exhibit 6 also shows the location of landscaping, parking, setbacks, building width and length, and internal roadway widths. As discussed in Section 2.9, Hazards and Hazardous Materials, of the Draft IS/MND, air space review is required for objects greater than 100 feet in height. However, the proposed building would not exceed 60 feet in height as required by the IL zoning district.

Response to BLUM-1-4
"Pre-zoning" was analyzed in the revisions to the zoning code. Annexation and Site Plan Review are listed as Required Discretionary approvals in the project description, on page 5 of the Draft IS/MND. This Draft IS/MND will be used by the Local Agency Formation Commission (LAFCo) to inform their analysis of potential environmental effects of the proposed project and the annexation.

Response to BLUM-1-5
The commenter states that the MND is deficient in the that it does not discuss the City's Municipal Services review. CEQA Guidelines Section 15204(a) states that reviewers commenting on Draft MNDs should focus on potential environmental effects. Accordingly, comments should focus on:

- Identifying the specific effect;
- Explaining why the reviewer believes that the effect would occur; and
- Explaining why the effect would be significant. (CEQA Guidelines Section 15204(b)).

Moreover, the CEQA Guidelines direct commenters to "explain the basis for their comments" by submitting "data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts." (CEQA Guidelines § 15204(c)). A lead agency may reject comments that are not focused as recommended in Section 15204(b). See CEQA Guidelines Section 15204(e). This comment does not identify any specific environmental issue or provide any facts in support of a comment regarding the environment and no further discussion is warranted.

Response to BLUM-1-6
The commenter refers to a complete technical commentary and analysis from SWAPE. Responses to the individual comments are provided below.

Response to BLUM-1-7
The commenter states that the MND does not include meaningful analysis of relevant environmental justice issues in reviewing potential impacts, including cumulative impacts. The commenter further states that the surrounding community is highly burdened by pollution and ranks in the 99th percentile for overall pollution burden according to CalEnviroScreen 4.0.

The comments are noted and acknowledged. The City does not have any CEQA thresholds of significance related to environmental justice. Additionally, CEQA does not require consideration of environmental justice considerations. Of relevance here, neither the California Air Resources Board (ARB) nor the Valley Air District has recommended significance thresholds be adjusted for environmental justice considerations, and thus neither entity recommends the evaluation of the same as part of the CEQA process. As discussed in more detail in the Air Quality section of the Draft IS/MND, it utilized the currently recommended Valley Air District significance thresholds to determine health risk impacts resulting from the proposed project in accordance with the mandates of CEQA. The MND evaluated potential impacts to nearby sensitive receptors through the analysis of cumulatively considerable criteria pollutant emissions and health risks under Impacts AIR-2 and AIR-3. The Draft IS/MND acknowledged that the project site is adjacent to the existing sensitive receptors identified by the commenter, and therefore the Draft IS/MND identifies the potential health risk impacts that could occur as a result of project construction and operation and includes feasible mitigation to reduce these impacts.

The commenter listed the public health impacts from exposure to ozone and diesel particulate matter (DPM); these comments are noted. The environmental setting in the Draft IS/MND includes a discussion of the public health impacts from exposure to air pollutants including ozone and diesel PM. No further response is needed.

Response to BLUM-1-8
The commenter states that the census tract is severely impacted in several areas that impact water quality; however, the comment does not specifically address the proposed project or the Draft IS/MND. Analysis of the potential impacts to water quality is provided in Section 2.4, Biological Resources and Section 10, Hydrology and Water Quality. With the incorporation of mitigation measures, no impacts to water quality were identified.

Response to BLUM-1-9
The commenter states that the census tract ranks 85th percentile for hazardous waste facility impacts, which contribute to the contamination of air, water and soil and can harm the environment as well as people. As noted in Section 2.9 Hazards and Hazardous Materials, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.

Response to BLUM-1-10
The commenter states that the census tract bears more impacts from cleanup sites than 84 percent of the State, and chemicals in the buildings, soil or water at cleanup sites can move into nearby communities through the air or movement of water. As noted in Section 2.9 Hazards and Hazardous Materials, the project site is not included on a list of hazardous materials sites compiled pursuant to

Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.

Response to BLUM-1-11
The commenter states that the census tract is a diverse community with a high rate of poverty and is burdened by high levels of pollution. The commenter further states that the community has a high rate of linguistic isolation, and that poverty can cause stress that weakens the immune system.

The comments are noted and acknowledged. This is not a CEQA issue and no further discussion is warranted. As previously stated, CEQA does not require consideration of environmental justice considerations or social issues.

Response to BLUM-1-12
The commenter states that the project census tract and the census tracts adjacent to the project site are identified as SB 535 Disadvantaged Communities, and this indicates that cumulative impacts of development and environmental impacts in the area are disproportionately impacting these communities. The commenter further states that the severity of the significant and unavoidable impacts particularly on these disadvantaged communities must be included for analysis in each section of the MND, including cumulative analysis and irreversible environmental effects.

The comments are noted and acknowledged. CEQA does not require consideration of environmental justice considerations. Of relevance here, neither the ARB nor the Valley Air District has recommended significance thresholds be adjusted for environmental justice considerations, and thus neither entity recommends the evaluation of these issues as part of the CEQA process. As discussed in more detail in the Air Quality section of the MND, the analysis utilized the currently recommended Valley Air District significance thresholds to determine health risk impacts resulting from the proposed project in accordance with the mandates of CEQA. The MND evaluated potential impacts to nearby sensitive receptors through the analysis of cumulatively considerable criteria pollutant emissions and health risks under Impacts AIR-2 and AIR-3. The MND acknowledged that the project site is nearby existing sensitive receptors, and therefore the MND identifies the potential health risk impacts that could occur as a result of project construction and operation and includes feasible mitigation to reduce these impacts.

Response to BLUM-1-13
The commenter generally asserts that there are three “approved compliance modeling software” (i.e., CBECC-Com, EnergyPro, and IES VE) for nonresidential buildings and purports that CalEEMod is not listed as an approved software. The commenter purports that CalEEMod modeling “does not comply with the 2022 Building Energy Efficiency Standards” and therefore “under-reports” the proposed project’s significant energy impacts and fuel consumption.

The comment is noted for the record. The commenter does not provide substantial evidence regarding any significant environmental impact that was not evaluated and disclosed in the Draft EIR. The basis for the commenter’s assertion that CalEEMod is “not approved” is unclear and unsubstantiated. Additionally, the commenter does not identify any project-specific impact that the MND failed to consider and disclose.

Use of CalEEMod for purposes of modeling potential air quality and related health risk assessments is appropriate. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform to calculate construction and operational emissions from land use development projects. CalEEMod was developed for the California Air Pollution Control Officers Association in collaboration with the California Air Districts. The model is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California and can be used for a variety of situations where an air quality analysis is necessary, such as preparing CEQA or National Environmental Policy Act (NEPA) documents, conducting pre-project planning, and verifying compliance with local air quality rules and regulations. CalEEMod was updated in 2022 and includes the gas and electric utility emissions factors pursuant to the location of the proposed project, as well as building energy zones. The 2022 CalEEMod update generates default electricity and natural gas consumption that consider Title 24 standards.

CBECC software is approved specifically for Title 24 compliance; however, it is used to confirm that a final building design (with detailed information included in its construction drawings) is Title 24 compliant. The final designs and construction drawings are not available for the proposed project and are not typically prepared until after a proposed development project is approved/entitled.

Accordingly, the Draft IS/MND and underlying technical studies correctly use CalEEMod to estimate energy demand based on average intensity factors for similar land use types. Since the occupants of the proposed project's buildings are unknown at this time, and information about the future building users' energy use is also not available at this time, it is appropriate to rely upon the CalEEMod default assumptions which have been derived by the California Air Pollution Control Officers Association. There is no requirement in CEQA or the City's thresholds of significance to show specific compliance with 2022 Building Energy Efficiency Standards based on conceptual building designs that are proposed at the entitlement stage of a project's approval process. This will be a requirement pursuant to State law prior to issuance of each building permit and verified by the City's Building and Safety Department. No further response is needed.

Response to BLUM-14

The commenter questions the calculation of building occupancy as well as square footage of open space. As stated in Section 2.9, Hazards and Hazardous Materials, Zone 7a allows for a maximum nonresidential density of 450 persons per acre. Given the 11.7-acre size of the property, that would allow for over 5,000 employees/occupants.

The calculation provided in the Draft IS/MND is based on the California Building Standards Code (CBC) occupancy level of 500 square feet/occupant for the 179,166 square feet of warehouse space (358 occupants) and 100 square feet per occupant for the 5,000 square feet of office use (50 occupants), for a total of 408 occupants. Although this calculation is slightly higher than the 391 reported in the Draft IS/MND, it is still well within the more than 5,000 allowed by the Airport Land Use Compatibility Plan (ALUCP). The proposed project would provide 131,850 square feet of open space, which equates to 25.8 percent, which would exceed the 10 percent requirement of the ALUCP.

Response to BLUM-1-15
The City and applicant have consulted with the Airport Land Use Commission (ALUC) throughout the CEQA process, as required by Section 3.1.6.1 of the ALUCP. The ALUC did not submit a comment letter on the Draft IS/MND.

Response to BLUM-1-16
The comment is noted. The proposed project does require an amendment to the City's land use map to incorporate the proposed project into the city limits.

Response to BLUM-1-17
Refer to Response to BLUM-1-15 above.

Response to BLUM-1-18
The proposed project is following the City's typical process for design review concurrent with CEQA review and prior to issuance of a building permit, based upon City Municipal Code requirements and Citywide Design Guidelines which are incorporated into the Draft IS/MND by reference.

Response to BLUM-1-19
The Draft IS/MND considers General Plan policy consistency and reflects the City's independent judgment that the proposed project would be consistent with the General Plan. A finding of consistency does not require strict consistency, or perfect consistency, with every policy or with all aspects of a plan. Courts have consistently recognized that a lead agency has the discretion to find consistency even if a project does not adhere to every policy or regulation. (*See Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 719).

Response to BLUM-1-20
The comment does not identify a potential significant impact or provide any data or facts regarding a potential significant impact as directed by CEQA Guidelines Section 15204(b)-(c). See Response to BLUM-1-6. There is no provision in the Public Resources Code or the CEQA Guidelines requiring the inclusion of a City Services Plan in a MND or an EIR. Additionally, there is no requirement to include a fiscal impact analysis. This principle is reflected in CEQA Guidelines Sections 15064(e) and 15382, which provide that economic and social changes may not be treated as significant effects on the environment. The Draft IS/MND thoroughly evaluates potential impacts on the physical environment

Under CEQA Guidelines Section 15071, a proposed negative declaration must include the following information:

- A brief description of the project, including any commonly used name;
- The project's location, preferably shown on a map;
- The name of the project proponent;
- A proposed finding that the project will not have a significant effect on the environment;
- An attached copy of the initial study documenting the reasons for the agency's finding; and
- Any mitigation measures included in the project to avoid potentially significant effects.

Here, the Draft IS/MND includes all of the required elements.

Response to BLUM-1-21
Neither CEQA nor this project requires the preparation of a Municipal Services Review (MSR). Additionally, the comment fails to identify any specific impacts to the physical environment related to public services associated with the proposed project. The proposed project will comply with Municipal Code Section 16-17.260, which requires the project applicant to pay a public facilities fee. As explained in the Draft IS/MND, payment of these fees would ensure that impacts would be less than significant.

Response to BLUM-1-22
CEQA does not require consideration of environmental justice considerations. As noted by the comment, preparation of a MSR is conducted by LAFCo and is not indicative of any potentially significant impact. The proposed project will comply with Municipal Code Section 16-17.260, which requires the project applicant to pay a public facilities fee. As explained in the Draft IS/MND, payment of these fees would ensure that impacts related to public services would be less than significant. Additionally, the City continues to work with LAFCo on the completion of the MSR to ensure that provision of public services is maintained at appropriate levels to support forecasted growth within the MSR time horizon.

Response to BLUM-1-23
Cumulative impacts are discussed throughout the Draft IS/MND. See, e.g., Section 2.20, Mandatory Findings of Significance. The comment does not include any facts or data that the proposed project would result in cumulative impacts.

Response to BLUM-1-24
The Draft IS/MND notes that upward of 400 jobs may be generated by the proposed project, and it is reasonable to assume that employees would be drawn from the local and surrounding area. Unemployment in this area is 6.3 percent as of November 2024.

Response to BLUM-1-25
Unemployment in the Stockton-Lodi Metropolitan Statistical Area is 6.3 percent as of November 2024.

