

APPENDIX D Air Quality and Greenhouse Gas Study

Air Quality and Greenhouse Gas Emissions Report for the 9160-9176 Sunset Boulevard Project City of West Hollywood

Prepared for:



City of West Hollywood

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September 2022



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ATTACHMENTS

Attachmant 1	CALEEMOD Output	
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Attachment 1 CALEEMOD Output

Attachment 2 Supplemental Calculations for Construction Energy Use



1.0 INTRODUCTION

This air quality and greenhouse gas (GHG) emissions technical study was prepared by UltraSystems to support an Environmental Impact Report (EIR) for the City of West Hollywood's proposed new commercial building, which would be composed of office and high turnover restaurant uses. The proposed project consists of demolishing the existing car dealership located at 9160-9176 Sunset Boulevard within the City of West Hollywood, and then constructing the five-story commercial building with a three-story underground parking garage.

The purpose of this report is to provide a detailed technical air quality and GHG analysis of the 9160-9176 Sunset Boulevard Project. The analysis was prepared in accordance with the *CEQA Air Quality Handbook* prepared by the South Coast Air Quality Management District (SCAQMD, 1993).¹ Regional climate and meteorology, air quality monitoring data, and the area's attainment status with respect to criteria air pollutants are discussed. The report includes a description of federal, state, and local agencies that govern air quality and climate change, and their pertinent statutes and regulations. It identifies potential impacts of air pollutants of concern for this project, including criteria pollutants (i.e., pollutants for which national ambient air quality standards [NAAQS] have been established by the U.S. Environmental Protection Agency and the California Air Resources Board, and their precursors), mobile source air toxics, and carbon dioxide and other GHGs. The report describes the analytical methodologies and assumptions used for this study as well as the results of these analyses.

2.0 PROJECT DESCRIPTION

2.1 Project Overview

The City of West Hollywood (City) is the Lead Agency under the California Environmental Quality Act (CEQA). The proposed project would construct and operate a five-story commercial building, located at 9160-9176 Sunset Boulevard within the City of West Hollywood. The commercial building would have high turnover restaurant and office establishments on the ground floor, and office uses on the remaining four floors above. The proposed project would also develop a three-story underground parking garage underneath the proposed building. **Figure 2.1-1** shows the vicinity of the project, **Figure 2.1-2** shows its precise location, and **Figure 2.1-3** shows the project's site plan.

2.2 Project Design Features

The following project design features (PDFs) related to air quality and greenhouse gas emissions would be implemented in addition to the project characteristics noted above.

2.1.1 Air Quality

AQ-PDF-1: All construction off-road equipment will be Tier 4 Interim or better where applicable.

2.1.2 Greenhouse Gas Emissions

The Project would comply with the 2019 California Green Building Standards Code (CalGreen) (Part 11 of Title 24, California Code of Regulations). The following are proposed energy conservation

¹ Updates to the CEQA Air Quality Handbook are at http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.



measures that are beyond the minimum requirements of CalGreen. Emission reduction information, where available, is shown in parentheses.²

Energy Conservation and Efficiency

GHG-PDF-1: Project design will provide an energy efficiency exceeding Title 24, Part 6, California Energy Code baseline standard requirements by 10 percent, based on the 2019 Building Energy Efficiency Standards requirements.³

GHG-PDF-2: Use of natural heating and cooling features.

GHG-PDF-3: Use of improved insulation.

GHG-PDF-4: Installation of PV panels.

GHG-PDF-5: Use of efficient and durable roofing materials and exterior finishes.

GHG-PDF-6: Use of efficient interior finishes.

Water Conservation

GHG-PDF-7: Water-efficient plumbing fixtures (17 to 31% of GHG emissions associated with non-residential indoor water use).

Solid Waste Conservation

GHG-PDF-8: Use of recycled foundation materials.

Other

GHG-PDF-9: No combustion of natural gas (100% reduction in emissions from natural gas use).

Emission reduction information is from CAPCOA, 2010.

³ For analysis purposes, a value of 10% more efficient than Title 24 was used in the CalEEMod model.