Response to BLUM-1-26
The Draft IS/MND included a Vehicle Miles Traveled (VMT) analysis and also includes a robust mitigation measure outlining the requirements for a Transportation Demand Management (TDM) program to further reduce VMT. Based on California Air Pollution Control Officers Association (CAPCOA) research, the analysis found that the location of the project site is within an area that is in close proximity to the airport, Downtown Stockton, and the Port of Stockton, in combination with the other industrial centers in the vicinity, could reduce VMT by approximately 13 percent. The total anticipated VMT reduction from this and the other TDM strategies would be 38 percent, as shown in Table 13.

Response to BLUM-1-27
Refer to Response to BLUM-1-26.

Response to BLUM-1-28
The commenter provides an alternate employment generation rate based on US Energy Administration data. The employment cited in the Draft IS/MND is more conservative (i.e., higher). To provide a more robust analysis, the City has chosen to use the employment generation rate provided in the Draft IS/MND as a more accurate representation.

Response to BLUM-1-29
As noted in Response to BLUM-1-24 and BLUM-1-25, the proposed project is expected to be served with workers from the Stockton-Lodi area, which has a current unemployment rate of 6.3 percent.

Response to BLUM-1-30
Refer to Response to BLUM-1-24 and BLUM-1-25.

Response to BLUM-1-31
The Draft IS/MND includes a discussion of cumulative impacts in Section 2.20, Mandatory Findings of Significance.

Response to BLUM-1-32
The VMT analysis in the Draft IS/MND is based upon standard methodologies for calculating impacts as well as the effect of TDM mitigation.

Response to BLUM-1-33
The VMT analysis in the Draft IS/MND is based upon standard methodologies for calculating impacts as well as the effect of TDM mitigation. The strategies incorporated in MM TRANS-1 are used throughout the State to achieve reductions in VMT.

Response to BLUM-1-34
The strategies incorporated in MM TRANS-1 are used throughout the State to achieve reductions in VMT and have been successfully employed in other projects. The City is committed to enforcing the measures to achieve the VMT reduction, and the Mitigation Monitoring and Reporting Program (MMRP) lists actions that will be taken to ensure success.

Response to BLUM-1-35
The VMT analysis in the Draft IS/MND is based upon standard methodologies for calculating impacts as well as the effect of TDM mitigation. VMT analyses are required to include an evaluation of passenger cars, not truck trips. CEQA Guidelines Section 15064.3(a) states “For the purpose of this section, “vehicle miles traveled” refers to the amount and distance of automobile travel attributable to a project.” Here, the term “automobile” refers to on-road passenger vehicles, specifically cars and light trucks, as stated in December 2018 Guidance from the Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA*; commercial vehicle VMT is excluded.

Response to BLUM-1-36
Refer to Response to BLUM-1-35.

Response to BLUM-1-37
An updated Traffic Impact Study has been submitted to the City, which includes specific exhibits and reflects a trip generation rate of 486 daily trips. The updated trip generation does not affect the conclusions of the analysis or significance determination.

Response to BLUM-1-38
The deceleration lane is recommended; it is not required for safety. However, the current site plan can accommodate a minimum of 235 feet for a left-turn/deceleration lane for northbound traffic. Should the City elect to impose a condition requiring creation of such a lane, it could be accomplished through striping in coordination with site development and frontage improvements along the existing right-of-way.

Response to BLUM-1-39
An updated Traffic Impact Study has been submitted to the City, which includes exhibits showing turning radius for ingress and egress via the northern driveway. The southern driveway would be restricted to egress only, and would be further restricted to right-turn egress. The City has reviewed the proposed site plan and did not identify any safety hazard concerns.

Response to BLUM-1-40
See responses to BLUM-1-32 through BLUM-1-39.

Response to BLUM-1-41
The City coordinated review by the fire department, and no concern with circulation or safety was identified.

Response to BLUM-1-42
Refer to Response to BLUM-1-41.

Response to BLUM-1-43
The Draft IS/MND includes a discussion of cumulative impacts in Section 2.20, Mandatory Findings of Significance. CEQA does not require a MSR and the comment does not identify any potentially significant impacts related to public services. Note, also, that under CEQA's definition of environmental impacts, an increase in demands on public facilities, public services, and utilities that may result from a project, are not environmental impacts that must be evaluated. (*City of Hayward v. Board of Trustees* (2015) 242 Cal.App.4th 833, 943). The City continues to work with LAFCo on the completion of the MSR to ensure that provision of public services is maintained at appropriate levels to support forecasted growth within the MSR time horizon.

Response to BLUM-1-44
The Draft IS/MND includes a discussion of public services in Section 2.15. As summarized therein, the City would be able to accommodate the proposed project and maintain the provision of all public services.

Response to BLUM-1-45
CEQA does not require consideration of environmental justice considerations. The conclusions of the Draft IS/MND confirm that the proposed project would not result in any significant unavoidable impacts to any local community or the public at large.

Response to BLUM-1-46
The conclusions of the Draft IS/MND confirm that the proposed project would not result in any significant unavoidable impacts to any local community or the public at large. The City continues to work with LAFCo on the completion of the MSR to ensure that provision of public services is maintained at appropriate levels to support forecasted growth within the MSR time horizon.

Response to BLUM-1-47
Refer to Response to BLUM-1-46.

Response to BLUM-1-48
The Draft IS/MND includes a discussion of cumulative impacts in Section 2.20, Mandatory Findings of Significance. The conclusions of the Draft IS/MND confirm that the proposed project would not result in any significant unavoidable impacts to any local community or the public at large. CEQA does not require a MSR and the comment does not identify any potentially significant impacts related to public services. Note, also, that under CEQA's definition of environmental impacts, an increase in demands on public facilities, public services, and utilities that may result from a project, are not environmental impacts that must be evaluated. (*City of Hayward v. Board of Trustees* (2015) 242 Cal.App.4th 833, 943). Additionally, the City continues to work with LAFCo on the completion of the MSR to ensure that provision of public services is maintained at appropriate levels to support forecasted growth within the MSR time horizon.

Response to BLUM-1-49
The conclusions of the Draft IS/MND confirm that the proposed project would not result in any significant unavoidable impacts to any local community or the public at large. The City continues to work with LAFCo on the completion of the MSR to ensure that provision of public services is maintained at appropriate levels to support forecasted growth within the MSR time horizon.

Response to BLUM-1-50
Refer to Response to BLUM-1-49.

Response to BLUM-1-51
Refer to Response to BLUM-1-48.

Response to BLUM-1-52
The employment cited in the Draft IS/MND is conservative and presents the number of employees anticipated during construction and operation. The Draft IS/MND notes that upward of 400 jobs may be generated by the proposed project, and it is reasonable to assume that employees would be drawn from the local and surrounding area. Unemployment in this area is 6.3 percent as of November 2024.

Response to BLUM-1-53
The Draft IS/MND includes a discussion of cumulative impacts in Section 2.20, Mandatory Findings of Significance. The conclusions of the Draft IS/MND confirm that the proposed project would not result in any significant unavoidable impacts to any local community or the public at large. CEQA does not require preparation of a MSR. The comment does not provide any data or facts demonstrating that the proposed project would have any potentially significant impacts related to public services.

Response to BLUM-1-54
The commenter provides concluding statements related to the foregoing comments. Please refer to Response to BLUM-1-1 through BLUM-1-53.

Response to BLUM-1-55
The City has added Golden State Environmental Justice Alliance to the list of parties requesting notice regarding this project. No further response is required.

SWAPE Technical Memorandum Attachment

Response to BLUM-1-56
The comment summarizes project information. No response is required.

Response to BLUM-1-57
Refer to Responses to BLUM-1-58 through BLUM-1-111.

Response to BLUM-1-58
The commenter states that land use development projects under CEQA typically evaluate air quality impacts and calculate potential criteria air pollutant emissions using CalEEMod. CalEEMod provides recommended default values based on site-specific information; if more specific project information is known, the user can change the default values an input project-specific values, those changes should be noted and substantiated and disclosed to the reader.

The comment is noted and no further response is necessary.

Response to BLUM-1-59
The commenter states that review of the proposed project's CalEEMod output files reveals that the files are incomplete, and are missing a table under CalEEMod Section 7.6 Health & Equity Custom Measures. The commenter further states that without access to the "User Changes to Default Data," verification of the model's default values is not possible.

The City disagrees. The CalEEMod output files are contained in the Draft IS/MND. The notes regarding project-specific data used in the CalEEMod modeling are shown as Page 1 of the Appendix A of the Air Quality report. The Air Quality report is included as Appendix A of the Draft IS/MND. Therefore, the analysis properly disclosed project-specific data used to override CalEEMod default assumptions. No further response is needed.

Response to BLUM-1-60
The commenter states that without access to the "User Changes to Default Data," they are unable to verify where the changes were made to the model's default values, and as a result an EIR should be prepared to include an updated, verifiable air quality analysis that correctly provides the complete output files.

As stated in *Response to BLUM-1-59*, the complete CalEEMod output files are contained in the Draft IS/MND. As shown in the screenshot presented by the commenter in *BLUM-1-59*, under the header in CalEEMod Section 7.6 Health & Equity Custom Measures is the text: No Health & Equity Custom Measures created. No default values were changed under this section of CalEEMod, and there is no associated table. No further response is needed.

Response to BLUM-1-61
The commenter states development of the proposed project may contribute to the disproportionate health risk impacts warehouses pose on community members living, working, and going to school within the immediate area of the project site.

The commenter did not substantiate or provide analysis or evidence to support the assertions that the proposed project may contribute to the disproportionate health risk impacts within the immediate area of the project site. No further response is needed.

Response to BLUM-1-62
The commenter references three studies which pertain to warehouse development and the associated traffic-related air pollutants.

The comments are noted for the record. To the extent the comment raises only generalized concerns and does not identify a project-specific environmental concern, no further response is necessary.

Response to BLUM-1-63
The commenter notes that the San Joaquin Valley Air Pollution Control District (Valley Air District) itself admits that it faces significant air quality challenges that affect the numerous disadvantaged communities within its region. The commenter asserts that the continued development of industrial warehouses within these communities poses a significant environmental justice challenge.

The comments are noted for the record. To the extent the comment raises only generalized concerns and does not identify a project-specific environmental concern, no further response is necessary.

Response to BLUM-1-64
The commenter notes that, according to CalEnviroScreen 4.0, California Environmental Protection Agency (Cal/EPA's) screening tool that ranks each census tract in the State for pollution and socioeconomic vulnerability, the project's census tract is in the 99th percentile of communities that are disproportionately affected by various sources of pollution.

The comments are noted for the record. To the extent the comment raises only generalized concerns and does not identify a project-specific environmental concern, no further response is necessary.

Response to BLUM-1-65
The commenter notes that according to CalEnviroScreen's SB 535 Disadvantaged Communities Map, the project site is located in a designated disadvantaged community.

The comments are noted for the record. To the extent the comment raises only generalized concerns and does not identify a project-specific environmental concern, no further response is necessary.

Response to BLUM-1-66
The commenter states that the project site is within a disadvantaged community, and the project's census tract exhibits a high cancer risk, and therefore the proposed project would contribute to the disproportionate health impacts that warehouses impose on nearby residents.

The comments are noted for the record. To the extent the comment raises only generalized concerns and does not identify a project-specific environmental concern, no further response is necessary.

Response to BLUM-1-67
SB 1000 directs cities and counties to incorporate environmental justice into the General Plan update process when two or more elements are being updated. SB 1000 does not apply to the preparation of an IS/MND when the current General Plan does not contain an Environmental Justice Element and no policies have been adopted to direct the analysis of potential impacts.

Of relevance here, neither the ARB nor the Valley Air District has recommended significance thresholds be adjusted for environmental justice considerations, and thus neither entity recommends the evaluation of these issues as part of the CEQA process. The conclusions of the Draft IS/MND confirm that the proposed project would not result in any significant unavoidable impacts to any local community or the public at large.

Response to BLUM-1-68
Refer to Response to BLUM-1-67.

Response to BLUM-1-69
The commenter provides general information about ozone and smog, citing text from the United States Environmental Protection Agency (EPA). The comments are noted for the record. To the extent the comment raises only generalized concerns and does not identify a project-specific environmental concern, no further response is necessary.

Comments BLUM-1-69 through BLUM-1-74 provide generalized information from various sources. The City must "consider" public comments on a negative declaration but is not required to prepare responses to such comments. (PRC § 21091(d), (f); CEQA Guidelines § 15074(b)). Nonetheless, the City has chosen to provide responses to significant environmental comments for this project. These comments do not raise issues in regard to environmental issues presented. The Draft IS/MND provided and disclosed an analysis of potential air quality impacts and potential impacts to the climate from greenhouse gas emissions.

Response to BLUM-1-70
The commenter provides general information from ARB regarding inhaled pollutants and effects on children. The comments are noted for the record. To the extent the comment raises only generalized concerns and does not identify a project-specific environmental concern, no further response is necessary.

Response to BLUM-1-71
The commenter provides general information from a Stanford study related to air pollution and effects upon adults. The comments are noted for the record. To the extent the comment raises only generalized concerns and does not identify a project-specific environmental concern, no further response is necessary.

Response to BLUM-1-72
The commenter provides general information from a University of Redlands study related to identifying sensitive receptors. The comments are noted for the record. To the extent the comment raises only generalized concerns and does not identify a project-specific environmental concern, no further response is necessary.

Response to BLUM-1-73
The commenter provides general information from a University of Redlands study related to identifying sensitive receptors. The comments are noted for the record. The Draft IS/MND Section 2.9 Hazards and Hazardous Materials, acknowledges the location of French Camp School and also notes that the warehouse is not intended to store hazardous materials or wastes. As such, the proposed project would not pose a potential impact to the French Camp School.

Response to BLUM-1-74
Refer to Response to BLUM-1-73.

Response to BLUM-1-75
The commenter summarizes the Draft IS/MND construction Health Risk Analysis (HRA) results, which showed less than significant health risk impacts (0.8 risks in a million compared to the Valley Air District significance threshold of 20 in a million).

The commenter then provides an excerpt from Draft IS/MND Section 2.3 Air Quality (p. 49), which cites the City's General Plan EIR MM A-5 requiring coordination with the Valley Air District and determination of the appropriate level of HRA for projects with truck trips that would generate substantial truck travel (i.e., 100 diesel trucks per day or 40 or more trucks with diesel-powered TRUs per day based on ARB recommendations for siting new sensitive land uses). The excerpted analysis then states that Valley Air District and an Operational HRA were not required based on the proposed 20 truck trips per day not exceeding the substantial diesel truck traffic levels and that DPM emissions from trucks are considered to be less than significant.

The commenter claims the Draft IS/MND's evaluation of the proposed project's potential health risk impacts, as well as the subsequent less than significant impact conclusion, however, is unsupported for four reasons.

This comment provides introductory statements to the four claims that the proposed project's less than significant health risk impact is allegedly unsubstantiated. No specific issues are raised in this comment. No response is needed.

Responses to the four claims are provided in Responses to BLUM-1-76 through BLUM-1-79 along with each assertion.

Response to BLUM-1- 76
This comment is the first of the four reasons listed in BLUM-1- 75.

The commenter states that the construction HRA prepared for the proposed project fails to provide the exposure assumptions for the HRA, such as age sensitivity factors (ASF) and fraction of time at home (FAH) for nearby sensitive receptors and that until the Draft IS/MND substantiates the use of correct exposure assumptions, the HRA may underestimate the cancer risk posed to nearby, existing sensitive receptors during project construction. The commenter further provides a dose and risk equation from the Office of Environmental Health Hazard Assessment (OEHHA) *2015 Risk Assessment Guidelines* claiming that because the HRA and associated documents failed to provide the equation, the proposed project's HRA cannot be verified as accurate.

The construction HRA was prepared and followed the methodologies prescribed in the Cal/EPA OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines–Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015). The HRA methodology is summarized in the Draft IS/MND and provides generalized dose and risk equations that include mentions of both ASF and FAH factors, as well as a reference to OEHHA methodology for the calculations. Detailed HRA assumptions and results are provided in Appendix B of the Air Quality, Greenhouse Gas Emissions, and Energy Report included as Appendix A of the Draft IS/MND.

Moreover, the ARB Hot Spots Analysis and Reporting Program (HARP2) was used to automatically calculate the health risk for the proposed project. Use of the HARP2 program ensures that the calculational procedures for cancer and non-cancer risk follow the OEHHA 2015 Guidelines and that ASF and FAH parameters are applied correctly. The HARP2 input and output files which are included in Appendix B, Health Risk Appendix Supporting Information of the Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report (Draft IS/MND Appendix A) detail how the HARP2 model was applied and document the appropriate HRA parameters for ASF and FAH for exposure. As set forth therein, the ASF appropriately started in the third trimester for residential receptors and the FAH was set to 100 percent for residential receptors.

Therefore, the Draft IS/MND and related technical appendices adequately disclosed all assumptions and methodologies utilized in the HRA, including, among others, the ASF and FAH, and accurately evaluated and disclosed the proposed project's potential health risk impacts. Based on the information presented above, the lead agency is of the opinion that project impacts related to air quality have been fully disclosed, adequately analyzed and appropriately mitigated to the extent feasible under CEQA; therefore, no further analysis or revisions are required.

Response to BLUM-1- 77
This comment is the second of the four reasons listed in BLUM-1-75.

The commenter states that the Draft IS/MND relies on guidance provided in the 2005 ARB's Air Quality and Land Use Handbook and asserts that it should instead rely on guidance from CEQA and California Department of Justice (DOJ) guidance.

The commenter did not provide justification or evidence as to why the 2005 ARB Air Quality and Land Use Handbook is inappropriate for purposes of the analysis, nor did the commenter provide justification outlining why the DOJ document is more appropriate for purposes of the analysis. No further response is required.

Response to BLUM-1- 78
This comment is the third of the four reasons listed in Response to BLUM-1- 75.

The commenter asserts that by failing to prepare a quantified Operational HRA, the proposed project is inconsistent with CEQA requirements to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences."

The commenters' assertions are unsubstantiated. First, the Draft IS/MND does include an analysis of the proposed project's potential health risks from project operation. The analysis in the Draft

IS/MND is based upon ARB guidance and recommendations and found that potential operational-related health risks would be less than significant, which represents a connection to the proposed project's air quality impacts and likely health consequences.

Second, as noted in Response to BLUM-1- 80-88, the HRA conducted for the proposed project fully analyzed all construction-related impacts and followed OEHHA guidance, including an exposure duration of 30 years to estimate individual cancer risk at the maximally exposed individual receptor (MEIR). The Draft IS/MND followed recommendations and guidance by the ARB in reaching this conclusion. There are no requirements set forth by OEHHA to assess the potential health risks from warehouse projects.

The commenter stated that the proposed project would generate about 378 daily vehicle trips, which would generate additional exhaust emissions and exposure to nearby sensitive receptors to DPM emissions; and that the Draft IS/MND fails to evaluate the toxic air contaminant (TAC) emissions associated with the proposed project's operation. The commenter further stated that the Draft IS/MND did not make a reasonable effort to connect the proposed project's operational TAC emissions to the potential health risks posed to nearby receptors, and therefore the proposed project is inconsistent with CEQA's requirement to correlate the project-generated emissions with potential adverse impacts on human health.

The ARB, in the Land Use Planning Handbook (Handbook) provides guidance, standards, methodologies, and procedures for conducting air quality analyses and was used extensively in the preparation of the air quality analysis for the proposed project.

For purposes of the proposed project, the Draft IS/MND followed the guidance issued by the ARB in the Land Use Planning Handbook (Handbook) that states, "avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units [TRUs] per day, or where TRU unit operations exceed 300 hours per week)." The ARB recommendation is based on distance-related findings that demonstrate that cancer risks decrease to acceptable levels with distance based on truck volumes in the range of 100 per day.

While the proposed project would generate in total 486 vehicle trips, the majority of these trips are passenger vehicle trips, which are primarily gasoline or Zero-Emission Vehicles (ZEVs) and are not significant sources of DPM or other toxic air contaminants. Therefore, the Draft IS/MND appropriately analyzed and disclosed the proposed project's construction and operational health risk impacts.

Response to BLUM-1-79

Finally, as the fourth point, the commenter asserts that the Draft IS/MND fails to evaluate the combined lifetime cancer risk to nearby receptors as a result of project construction and operation together.

The proposed project did consider both the health effects of construction and operation, but concluded, based on ARB guidance that the health risks from emissions for 20 truck trips per day were not significant, and therefore they were not quantified or added to the lifetime construction

risks. If they were quantified, they would be insignificant and not represent any appreciable additional risk (see Response to BLUM-1-88).

Response to BLUM-1-80
Here the commenter reiterates CEQA's requirement to make a "reasonable" effort to substantially connect a project's air quality impacts to likely health consequences" and share that they conducted a screening level HRA in an attempt to analyze the proposed project's potential health risks. The commenter introduces that a Level 2 health risk screening assessment utilizes a limited amount of site-specific information and generates maximum downwind concentration such that if the screening determines unacceptable levels, a more refined approach should be conducted.

This comment is an introductory paragraph. No claims or concerns related to environmental impacts of the proposed project or related to the Draft IS/MND are included. No response is needed.

Response to BLUM-1- 81
The commenter presents a screening level HRA prepared using AERSCREEN, a screening level air quality dispersion model. However, the screening level HRA presented by the commenter is flawed and as such does not represent the proposed project's air quality impacts. The following summarizes the commenter's approach with findings related to errors in representing both the project emissions and in conducting the exposure assessment.

The commenter presents their approach for their screening HRA utilizing assumptions from the Draft IS/MND by dividing the annual DPM emissions (40 pounds) as determined by the PM_{10} exhaust emissions from CalEEMod divided by 365 days per year to get an average emission rate for the screening dispersion model AERSCREEN. The commenter calculates the length of the operational exposure period by subtracting the construction period from 30-year lifetime exposure period and dividing it by 11.7 acres to represent emissions from the site. They also document other AERSCREEN inputs such as population, urban meteorological setting, and plume release characteristics.

In response to this analysis, FirstCarbon Solutions (FCS) has the following assessment:

- The modeling parameters for the AERSCREEN source characteristics (release height and initial dispersion parameter, area, urban dispersion) are appropriate.
- The census data and urban dispersion parameters for AERSCREEN are also appropriate.
- The modeling parameters for the operational exposure duration (29.27 years) used by the commenter are not consistent with those required by Valley Air District guidelines, revealing the commenter's lack of familiarity with the Valley Air District HRA guidelines, which requires a lifetime exposure of 70-years for all residential receptors to be compared to a threshold risk of 20 in a million excess cancer cases. A proper HRA would be based on 69.27 years of residential exposure.
- The annual modeled emission amount used in the HRA (40 pounds) is inappropriate and does not represent the emissions of DPM that would occur on and near the site, but rather represents the emissions from all vehicles over 50 miles and includes PM10 exhaust that is from gasoline vehicles as well as diesel trucks.

Response to BLUM-1 82
The commenter continues their analysis with the AERSCREEN results, scaling the maximum 1-hour concentration to an annual average using a factor of 0.1 or 10 percent, appropriately. The model predicts the maximum impact at 150 meters away or at the distance corresponding to the nearest residential sensitive receptor or the MEIR. This value is presented as 0.0479 µg/m^3.

While a screening HRA is known to be conservative and overpredict potential health risks (see BLUM-1- 87), the screening HRA itself is flawed for several reasons. The primary flaw is that the emissions utilized in the screening HRA (40 pounds of DPM annually) are based on emissions from the full truck trip length of 50 miles from the project site and are used inappropriately as a localized HRA with emissions all modeled from the project site. These full emissions should not be utilized in an HRA because, unlike regional emissions, localized emissions are evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects. Valley Air District requires that local impact assessments consider emissions within 0.25 mile of a project site.

Therefore, the HRSA provided by the commenter is flawed because it does not accurately reflect the localized emissions that should be evaluated in a health risk assessment. Because the HRSA is inaccurate, it does not constitute substantial evidence of the proposed project's effects, nor does it provide substantial evidence that a more refined HRA should be prepared to assess potential operational-related health impacts.

Response to BLUM-1- 83
The commenter continues their analysis showing step-by step exposure assumptions for residential cancer risk, showing OEHHA assumptions as recommended by Valley Air District.

In response to this analysis, FCS has the following assessment:

- The tables do follow OEHHA assumptions as stated by the commenter, but do not follow Valley Air District HRA Guidance APR-1906 Framework for Preparing Health Risk Assessments, and do not present a proper HRA procedure for the Valley Air District.
- Valley Air District policies (https://ww2.valleyair.org/media/0shm0mlk/apr-1906.pdf) specifies an OEHHA-derived Method exposure assessment and an exposure period of 70-years. In cancer risk assessments, the OEHHA-derived method uses the high-end point estimate (i.e., 95th percentile) for the two driving (dominant) exposure pathways and the mean point estimate for the remaining pathways.
- The exposure assumptions provided in the commenter's table appears to use the 95 percent point approach for ages 2 and younger, but the 80th percentile for ages greater than age 2. The OEHHA-derived approach, which utilizes the 95 percent estimate for all age-bins would correspond to 745 L/kg BW-day for 2<16 years and 290 L/kg BW-day for 16-70 years (Table 5.8 of the OEHHA 2015 Guidelines). This does not match the commentors table.

The Valley Air District does not allow the use of adjustments to the "time away from home" without justification and Valley Air District review and approval prior to use. So, the assessment should have

used 100 percent time at home for all ages, up to age 70 years. Again, parameters in the commenter's table for the HRA are not correct.

Response to BLUM-1- 84
The commenter presents their results for the operational exposure over infancy, childhood and adulthood (up to 30 years of age) as 24.6 in a million excess cancer cases.

As previously discussed, these results are based on faulty use of truck trip length emissions, and do not follow Valley Air District Risk Assessment Guidelines.

Response to BLUM-1- 85
The commenter sums their Operational HRA analysis results as 24.6 in a million with the proposed project's construction health risk of 0.8 in a million for a total predicted excess cancer risk of 25.4 in a million over a residential lifetime of 30 years. FCS demonstrated in Response to BLUM-1-81 through BLUM-1-84 above that the commenter's HRA analysis is flawed in two major respects, both in terms of the project emissions modeled and the Valley Air District HRA protocols.

Response to BLUM-1- 86
The commenter compares the resulting combined construction and operational project risk of 25.4 in a million to the Valley Air District threshold of 20 in a million and claims that the proposed project would result in a potentially significant impact.

As previously discussed, these results are based on faulty use of truck trip length emissions, and do not follow Valley Air District Risk Assessment Guidelines.

Response to BLUM-1- 87
The commenter adds informational information that their analysis represents a screening level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening level HRA is to demonstrate the potential link between project-generated emissions and adverse health risk impacts.

No response is needed, as this comment is informational in nature.

Response to BLUM-1- 88
Finally, following up on BLUM-1-87 and BLUM-1-88, the commentors conclude that analyses warrant further evaluation in a refined modeling approach since it demonstrated that the proposed project could result in a potentially significant health risk impact. The commenter also asserts that the future EIR should be prepared to include a refined HRA which adequately and accurately evaluates health risk impacts associated with both project construction and operation.

FCS demonstrated that the screening level HRA provided by the commenter was flawed on several fronts and that the original conclusions in the Draft IS/MND were correct. No additional HRA is necessary and an EIR is not necessary to provide additional information regarding operational health risk from the proposed project.

Response to BLUM-1-89
The commenter cited CEQA Guidelines Section 15096(g)(2) and asserts that the proposed project would result in potentially significant health risk impacts that should be mitigated further. None of

the information provided by commenter demonstrates a potential significant impact or the need for mitigation. As demonstrated above, the proposed project would not result in significant health risk impacts that would require mitigation.

Response to BLUM-1-90
The commenter includes a list of measures from the ARB that could reduce DPM emissions. As demonstrated above, the proposed project would not have a significant health risk impact caused by the proposed project's DPM emissions. Impacts to air quality are fully mitigated and reduced to below a level of significance. The mitigation measures proposed by the commenter are neither necessary nor required. No changes to the Draft IS/MND are required.

Response to BLUM-1-91
The commenter includes an additional list of measures from the ARB that could reduce DPM emissions. As demonstrated above, the proposed project would not have a significant health risk impact caused by the proposed project's DPM emissions. Therefore, no mitigation is necessary. No changes to the Draft IS/MND are required.

Response to BLUM-1-92
The commenter includes a list of measures from the South Coast Air Quality Management District–an air district with jurisdiction in Southern California and not the air district that governs air quality in the project area–that could reduce DPM emissions. As demonstrated above, the proposed project would not have a significant health risk impact caused by the proposed project's DPM emissions. Therefore, no mitigation is necessary. No changes to the Draft IS/MND are required.

Response to BLUM-1-93
The commenter includes a list of measures from the CalEEMod User's Guide that could reduce DPM emissions. As demonstrated above, the proposed project would not have a significant health risk impact caused by the proposed project's DPM emissions. Therefore, no mitigation is necessary. No changes to the Draft IS/MND are required.

Response to BLUM-1-94
The commenter asserts that they have provided several mitigation measures that could reduce DPM emissions. As demonstrated above, the proposed project would not have a significant health risk impact caused by the proposed project's DPM emissions. Therefore, no mitigation is necessary. No changes to the Draft IS/MND are required.

Response to BLUM-1-95
As demonstrated above, the commenter has not provided substantial evidence that the proposed project would result in significant air quality impacts. In contrast, the proposed project's potential air quality and health risk impacts are thoroughly analyzed and disclosed in Section 2.3, Air Quality, of the Draft IS/MND. All air quality and health risk impacts are shown to be less than significant and do not require mitigation. Therefore, no additional analysis is necessary. No changes to the Draft IS/MND are required.

Response to BLUM-1-96
The commenter provides a disclaimer and does not raise any specific environmental issues. No response is needed.

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VIA E-MAIL

September 30, 2024

Nicole Moore, Contract Planner
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Em: Matt.Diaz@stockton.gov

RE: City of Stockton South McKinley Avenue East Industrial Project IS/MND (SCH# 2024081317)

Dear Nicole Moore,

On behalf of the Carpenters Local Union #152 ("**Local 152**"), our Office is submitting these comments on the Initial Study and Mitigated Negative Declaration ("**IS/MND**") for the City of Stockton's ("**City**") South McKinley Avenue East Industrial Project ("**Project**"). 1

The City's IS/MND describes the project as follows:

> The proposed project would result in the annexation of the site into the City of Stockton and the development of a 184,166-square-foot building containing 179,166 square feet of warehouse space and 5,000 square feet of office space . . .The building would include 27 dock doors and a loading area along the west side of the building. Parking spaces would be provided on the east, south, and west sides of the building. There would be a 30-foot setback at the front of the building along South McKinley Avenue. Landscaping would be provided around the perimeter of the parking lot, with trees and shrubs to provide canopy. All landscaping would be low-maintenance with water-efficient native species. All landscaping equipment used at the facility would be electric or battery powered. The design of the building would provide for outlets on the outside of buildings or in other accessible areas to facilitate the use of electrically powered landscape equipment. 2

> In addition, the project would require a 4-foot-deep trench for a new sewer line in South McKinley Avenue, extending approximately 2,400 feet north of the site, near the intersection of Sperry Road . . . A sewer lift station would be constructed within the project site. (IS/MND, p. 2–3.)

2 CONT

Local 152 is a labor union that represents thousands of union carpenters who live and work in San Joaquin County, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

3

Individual members of Local 152 live, work, and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

Local 152 expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

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Local 152 incorporates by reference all comments related to the Project or its CEQA review, including the Initial Study/Mitigated Negative Declaration. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

5

Moreover, Local 152 requests that the City provide **advance notice** of any upcoming hearings, as well as for any and all notices referring or related to the Project, as required by the Municipal Code, as well as under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California 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. We request that such notice be *both* mailed and e-mailed to us.

6

I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT.

The City should require the Project to be built by contractors who participate in a Joint Labor-Management Apprenticeship Program approved by the State of California and make a commitment to hiring a local workforce.

7

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide 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.

8

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

> [L]abor 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.[1]

9

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.[2]

10

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

[2] 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

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.[3]

11

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.[4] Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

12

> 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.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022,

13

Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10.

[3] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

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

otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements. 13 CONT

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

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

A. Background Concerning the California Environmental Quality Act

The California Environmental Quality Act is a California statute designed to inform decision-makers and the public about the potential significant environmental effects of a project. 14 California Code of Regulations ("**CEQA Guidelines**"), § 15002, subd. (a)(1).[5] At its core, its purpose is to "inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made." *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564. 14

B. Background Concerning Environmental Impact Reports

CEQA directs public agencies to avoid or reduce environmental damage, when possible, by requiring alternatives or mitigation measures. CEQA Guidelines, § 15002, subds. (a)(2)-(3); see also *Berkeley Keep Jets Over the Bay Committee v. Board of Port Comes* (2001) 91 Cal.App.4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; *Laurel Heights Improvement Assn.*, 47 Cal.3d at p. 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines, § 15002, subd. (a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are

[5] The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 et seq., are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. Cal. Pub. Res. Code, § 21083. The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." *Center for Biological Diversity v. Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204, 217.

"acceptable due to overriding concerns" specified in Public Resources Code section 21081. See CEQA Guidelines, § 15092, subds. (b)(2)(A)-(B).

14 CONT

While the courts review an EIR using an 'abuse of discretion' standard, the reviewing court is not to *uncritically* rely on every study or analysis presented by a project proponent in support of its position. *Berkeley Jets*, 91 Cal.App.4th at p. 1355 (quoting *Laurel Heights Improvement Assn.*, 47 Cal.3d at pp. 391, 409 fn. 12) (internal quotations omitted). A clearly inadequate or unsupported study is entitled to no judicial deference. *Id.* Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 102, 131. As the court stated in *Berkeley Jets*, prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process. 91 Cal.App.4th at p. 1355 (internal quotations omitted).

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. *Communities for a Better Environment v. Richmond* (2010) 184 Cal.App.4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449-450). The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. *Id.* For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Id.*

A strong presumption in favor of requiring preparation of an EIR is built into CEQA. This presumption is reflected in what is known as the "fair argument" standard under which an EIR must be prepared whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602; *Friends of "B" St.* v. *City of Hayward* (1980) 106 Cal.3d 988, 1002.

15

The fair argument test stems from the statutory mandate that an EIR be prepared for any project that "may have a significant effect on the environment." PRC, § 21151;

see *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.App.3d 68, 75; accord *Jensen v. City of Santa Rosa* (2018) 23 Cal.App.5th 877, 884. Under this test, if a proposed project is not exempt and may cause a significant effect on the environment, the lead agency must prepare an EIR. PRC, §§ 21100 (a), 21151; CEQA Guidelines, § 15064 (a)(1), (f)(1). An EIR may be dispensed with only if the lead agency finds no substantial evidence in the initial study or elsewhere in the record that the project may have a significant effect on the environment. *Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 785. In such a situation, the agency must adopt a negative declaration. PRC, § 21080, subd. (c)(1); CEQA Guidelines, §§ 15063 (b)(2), 15064(f)(3). 15 CONT

"Significant effect upon the environment" is defined as "a substantial or potentially substantial adverse change in the environment." PRC, § 21068; CEQA Guidelines, § 15382. A project may have a significant effect on the environment if there is a reasonable probability that it will result in a significant impact. *No Oil, Inc.*, 13 Cal.3d at p. 83 fn. 16; see *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 309. If any aspect of the project may result in a significant impact on the environment, an EIR must be prepared even if the overall effect of the project is beneficial. CEQA Guidelines, § 15063(b)(1); see *County Sanitation Dist. No. 2 v. County of Kern* (2005) 127 Cal.App.4th 1544, 1580. 16

This standard sets a "low threshold" for preparation of an EIR. *Consolidated Irrigation Dist. v. City of Selma* (2012) 204 Cal.App.4th 187, 207; *Nelson v. County of Kern* (2010) 190 Cal.App.4th 252; *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928; *Bowman v. City of Berkeley* (2004) 122 Cal.App.4th 572, 580; *Citizen Action to Serve All Students v. Thornley* (1990) 222 Cal.App.3d 748, 754; *Sundstrom*, 202 Cal.App.3d at p. 310. If substantial evidence in the record supports a fair argument that the project may have a significant environmental effect, the lead agency must prepare an EIR even if other substantial evidence before it indicates the project will have no significant effect. See *Jensen,* 23 Cal.App.5th at p. 886; *Clews Land & Livestock v. City of San Diego* (2017) 19 Cal.App.5th 161, 183; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491; *Friends of "B" St.*, 106 Cal.App.3d 988; CEQA Guidelines, § 15064(f)(1). 17

C. Background Concerning Initial Studies, Negative Declarations and Mitigated Negative Declarations

CEQA and CEQA Guidelines are strict and unambiguous about when an MND may be used. A public agency must prepare an EIR whenever substantial evidence supports a "fair argument" that a proposed project "may have a significant effect on the environment." Pub. Res. Code, §§ 21100, 21151; CEQA Guidelines, §§ 15002, subds. (f)(1)-(2), 15063; *No Oil, Inc.*, 13 Cal.3d at p. 75; *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 111-112. 18

Essentially, should a lead agency be presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect. CEQA Guidelines, §§ 15064, subds. (f)(1)-(2); see *No Oil Inc., supra*, 13 Cal.3d at p. 75 (internal citations and quotations omitted). Substantial evidence includes "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." CEQA Guidelines, § 15384(a).

The fair argument standard is a "low threshold" test for requiring the preparation of an EIR. *No Oil Inc.*, *supra*, 13 Cal.3d at p. 84; *County Sanitation Dist. No. 2 of Los Angeles County v. County of Kern* (2005) 127 Cal.App.4th 1544, 1579. It "requires the preparation of an EIR where there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial[.]" *County Sanitation*, *supra*, 127 Cal.App.4th at p. 1580 (quoting CEQA Guidelines, § 15063(b)(1)). A lead agency may adopt an MND only if "there is no substantial evidence that the project will have a significant effect on the environment." CEQA Guidelines, § 15074(b). 19

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

Further, it is the duty of the lead agency, not the public, to conduct the proper environmental studies. "The agency should not be allowed to hide behind its own failure to gather relevant data." *Sundstrom*, 202 Cal.App.3d at p. 311. "Deficiencies in the record may actually enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences." *Id*; see also *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1382 (lack of study enlarges the scope of the fair argument which may be made based on the limited facts in the record). 20

Thus, refusal to complete recommended studies lowers the already low threshold to establish a fair argument. The court may not exercise its independent judgment on the omitted material by determining whether the ultimate decision of the lead agency would have been affected had the law been followed. *Environmental Protection Information Center v. Cal. Dept. of Forestry* (2008) 44 Cal.4th 459, 486 (internal citations and quotations omitted). The remedy for this deficiency would be for the trial court to issue a writ of mandate. *Id.* 21

Both the review for failure to follow CEQA's procedures and the fair argument test are questions of law, thus, the de novo standard of review applies. *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435. "Whether the agency's record contains substantial evidence that would support a fair argument that the project may have a significant effect on the environment is treated as a question of law. *Consolidated Irrigation Dist.*, 204 Cal.App.4th at p. 207; Kostka and Zischke, Practice Under the Environmental Quality Act (2017, 2d ed.) at § 6.76. 22

In an MND context, courts give no deference to the agency. Additionally, the agency or the court should not weigh expert testimony or decide on the credibility of such evidence—this is one of the EIR's functions. As stated in *Pocket Protectors v. City of Sacramento*:

> Unlike the situation where an EIR has been prepared, neither the lead agency nor a court may "weigh" conflicting substantial evidence to determine whether an EIR must be prepared in the first instance. Guidelines section 15064, subdivision (f)(1) provides in pertinent part: if a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect. Thus, as *Claremont* itself recognized, [c]onsideration is not to be given contrary evidence supporting the preparation of a negative declaration.

(2004) 124 Cal.App.4th 903, 935 (internal citations and quotations omitted).

In cases where it is not clear whether there is substantial evidence of significant environmental impacts, CEQA requires erring on the side of a "preference for resolving doubts in favor of environmental review." *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 332. "The foremost principle under CEQA is that the Legislature intended the act to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language. *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259. 22 CONT

1. There Is a Fair Argument that the Project May Have a Significant Air Quality Impact By Increasing Exposure To Air Pollution In Disadvantaged Communities

The Project, individually and taken together with the operation of other industrial development within the City, will expose the nearby City community to increased air pollution and requires respective studies and mitigation.

According to the California Air Resources Board ("**CARB**"), industrial development, including warehouse projects, can lead to the increase in daily volumes of heavy-duty truck traffic and the operation of on-site equipment that emits toxic diesel, thus contributing to both regional air pollution and climate change.[6] This is especially detrimental to disadvantaged communities located within the vicinity of these warehouse projects. 23

Accordingly, to address the disproportionate impacts of air pollution and particularly such impacts on disadvantaged communities, the State has passed some key pieces of legislation that focus on clean air investment, pollution, mitigation, and environmental regulation. 24

a) Senate Bill 535

Senate Bill 535, passed in 2012, authorized the California Environmental Protection Agency ("**CalEPA**") to identify disadvantaged communities in order to target a share of the investment of Greenhouse Gas Reduction Funds to these communities.[7] The

[6] CARB Comment Letter ("**CARB Letter**") (Apr. 28, 2023) (p. 1), *available at* https://ww2.arb.ca.gov/sites/default/files/2023-05/CARB%20Comments%20-%20NOP%20for%20the%20Mariposa%20Industrial%20Park%20%232%20DEIR%20-%204.28.2023.pdf (accessed on May 19, 2023.)

[7] Sen. Bill No. 535, approved by Governor, Sept. 30, 2012, *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB535

bill requires that funds be allocated for the benefit of disadvantaged communities while recognizing the potential vulnerability of these communities to poor air quality.[8] CalEPA defines a "disadvantaged communities" as "the top 25% highest scoring census tracts in what was then the most current version of CalEnviroScreen, Version 3.0, along with the census tracts that scored in the highest 5% of CalEnviroSceen's Pollution Burden indicator but did not have an overall CalEnviroScreen score."[9]

24 CONT

In its May 2022 final designation, CalEPA has decided to formally designate as disadvantaged communities ("DACs") the four categories of tracts proposed for designation in the Preliminary Designation; i.e.: (1) census tracts with the highest 25 percent of CalEnviroScreen overall scores; (2) census tracts lacking overall scores due to data gaps, but with the highest 5 percent of CalEnviroScreen Pollution Burden scores; (3) census tracts recognized as disadvantaged in CalEPA's most recent SB 535 designation, made in 2017; and (4) areas under the control of federally recognized Tribes.[10]

Based on these four criteria, CalEPA provided an interactive map of DACs,[11] which shows that the Project is near disadvantaged communities.

Accordingly, the City should ensure that the Project will not have an adverse impact on nearby disadvantaged communities.

25

b) Senate Bill 1000

Senate Bill 1000, passed in 2016, requires local governments to include environmental justice elements into their general plans where local governments have identified disadvantaged communities when the government will next adopt or revise two (2) or more elements concurrently on or after January 1, 2018.[12] SB 1000 requires that these

26

[8] *Id.* at Section 1(b).

[9] CalEPA, *Preliminary Designation of Disadvantaged Communities Pursuant to Senate Bill 535* (Oct. 2021), p. 1, *available at* https://calepa.ca.gov/wp-content/uploads/sites/6/2021/10/2021_CalEPA_Prelim_DAC_1018_English_a.pdf (accessed on May 19, 2023.)

[10] CalEPA's *Final Designation of Disadvantaged Communities Pursuant to Senate Bill* 535, May 2022 - https://calepa.ca.gov/wp-content/uploads/sites/6/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf ;

[11] See, CalEPA's Final Designation interactive map: https://calepa.ca.gov/envjustice/ghginvest/

[12] Sen. Bill No. 1000, approved by Governor Sept. 24, 2016, *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB1000 (accessed on May 19, 2023.)

environmental justice elements set forth objectives and policies intended to reduce health risks in disadvantaged communities and include policies aimed at reducing community pollution exposure by improving air quality.[13] The purpose is to ensure environmental justice principles are incorporated into the planning process so that disadvantaged community needs are addressed and improvements and programs are prioritized. **26 CONT**

c) Assembly Bill 617

Assembly Bill 617 is aimed at developing "a new community focused program to more effectively reduce to [sic] air pollution and preserve public health" and "directs [CARB] and all local air districts, . . . to take measures to protect communities disproportionately impacted by air pollution."[14] As a result, CARB, in conjunction with local air districts, created the Community Air Protection Program.[15]

The foregoing three (3) bills should be evaluated and included in the Project's environmental analysis in order to address and mitigate any potential negative impacts that the Project may have on air quality and the communities nearby.

2. The City Should Quantify and Discuss the Potential Cancer Risks from Project Operation.

Since the Project Site is located near a community already burdened by various sources of air pollution, the City should revise the health risk assessment ("**HRA**") for the Project to account for all potential health risks from the Project. According to CARB, an "HRA should account for all potential operational health risks from Project-related diesel particulate matter (diesel PM) emission sources, including, but not limited to, **27**

[13] *Id.* at Section 65302(h)(A).

[14] Sacramento Metropolitan Air Quality Management District, *AB 617 Background*, *available at* https://www.airquality.org/air-quality-health/community-air-protection/ab-617-background (accessed on May 19, 2023); *see also* Assem. Bill No. 617, approved by Governor July 26, 2017, *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB617 (accessed on May 19, 2023.)

[15] California Air Resources Board, *AB 617 Community Air Protection Incentives Status Report* (accessed on May 19, 2023), *available at* https://ww2.arb.ca.gov/our-work/programs/community-air-protection-incentives/ab-617-community-air-protection-incentives#:~:text=Specifically%2C%20AB%20617%20directed%20CARB,variety%20of%20strategies%20including%20incentives.

back-up generators, on-site diesel-powered equipment, locomotives, and heavy-duty trucks."[16] 27 CONT

In addition, the HRA should evaluate whether the Project's operation, considered together with past, present, and reasonably foreseeable future projects, would cause a cumulative cancer risk impact on neighboring communities.[17] Therefore, the City should include all air pollution reduction measures listed in Attachment A of the CARB Letter.[18] 28

Assuming that the proposed industrial land uses here would be used for cold storage, it is possible that the trucks and trailers visiting the Project Site could be equipped with Transport Refrigeration Units ("**TRU**").[19] According to CARB, TRUs can emit a significant amount of diesel exhaust while operating near the Project Site, which would expose nearby residences and other sensitive receptors to diesel exhaust emissions, thereby posing a significant cancer risk to the nearby community.[20] Thus, if the Project will be used for cold storage, the City should model air pollutant emissions from on-site TRUs in the environmental study and account for the potential cancer risks that the on-site TRUs may pose in the Project's HRA. 29

If, however, the Project's use of TRUs is unclear or if the Project at this time is proposed with no TRUs and the Project site will not be used for cold storage or TRU trucks, then the City should ensure that any future use of TRUs will be duly accounted for and its impacts mitigation. To do so, the City should include at least one of the following design measures and approval conditions: 30

> A Project design measure requiring contractual language in tenant lease agreements that prohibits tenants from operating TRUs within the Project-site; or

[16] CARB Letter, *supra*, at p. 2.
[17] *Id.*
[18] *Id.* at p. 8, Attachment A.
[19] *See,* https://ww2.arb.ca.gov/sites/default/files/classic//cc/cold-storage/cold-storage1.htm#:~:text=TRUs%20are%20currently%20defined%20as,trailers%2C%20railcars%20and%20shipping%20containers (Dec. 18, 2018) (TRUs are defined as "refrigeration systems that are powered by internal combustion engines (inside the unit housing). They control the environment of temperature-sensitive products that are transported in refrigerated trucks, trailers, railcars and shipping containers.") (accessed on May 19, 2023.)
[20] CARB Letter, *supra*, at p. 2.

A condition requiring a restrictive covenant over the parcel that prohibits the applicant's use of TRUs on the property unless the applicant seeks and receives an amendment to its conditional use permit allowing such use.[21]

30 CONT

3. The City Should Quantify and Discuss the Potential Cancer Risks from Project Construction.

In addition to the potential health risks discussed above, the Project's air quality studies or findings and the Project's HRA should also include health risks associated with construction diesel particulate matter emissions. The Project's construction activities would cause short-term diesel particulate matter emissions both from on-road and off-road diesel equipment.[22] Since the Project's construction activities will likely take place for more than two (2) months, the Project's HRA should discuss the health risks posed for existing residences located near the Project Site while the Project's construction takes place.[23]

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In addition, the HRA should analyze all diesel particulate matter emission sources pertaining to Project construction and evaluate the cancer risks based on the most recent Office of Environmental Health Hazard Assessment's guidance and CARB's HARP2 model.[24]

In sum, City must address, study, and mitigate the Project's reasonably foreseeable air quality impacts, including the localized air pollutant exposure at the neighborhood level, as well as the Project's regional air quality impacts, through a revised HRA.[25]

32

4. CEQA Bars the Deferred Development of Environmental Mitigation Measures

CEQA mitigation measures proposed and adopted into an environmental impact report are required to describe what actions that will be taken to reduce or avoid an environmental impact. (CEQA Guidelines § 15126.4(a)(1)(B) [providing

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[21] *Id.* at p. 2.
[22] *Id.* at p. 3.
[23] *Id.*
[24] *Id.*
[25] As stated in the CARB letter, "With regard to greenhouse gas emissions from this project, CARB has been clear that local governments and project proponents have a responsibility to properly mitigate these impacts. CARB's guidance, set out in detail in the Scoping Plan issued in 2017, makes clear that in CARB's expert view, local mitigation is critical to achieving climate goals and reducing greenhouse gases below levels of significance." *Id.* at p. 1. As noted in the CARB Letter (*id.*), the noted concerns are for both the localized air pollutant exposure at the neighborhood level, as well as the Project's regional air quality impacts.

"[f]ormulation of mitigation measures should not be deferred until some future time."].) While the same Guidelines section 15126.5(a)(1)(B) acknowledges an exception to the rule against deferrals, but such exception is narrowly proscribed to situations where "measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way." (*Id.*) Courts have also recognized a similar exception to the general rule against deferral of mitigation measures where the performance criteria for each mitigation measure is identified and described in the EIR. (*Sacramento Old City Ass'n v. City Council* (1991) 229 Cal.App.3d 1011.)

33 CONT

Impermissible deferral can occur when an EIR calls for mitigation measures to be created based on future studies or describes mitigation measures in general terms but the agency fails to commit itself to specific performance standards. (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 [city improperly deferred mitigation to butterfly habitat by failing to provide standards or guidelines for its management]; *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 671 [EIR failed to provide and commit to specific criteria or standard of performance for mitigating impacts to biological habitats]; *see also Cleveland Nat'l Forest Found. v San Diego Ass'n of Gov'ts* (2017) 17 Cal.App.5th 413, 442 [generalized air quality measures in the EIR failed to set performance standards]; *California Clean Energy Comm. v City of Woodland* (2014) 225 Cal.App.4th 173, 195 [agency could not rely on a future report on urban decay with no standards for determining whether mitigation required]; *POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 740 [agency could not rely on future rulemaking to establish specifications to ensure emissions of nitrogen oxide would not increase because it did not establish objective performance criteria for measuring whether that goal would be achieved]; *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1119 [rejecting mitigation measure requiring replacement water to be provided to neighboring landowners because it identified a general goal for mitigation rather than specific performance standard]; *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794 [requiring report without established standards is impermissible delay].)

The Air Quality Mitigation Measures for the Project results in deferred mitigation by not adequately analyzing the applicability of San Joaquin Valley Air Pollution Control District's ("**SJVAPCD**") Rule 9510. While the IS/MND states that the air quality

34

assessment included in Appendix A fulfills the requirements of the majority of the mitigation measures, measure MM AQ-4b is left to be assessed by the applicant prior to the Project's discretionary approval. (IS/MND, p. 51.) This requirement, however, lacks necessary enforcements mechanisms to ensure the assessment is performed and available to the public ***prior*** to any approvals. Further, the mitigation measure itself requires the creation of future, unknown mitigation measures to reduce impacts as necessary. These mitigations must also be made available for public comment to ensure compliance with CEQA. **34 CONT**

As the currently air quality mitigations are speculative in nature, there is a fair argument that there will be a significant air quality impact requiring the preparation of an EIR. **35**

5. There Is a Fair Argument that the Project May Have a Significant Biological Impacts Mandatory Findings of Signficance and an EIR.

The IS/MND fails to outline all mitigation measures necessary to support a finding of no significant impact. As the Project site is located within the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan ("**SJMSCP**") area, the applicant will be required to obtain an incidental take permit and implement further mitigation requirements as defined by the San Joquin Council of Governments ("**SJCOG**"). The City of Stockton, as a Plan Participant, agreed to the terms of the plan. Further mitigations required by the Regional Water Quality Control Board are also expected due to the Project's impacts on the nearby French Camp Slough. However, the potential mitigations have not been included in the IS/MND and no clear description of the performance standards was included in the existing mitigation measures. As such, the biological impact mitigations also engage in impermissible deferred mitigation. **36**

As written, the IS/MND relies on compliance alone to support its findings of no significant impacts on biological resources. However, as explained above, this compliance is completely speculative as the measures required for actual compliance have not been created. Further, the process currently described by the IS/MND is ***not compliant*** with the requirements of the SJMSCP. The Plan states that "Plan Participants shall forward Advisory Agency Notices to the Joint Powers Authority (JPA), as required by Section 8.1.3.2, ***at the beginning of a discretionary project's application review process***." (SJMSCP, p. 5-16)(Emphasis added.) If the JPA determines that the project will require mitigation measures, the JPA' "shall list the applicable Incidental Take Minimization Measures in the written response." (*Id.*) **37**

Further, any mitigation measures required by the JPA are to be ***included as conditions of project approval***. (*Id.*) The IS/MND has failed to clarify whether or not the incidental take permit process has even been initiated. 38

As the requirements of the SJMSCP have not been met, the City's conclusion that there will be no significant impacts on biological resources is entirely unsupported by evidence, and there is a fair argument that the Project may have significant biological resources impacts, necessitating the preparation of an EIR. 39

III. CONCLUSION

Based on the foregoing, the City should deny the Project's proposed entitlements and require that an Environmental Impact Report be prepared pursuant to CEQA, consistent with the comments and issues identified in this comment letter. 40

Sincerely,

Grace Holbrook
Attorneys for Carpenters
Local Union #152

Attached:

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

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

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

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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March 8, 2021

Mitchell M. Tsai
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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."[1] 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.[2]

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.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

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

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

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> 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):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

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.[7] 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.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] 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."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

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

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).[13]

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**

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, 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.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

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

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

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, 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 E. Rosenfeld, Ph.D.

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	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

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

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

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**

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 (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

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

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

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6826**	**1,721.6826**	**0.1294**	**0.0000**	**1,724.9187**

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

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6823**	**1,721.6823**	**0.1294**	**0.0000**	**1,724.9183**

	ROG	NOx	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	1.4103	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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

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

3.0 Construction Detail

Construction Phase

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

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

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

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

OffRoad Equipment

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

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

Trips and VMT

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

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

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

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

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
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**

Mitigated Construction On-Site

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

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
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

Unmitigated Construction On-Site

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

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2022

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

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

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

Mitigated Construction On-Site

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

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

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

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
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**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

Mitigated Construction On-Site

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

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
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**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

3.6 Paving - 2023

Unmitigated Construction On-Site

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

3.6 Paving - 2023

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2023

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.6 Paving - 2024

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2024

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
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**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
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**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

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

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

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

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

4.4 Fleet Mix

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

5.3 Energy by Land Use - Electricity

Unmitigated

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

5.3 Energy by Land Use - Electricity

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
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**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
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			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

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

7.2 Water by Land Use

Mitigated

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Category/Year

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

8.2 Waste by Land Use

Unmitigated

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

8.2 Waste by Land Use

Mitigated

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

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

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

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

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

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1520
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

	ROG	NOx	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**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

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

3.0 Construction Detail

Construction Phase

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

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

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

OffRoad Equipment

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

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

Trips and VMT

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

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

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

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

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

Mitigated Construction On-Site

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

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

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

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2022

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

Mitigated Construction On-Site

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

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

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

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

Mitigated Construction On-Site

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

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

3.6 Paving - 2023

Unmitigated Construction On-Site

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

3.6 Paving - 2023

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2023

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.6 Paving - 2024

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2024

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			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

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

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

4.4 Fleet Mix

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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 (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

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

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

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

	ROG	NOx	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**

2.2 Overall Operational

Unmitigated Operational

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

Mitigated Operational

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

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

3.0 Construction Detail

Construction Phase

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

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

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

OffRoad Equipment

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

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

Trips and VMT

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

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

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

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

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

Mitigated Construction On-Site

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

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

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

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
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**

Mitigated Construction On-Site

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

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2022

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

Mitigated Construction On-Site

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

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

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

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

Mitigated Construction On-Site

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

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

3.6 Paving - 2023

Unmitigated Construction On-Site

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

3.6 Paving - 2023

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2023

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.6 Paving - 2024

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2024

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			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

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

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

4.4 Fleet Mix

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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 (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

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

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

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6554**	**1,418.6554**	**0.1215**	**0.0000**	**1,421.6925**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6550**	**1,418.6550**	**0.1215**	**0.0000**	**1,421.6921**

	ROG	NOx	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

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

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

3.0 Construction Detail

Construction Phase

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

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

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

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

OffRoad Equipment

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

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

Trips and VMT

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

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

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

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

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
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**

Mitigated Construction On-Site

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

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
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

Unmitigated Construction On-Site

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

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2022

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.5 Building Construction - 2022

Mitigated Construction Off-Site

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

3.5 Building Construction - 2023

Unmitigated Construction On-Site

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

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.5 Building Construction - 2023

Mitigated Construction Off-Site

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

3.6 Paving - 2023

Unmitigated Construction On-Site

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

3.6 Paving - 2023

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2023

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.6 Paving - 2024

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2024

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
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**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
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**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

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

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

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

4.2 Trip Summary Information

	Average Daily Trip Rate			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

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	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

5.3 Energy by Land Use - Electricity

Unmitigated

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

5.3 Energy by Land Use - Electricity

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
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**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
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			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

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

7.2 Water by Land Use

Mitigated

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

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

8.2 Waste by Land Use

Mitigated

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

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 (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

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

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

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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

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

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0955
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

	ROG	NOx	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**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

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

3.0 Construction Detail

Construction Phase

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

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

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

OffRoad Equipment

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

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

Trips and VMT

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

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

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

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

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

Mitigated Construction On-Site

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

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

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

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
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**

Mitigated Construction On-Site

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

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2021

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.4 Grading - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2022

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

Mitigated Construction On-Site

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

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

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

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

Mitigated Construction On-Site

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

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

3.6 Paving - 2023

Unmitigated Construction On-Site

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

3.6 Paving - 2023

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2023

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.6 Paving - 2024

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.6 Paving - 2024

Mitigated Construction Off-Site

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

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			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

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

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

4.4 Fleet Mix

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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 (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

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

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/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

	ROG	NOx	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**

2.2 Overall Operational

Unmitigated Operational

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

Mitigated Operational

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

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

3.0 Construction Detail

Construction Phase

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

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

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

OffRoad Equipment

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

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

Trips and VMT

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

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

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

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

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

Mitigated Construction On-Site

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

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

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

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
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**

Mitigated Construction On-Site

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

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
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

Unmitigated Construction On-Site

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

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
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**

Mitigated Construction On-Site

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

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
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

Unmitigated Construction On-Site

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

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
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**

Mitigated Construction On-Site

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

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
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

Unmitigated Construction On-Site

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

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

Mitigated Construction On-Site

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

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

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

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

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

Mitigated Construction On-Site

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

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

3.6 Paving - 2023

Unmitigated Construction On-Site

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

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
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**

Mitigated Construction On-Site

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

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
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

Unmitigated Construction On-Site

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

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
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**

Mitigated Construction On-Site

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

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
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	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
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**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

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

4.2 Trip Summary Information

	Average Daily Trip Rate			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

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

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

4.4 Fleet Mix

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

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_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

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

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

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

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

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

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

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

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

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

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

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

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

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd 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 23rd 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 *23rd 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 Conferenc*e. 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 N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, 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.

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

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

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

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

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

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

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

Other Experience:

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

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Tsai (TSAI-1)

Response to TSAI-1-1
The commenter provides introductory remarks. No response is required.

Response to TSAI-1-2
The commenter summarizes project details. No response is required.

Response to TSAI-1-3
The commenters describes their membership. No response is required.

Response to TSAI-1-4
The commenter provides introductory remarks. No response is required.

Response toTSAI-1-5
The commenter incorporates other comments submitted on the Draft IS/MND. No response is required.

Response to TSAI-1-6
The commenter requests notice for any upcoming hearing. The comment is noted. No further response is required.

Response to TSAI-1-7
The commenter requests that a local workforce be used to construct the proposed project. This comment is beyond the purview of CEQA, although the document acknowledges that the proposed project would provide employment opportunities for local residents and that the unemployment rate in the Stockton-Lodi Metropolitan Area would provide a substantial number of available workers for hire.

Response to TSAI-1-8
Refer to Response to TSAI-1-7.

Response to TSAI-1-9
Refer to Response to TSAI-1-7.

Response toTSAI-1-10
Refer to Response to TSAI-1-7.

Response to TSAI-1-11
Refer to response to TSAI-1-7.

Response to TSAI-1-12
Refer to Response to TSAI-1-7.

Response to TSAI-1-13
Refer to Response to TSAI-1-7.

Response to TSAI-1-14
The Draft IS/MND confirms that the proposed project would not result in any significant and unavoidable impacts; accordingly, preparation of an EIR including analysis of project alternatives is not warranted under CEQA.

Response toTSAI-1-15
Refer to Response to TSAI-1-14.

Response to TSAI-1-16
Refer to Response to TSAI-1-14.

Response to TSAI-1-17
Refer to Response to TSAI-1-14.

Response to TSAI-1-18
Refer to Response to TSAI-1-14.

Response to TSAI-1-19
Refer to Response to TSAI-1-14.

Response toTSAI-1-20
Refer to Response to TSAI-1-14.

Response to TSAI-1-21
Refer to Response to TSAI-1-14.

Response to TSAI-1-22
Refer to Response to TSAI-1-14.

Response to TSAI-1-23
The commenters asserts that the proposed project would have a cumulatively significant air quality impact on disadvantaged communities located within the project vicinity. The Draft IS/MND demonstrates that the proposed project would not have any significant impacts. See Response to BLUM-1-7 related to project impacts to nearby disadvantaged communities.

Response to TSAI-1-24
The commenter provides background information on SB 535, identification of disadvantaged communities. The commenter states that the proposed project is near disadvantaged communities. The comment does not raise any specific environmental issue in the Draft IS/MND. No response is needed.

Response toTSAI-1-25
The commenter states that the City should ensure that the proposed project would not have an adverse impact on nearby disadvantaged communities. The proposed project's impact on nearby sensitive receptors, which are disadvantaged communities, is appropriately analyzed and disclosed in the Draft IS/MND. See Response to BLUM-1-8.

Response to TSAI-1-26
SB 1000 directs cities and counties to incorporate environmental justice into the General Plan update process when two or more elements are being updated. SB 1000 does not apply to the preparation of an IS/MND when the current General Plan does not contain an Environmental Justice Element and no policies have been adopted to direct the analysis of potential impacts.

Of relevance here, neither the ARB nor the Valley Air District has recommended significance thresholds be adjusted for environmental justice considerations, and thus neither entity recommends the evaluation of the same as part of the CEQA process. The conclusions of the MND confirm that the proposed project would not result in any significant unavoidable impacts to any local community or the public at large.

Response to TSAI-1-27
The commenter asserts that the City should prepare an HRA that includes all potential operational health risks from project-related diesel particulate matter (diesel PM) emission sources, including, but not limited to, backup generators, on-site diesel-powered equipment, locomotives, and heavy-duty trucks. The proposed project's operation health risk impacts are appropriately analyzed and disclosed in the Draft IS/MND. See Response to BLUM-1-82 through BLUM-1-86. No further analysis is needed.

Response to TSAI-1-28
The commenter states that the HRA should evaluate whether the proposed project's operation, considered together with past, present and reasonably foreseeable future projects, would cause a cumulative cancer risk impact on neighboring communities, and therefore include all air pollution reduction measures listed in Attachment A of the ARB letter.

As stated, the proposed project's operational health risk impacts are appropriately analyzed and disclosed in the Draft IS/MND. See Response to BLUM1-82 through BLUM-1-86. No further analysis or response is needed.

Response to TSAI-1-29
The commenter states that "if the project will be used for cold storage, the City should model air pollutant emissions from on-site TRUs."

The proposed project does not include cold storage. MM GHG-1e expressly limits the project use to dry storage only. As previously stated, the proposed project's health risk impacts are appropriately analyzed and disclosed in the Draft IS/MND within the HRA, which was conducted according to the latest OEHHA guidance and takes into account the proposed project's attributes. See Response to BLUM-1-82 through BLUM-1-86. No further analysis or response is needed.

Response to TSAI-1-30
The commenter states that if TRUs will not be utilized then the City should ensure that any future use of TRUs will be prevented by use of restrictive covenant as a part of the conditions of approval. As previously stated, the proposed project's health risk impacts are appropriately analyzed and disclosed in the Draft IS/MND within the HRA, which was conducted according to the latest OEHHA guidance and includes the use of the HARP2 model. See Response to BLUM-1-82 through BLUM-1-86, and Response to TSAI-1-29. No further analysis or response is needed.

Response to TSAI-1-31
The commenter asserts that the proposed project's HRA should also include health risks associated with construction diesel particulate matter emissions and should follow OEHHA guidance and utilize the HARP2 model when calculating potential health risks. As demonstrated in Section 2.3, Air Quality, Impact c) (page 44 to 49) of the Draft IS/MND, the proposed project's construction health risk impacts to nearby sensitive receptors were appropriately analyzed and disclosed. The proposed project's construction health risk impacts would be less than significant. Therefore, no further analysis or response is needed.

Response to TSAI-1-32
The commenter states that the City must address, study and mitigate the proposed project's reasonably foreseeable air quality impacts, including the localized air pollutant exposure at the neighborhood level, as well as the proposed project's regional air quality impacts, through a revised HRA.

As previously stated, the Draft IS/MND properly addressed and studied the proposed project's reasonably foreseeable air quality impacts according to guidance and recommendations set forth by the Valley Air District, including for localized air pollutant exposures at the neighborhood level. The analysis in the Draft IS/MND includes an HRA which was conducted pursuant to the most current OEHHA guidance. No further response or analysis is needed.

Response to TSAI-1-33
The commenter summarizes CEQA requirements and case laws related to mitigation measures and deferral of mitigation. This comment does not raise any project-specific environmental issues, no response is needed.

Response to TSAI-1-34
The commenter asserts that MM AQ-4b is deferred mitigation because it lacks necessary enforcement mechanisms to ensure the assessment is performed and available to the public prior to project approval. The City disagrees. General Plan MM AQ-4b requires the applicant to comply with Valley Air District Rule 9510 which requires air impact assessment and fee payment (if necessary) based on Valley Air District Indirect Source Review thresholds. These thresholds are distinct from the air emission thresholds set forth by the Valley Air District for the purpose of CEQA analysis. The proposed project's emissions are appropriately compared to the Valley Air District CEQA thresholds as shown in Section 2.3 Air Quality of the Draft IS/MND. The proposed project would not exceed any emission thresholds as shown in Tables 1 through 5 in the Draft IS/MND. Therefore, although General Plan MM AQ-4b (compliance with Valley Air District Rule 9510) is applicable to the proposed project because it applies to all development projects subject to CEQA, it is not needed to reduce an air quality impact. See *Oakland Heritage Alliance v. City of Oakland* (2011) 195 CA4th 884, 906 ("a condition requiring compliance with regulations is a common and reasonable mitigation measure and may be proper where it is reasonable to expect compliance.")

Furthermore, in accordance with MM AQ-4b, the applicant has assessed the proposed project and submitted the Indirect Source Review application package to the Valley Air District in accordance with Rule 9510. On December 20, 2024, the Valley Air District approved the application package and

deemed that no additional fees or mitigation is needed. Thus, the requirements in MM AQ-4b have been met.

No further analysis is necessary.

Response to TSAI-1-35
The commenter states that "As the currently air quality mitigations are speculative in nature, there is a fair argument that there will be a significant air quality impact requiring the preparation of an EIR." As demonstrated above, the proposed project's environmental impacts have been appropriately analyzed and disclosed. The proposed project would not result in any significant impact that would not be reduced by implementation of mitigation measures. Therefore, no additional analysis or preparation of EIR is necessary.

Response to TSAI-1-36
Section 2.4, Biological Resources, of the Draft IS/MND includes a comprehensive analysis of potential impacts and also identifies MM BIO 1 through MM BIO-6 to ensure that impacts are avoided or minimized to the greatest extent possible

Response to TSAI-1-37
Refer to Response to TSA- 1-36.

Response to TSAI-1-38
As stated in Section 2.4 Biological Resources, of the Draft IS/MND, the SJCOG offers compensatory mitigation for loss of Valley Oak Woodland and Forest through the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) permitting process. Potential impacts to valley oak woodland are typically addressed through the payment of fees or purchase of banking credits prior to or at the time of issuance of building permits. Per communication with the SJCOG in April 2022, no permanent setback is required to avoid impacts on the riparian corridor. The proposed project would implement all water quality protection measures imposed by the SJCOG and the RWQCB, and therefore any potential indirect impacts on aquatic special-status species would be reduced to less than significant.

Response to TSAI-1-39
Refer to Response to TSAI-1-36 and TSAI-1-38.

Response to TSAI-1-40
The comment in opposition to the proposed project is noted and will be forwarded to the decision-makers for their consideration.

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EXHIBIT 1

South McKinley Avenue East Industrial Project

Mitigation Monitoring and Reporting Program

EXHIBIT 1

FCS
An ADEC Innovation

Mitigation Monitoring and Reporting Program for the South McKinley Avenue East Industrial Project Initial Study/Mitigated Negative Declaration City of Stockton, San Joaquin County, California

Prepared for:
City of Stockton
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Stockton, CA 95202
202.937.8561

Contact: Nicole D. Moore, LEED® AP

Prepared by:
FirstCarbon Solutions
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Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director
Elizabeth Johnson, Senior Project Manager

Report Date: October 24, 2024

EXHIBIT 1

PREFACE

Section 21081.6 of the California Environmental Quality Act (CEQA) and CEQA Guidelines Section 15097 require a Lead Agency to adopt a Mitigation Monitoring and Reporting Program (MMRP) whenever it adopts a Mitigated Negative Declaration (MND) in conjunction with a project approval. The purpose of the MMRP is to ensure compliance with the mitigation measures during project implementation.

The Draft IS/MND prepared for the proposed South McKinley Avenue East Industrial Project (proposed project) concluded that project implementation could result in potentially significant effects on the environment and mitigation measures were incorporated into the proposed project or are required as a condition of project approval that reduce these potential impacts to a less than significant level. This MMRP documents how and when the mitigation measures adopted by the Lead Agency will be implemented and confirms that potential environmental impacts are reduced to less than significant levels as identified in the Draft IS/MND.

This document does not discuss those subjects that the environmental analysis demonstrates would result in less than significant impacts and for which no mitigation was proposed or necessary.

EXHIBIT 1

Table 1: South McKinley Avenue East Industrial Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
2.3 Air Quality					
MM AQ-4b: Prior to discretionary approval, applicants for development projects that are subject to the California Environmental Quality Act (CEQA) shall assess their projects to the San Joaquin Valley Air Pollution Control District's (SJVAPCD) Rule 9510 Applicability Thresholds as follows: • 50 residential units; • 2,000 square feet of commercial space; • 25,000 square feet of light industrial space; • 100,000 square feet of heavy industrial space; • 20,000 square feet of medical office space; • 39,000 square feet of general office space; • 9,000 square feet of education space; • 10,000 square feet of government space; • 20,000 square feet of recreational space; or • 9,000 square feet of space not identified above. Applicants for development projects subject to CEQA that do not meet the SJVAPCD Rule 9510 Applicability Thresholds shall assess whether project-related construction and operational emissions exceed the SJVAPCD 100 pounds per day ambient air quality screening threshold. Applicants for development projects that exceed this ambient air quality screening threshold shall prepare or have prepared an ambient air quality analysis, consistent with the SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), to assess whether the subject development project would cause or contribute to a violation of any California Ambient Air Quality Standard or National Ambient Air Quality Standard. The ambient air quality analysis shall identify measures to reduce impacts, as necessary.	Incorporation of air quality analysis recommendations into all construction management and design plans; submission to City.	Prior to discretionary approval.	City of Stockton.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Recommended measures may include those identified in MM AQ-2 and MM AQ-3. The related recommendations of the ambient air quality analysis shall be incorporated into all construction management and design plans and shall be submitted to the City and verified by the City's Planning and Engineering Division.					
2.4 Biological Resources					
MM BIO-1: Prior to any disturbance activities (including vegetation removal and grading), the applicant shall obtain a San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) permit from San Joaquin Council of Governments (SJCOG) to mitigate for impacts to SJMSCP-covered species and their habitats. The applicant shall implement all requirements and conditions stated in the SJMSCP permit. Coverage involves compensation for habitat impacts on covered species through implementation of Incidental Take Minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered species.	Provide proof of implementation of all requirements and conditions.	Prior to any disturbance activities.	City of Stockton.		
MM BIO-2a: Avoidance and Minimization of Indirect Temporary Impacts to Water Quality and Riparian Habitat • The project applicant shall obtain a Construction General Permit from the Regional Water Quality Control Board (RWQCB). The applicant shall ensure that the project Civil Engineer prepares all required stormwater planning documents consistent with the requirements of the RWQCB (e.g., a Storm Water Pollution Prevention Plan [SWPPP] that complies with current National Pollutant Discharge Elimination System [NPDES]; Best Management Practices [BMPs] to control the pollutants in stormwater runoff, and/or a Storm Water Management Plan [SWMP]) shall be developed and integrated into the project plan.	Review construction plans.	During construction activities.	City of Stockton		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM BIO-2b: No Work Within the Riparian Corridor and Creek Bed or Banks • No work (including vegetation removal) shall take place within the riparian corridor of French Camp Slough unless specifically permitted by the California Department of Fish and Wildlife (CDFW) or Regional Water Quality Control Board (RWQCB). • Prior to construction the applicant shall install silt fencing including the placement of straw wattles between all construction areas and the riparian corridor to avoid impacts to water quality by grading and construction. A qualified Biologist shall be on-site to monitor the installation of fencing. Fencing shall be in place and regularly maintained during project implementation.	Review construction plans.	During construction activities.	City of Stockton.		
MM BIO-2c: Avoidance and Minimization of Indirect Permanent Impacts to Water Quality and Riparian Habitat • The applicant shall install post-construction stormwater management measures and establish a long-term maintenance plan. This requirement is intended to ensure that the post-construction conditions at the project site do not cause or contribute to direct or indirect water quality impacts (i.e., pollution and/or hydromodification) upstream and downstream. Specifically, the discharger shall demonstrate compliance with the post-construction standards set forth in the General Permit. The discharger is responsible for all compliance issues including all annual fees until the Notice of Termination (NOT) has been filed and approved by the local Regional Water Quality Control Board (RWQCB). • The applicant shall establish permanent fencing to keep trash and other debris from moving off-site into the aquatic or riparian habitats of French Camp Slough.	Review construction plans.	During construction activities.	City of Stockton.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM BIO-3: Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found). • Removal of trees shall be limited to only those necessary to construct the proposed project as reflected in the relevant project approval documents. • If the proposed project requires trees to be removed during the nesting season, pre-construction surveys shall be conducted no more than 10 days prior to the start of ground or vegetation disturbance (including tree removal) to determine whether or not active nests are present. • If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s). • The qualified Biologist shall monitor the active nest during construction activities to prevent any potential impacts that may result from the construction of the proposed project, until the young have fledged.	Conduct pre-construction surveys; if active nest is located, implement appropriate buffer; retain qualified biologist.	During construction activities.	City of Stockton.		
MM BIO-4: Roosting Bat Pre-construction Survey and Avoidance Prior to the start of construction (e.g., prior to any earthmoving or ground-disturbing activity), a qualified	Conduct pre-construction surveys; if roosting bats are located, implement	Prior to the start of construction, no more than 14 days	City of Stockton.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.). Visual surveys will include trees within 500 feet of project construction activities. Not more than 2 weeks prior to building demolition, the project applicant shall ensure that a qualified Biologist (i.e., one familiar with the identification of bats and signs of bats) survey buildings proposed for demolition for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the structure, demolition may proceed. If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Building demolition shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on young non-volant (i.e., non-flying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young) as determined by the Biologist.	appropriate buffer; retain qualified biologist.	prior to beginning ground disturbance.			
MM BIO-5: The project applicant shall implement GP NCR-2.18 Minimize Lighting Impacts for the portion of the project site that is visible from the riparian corridor of French Camp	Review construction plans.	During construction activities.	City of Stockton.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Slough. The applicant shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than 1 foot-candle above ambient conditions.					
MM BIO-6: The applicant shall prepare and submit a tree report to the City of Stockton. The tree report shall include the location, species, and diameter at 24 inches above grade (for multi-trunked trees the combined total trunk diameter shall be used for all trunks measuring 6 inches or greater measured at 24 inches above actual grade). The tree report shall list the number of ordinance-size trees proposed to be removed. For ordinance-size trees to be removed, the applicant shall obtain a tree removal permit from the City of Stockton. If ordinance-size valley oaks are proposed to be removed, then mitigation for loss of these valley oaks can be covered through valley oak woodland mitigation as required by the San Joaquin Council of Governments (SJCOG) and defined in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJCMSCP) permit to be obtained by the applicant.	Verify submission of tree report.	Prior to issuance of Grading Permit	City of Stockton.		
2.5 Cultural Resources and Tribal Cultural Resources					
MM CUL-1: An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall provide full-time archaeological monitoring both on-site and off-site for the new sewer line connection in South McKinley Avenue, for all ground disturbance, including, but not limited to, grubbing, clearing, grading, and trenching into previously undisturbed soils. It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried	Retain qualified Archeologist; if cultural resources are discovered, adhere to Archeologist's recommendations.	During all ground disturbance activities.	City of Stockton.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
cultural resources. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area shall be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria. If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the Archaeological Monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM CUL-2: In the event of an accidental discovery or recognition of any human remains, Public Resources Code Section 5097.98 must be followed. For purposes of this project, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The Most Likely Descendant (MLD) may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Section 5097.98, or 2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance: • The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation.	Retain qualified Archeologist during all earthmoving activities; in the event of the discovery of human remains, contact NAHC and the County Coroner and halt all excavation on-site or nearby.	During construction activities.	City of Stockston, NAHC.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
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• The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.					
2.7 Geology and Soils					
MM GEO-1: The proposed project shall adhere to the site preparation, grading, foundation support, earthwork, and other recommendations of the Geotechnical Exploration for the project site prepared by ENGEO Incorporated on June 20, 2022.	Verify incorporation of recommendations in Geotechnical Exploration into project plans.	Prior to any ground disturbance activities.	City of Stockton.		
MM GEO-2: All construction-related earth-disturbing activities that would impact previously undisturbed sediments on the project site shall be monitored closely by a qualified Paleontologist to recover any fossil remains discovered quickly and professionally while not impeding development. Should any significant paleontological resources (e.g., bones, teeth,) be unearthed, all construction activities shall be diverted at least 15 feet from the find until a professional Paleontologist has assessed it and, if deemed significant, salvaged the fossil(s) in a timely manner. Collected fossils shall be deposited in an appropriate repository, such as the University of California Museum of Paleontology (UCMP), where they would be properly curated and made available for future research.	Retain qualified Paleontologist; in the event of the discovery of significant paleontological remains, divert construction activities by at least 15 feet.	During any ground disturbance activities.	City of Stockton.		
2.8 Greenhouse Gas Emissions					
MM GHG-1a: All buildings shall be designed to provide infrastructure to support use of electric-powered forklifts and/or other interior vehicles.	Verify construction plans.	Prior to start of construction activities.	City of Stockton.		
MM GHG-1b: Only electric-powered off-road equipment (e.g., forklifts, indoor material handling equipment, etc.) shall be utilized on-site for daily warehouse and business	Verify construction plans.	During project operation.	City of Stockton.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
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operations. The project developer/facility owner shall disclose this requirement to all tenants/business entities prior to the signing of any lease agreement. In addition, the limitation to use only electric-powered off-road equipment shall be included in all leasing agreements.					
MM GHG-1c: All landscaping equipment used at the facility shall be electric or battery powered. The design of the building should provide for outlets on the outside of buildings or in other accessible areas to facilitate the use of electrically powered landscape equipment.	Verify construction plans.	During project operation.	City of Stockton.		
MM GHG-1d: All buildings shall be designed to facilitate future retrofit of all current natural gas systems and appliances to electric replacements.	Verify construction plans.	Prior to start of construction activities.	City of Stockton.		
MM GHG-1e: The warehouse use will be limited to dry storage.	Verify construction plans.	During project operation.	City of Stockton.		
MM GHG-1f: Prior to the issuance of a building permit, the Community Development Department, Planning Division shall confirm that the Project is designed to include the following: The buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed to supply power for the future installation of electric vehicle (EV) truck charging stations on the site. Conduit should be installed from the electrical room to tractor trailer parking spaces in a logical location(s) on the site determined by the project applicant during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology **becomes commercially available and the buildings are being served by trucks with electric-powered engines.**	Verify construction plans.	Prior to issuance of a building permit.	City of Stockton.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
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2.9 Hazards and Hazardous Materials					
MM HAZ-1: Prior to project approval, the project applicant shall contract a qualified firm to complete a Phase II Environmental Site Assessment (Phase II ESA) at the project site. The Phase II ESA shall further investigate the debris pile on-site through soil sampling. The project applicant shall implement all measures recommended by the Phase II ESA prior to issuance of grading permits.	Verify completion of a Phase II ESA and incorporation of all recommended measures; review construction plans.	Prior to project approval.	City of Stockton.		
2.17 Transportation					
MM TRANS-1: Transportation Demand Management The project shall implement the following Transportation Demand Management (TDM) strategies as detailed in the Transportation Impact Analysis (TIA): 1. Pedestrian Network Improvements. Provide a safe and accessible pedestrian network that links the project site to other areas. The proposed project would provide design elements that enhance walkability and connectivity, including low-speed internal roadways. The proposed project will also close the City's sidewalk gap and provide a connection to the City's existing sidewalk network. 2. Electric Vehicle Parking and Neighborhood Electric Vehicle (NEV) Network The project will provide NEV parking, charging facilities, striping, and signage. 3. Commuter Trip Reduction Program The proposed project would implement a Commuter Trip Reduction (CTR) program. The following strategies would be implemented as part of the program: a. Implement a Commuter Trip Reduction Program i. TDM Coordinator: This person would be responsible for implementing and managing the proposed project's TDM plan,	Verify implementation of all TDM strategies; review construction plans.	Prior to start of construction activities.	City of Stockton.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
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ensure all employees are aware of all available transportation options, and serve as the point of contact for all employees to answer any TDM-related questions. The following services would be provided by the TDM Coordinator: • Provide information packets to all new employees. • Set up and maintain an on-site and/or online TDM board/kiosk with information on non-auto transportation alternatives and promotional programs. • Provide trip planning assistance to employees considering an alternative mode, including carpool/vanpool ride-matching and bicycle buddy matching services. • The appointed Transportation Coordinator would provide transportation information packets to all new residents and employees upon move-in. The packets would include local and regional bikeway maps, bicycling resources, local and regional transit maps, locations of nearest transit stops, local and regional transit schedules of adjacent routes, trip planning resources, ride-matching/sharing programs, and contact information for the Transportation Coordinator. The new tenant information packets would also be made available to employees via the on-site and/or online TDM board. ii. TDM Marketing/TDM board The TDM Coordinator will maintain an on-site TDM board with information on transportation alternatives. The information provided should contain information on: • Local and regional transit routes					

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• Ride-matching services and any available discount/incentive programs • Trip planning resources in San Joaquin County and the City of Stockton • Safety tips for cyclists and pedestrians To be effective, the coordinator will need to update the board with up-to-date information, commuter alerts, and new proposed TDM measures or incentives. Along with this board, the TDM Coordinator will also need to continuously promote TDM measures through marketing. Marketing can be accomplished through the following measures: - Yearly survey of employees on their modes of transportation to work - Marketing campaigns/events to encourage alternative travel modes - Produce courses/guides that promote the benefits of alternative transportation iii. Ride Sharing/Carpooling TDM Coordinator would set up a ride sharing/carpooling program that can increase vehicle occupancy and reduces the number of vehicles driving the same trip, resulting in decreased TDM. To encourage carpooling, the proposed project would provide a designated on-site passenger loading space and provide an on-site and/or online message board for coordinating rides. The coordinator would also provide information on the Van Go! Rideshare service as part of the TDM Board and the new employee guide. This service can be used throughout San Joaquin County and is booked through an online website or mobile application. Up to three people in the group can use this service with					

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the first 5 miles driven costs $4 per person. Any additional miles after those first five miles using the service cost $0.50 per person. iv. Alternative Work Schedule Program TDM Coordinator would setup an alternative work schedules program that can help reduce peak-period commute and accommodate ride sharing. Alternative work schedules include: • Flextime: Employees can work within a given time period rather than a rigid schedule. For example, a company typically working from 8:00 to 4:30 can have some employees work from 7:30 to 4:00 and others from 9:00 to 5:30. • Compressed Work Week: Employees work longer but fewer days. They can do a 4/40 schedule (four 10-hour work weeks), or a 9/80 schedule (9-hour work days and a day off every two weeks). a. Price Parking Program A Price Parking Program is meant to charge employees for parking at the work site instead of providing free parking. By charging for parking, employees will be encouraged to find alternative modes of transportation to work. The revenue received by the price parking program would be used to fund parts of the CTR program. The parking program would charge daily parking instead of monthly parking to increase parking prices and decrease accessibility of employees paying parking. Employees would pay through an electronic pay box. Guests and employees who only drive occasionally would					

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pay through the TDM Coordinator at the front office/counter. b. Freight Transport Management A Freight Transport Management Program would be implemented to mitigate truck traffic and would be coordinated by a Logistics Manager. This manager can improve fright transportation efficiency with the following measures: • Improve scheduling and routing to reduce freight vehicle mileage and empty backhauls. • The Logistics Manager can schedule freight deliveries making sure that they deliver as much shipment as possible. This will reduce the number of freight trips with half hauls or trips with empty backhauls. • Organize regional delivery systems so fewer vehicle trips are needed to distribute goods. • The Logistics Manager can contact regional warehouses to allow sharing of resources and freight consolidation. If two warehouses within the same area are delivering similar products, they can coordinate and share a single truck instead of using two trucks for the delivery. • Implement weight distance charges. • A special impact fee would be charged to freight based on the number of miles traveled. • Change freight delivery times to reduce congestion.					

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• The Logistics Manager would schedule more truck deliveries between the off-peak hours instead of peak hours.					
MM TRANS-2: The proposed project shall only allow trucks to exit and not enter from the southernmost project driveway in order to prevent collisions.	Verify construction plans.	During project operation.	City of Stockton.		