Figure 2.1-1 PROJECT VICINITY

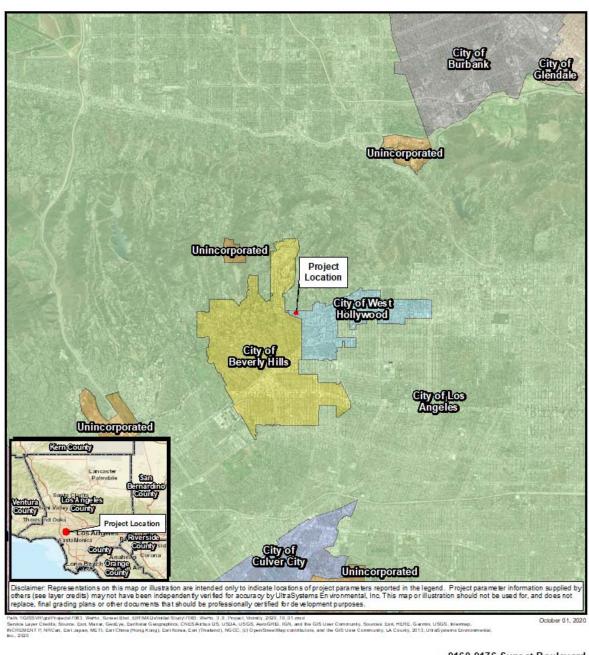
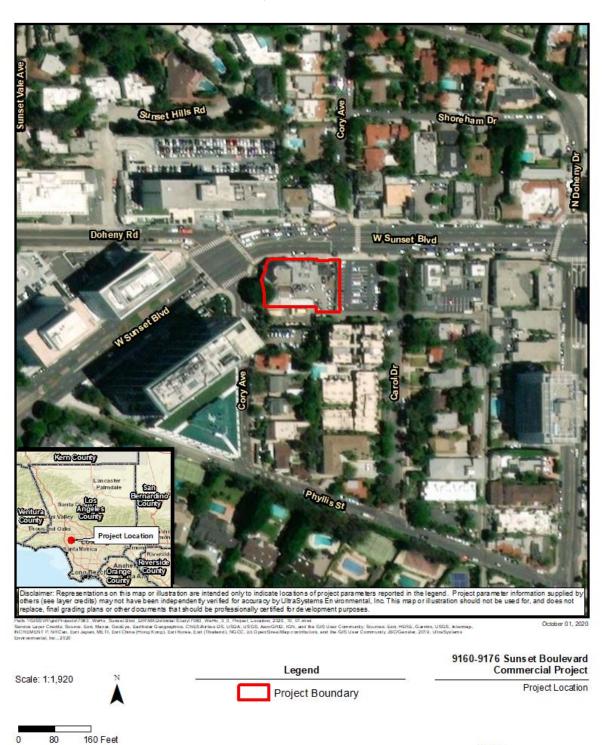






Figure 2.1-2 PROJECT LOCATION

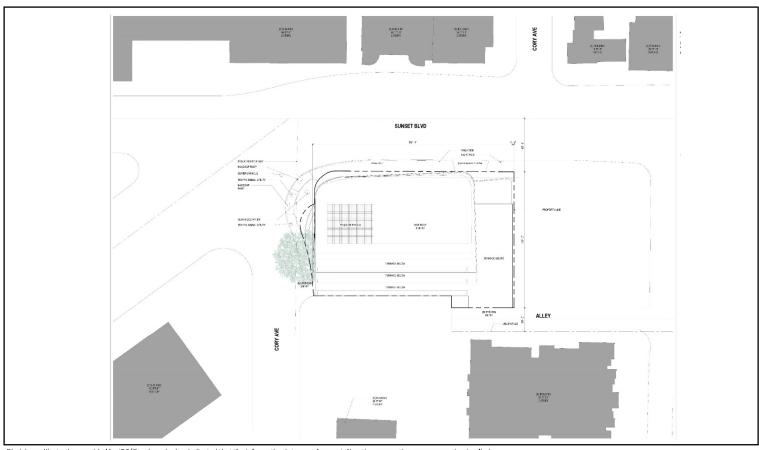


40 Meters

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Figure 2.1-3 PROPOSED SITE PLAN



Disclaimer: Illustration provided by JBC/Gensler, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Sources: JBC/Gensler, 2020.

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Environmental management planning

9160-9176 Sunset Boulevard Commercial Project

Proposed Site Plan



2.3 Project Construction and Phasing

2.3.1 Onsite Construction

Construction activities would include earthwork, rebar, structural steel, concrete slab, concrete panels, truss placement, mechanical, electrical, plumbing, glazing, roofing, landscaping, hardscape consisting of asphalt concrete, fencing, associated site utilities, site drainage, and any associated offsite work that may be required.

Construction would include excavation for construction of the proposed three-level underground parking structure. The finished floor of the bottom (B03) level of the parking structure would be 36 feet below ground surface, and the structure would span the entire footprint of the proposed building. Construction would involve approximately 25,000 cubic yards (cy) of soil export. Exported soil would be transported to Chiquita Canyon Sanitary Landfill west of the city of Santa Clarita, approximately 36 miles to the north.

For safety reasons, temporary barricades would be used to limit access to the site during project construction and allow for safe access for construction workers to be maintained throughout construction. It is anticipated that approximately 75 to 100 workers would be onsite during the peak construction phases.

The type of equipment utilized during construction is anticipated to include:

- Tractors, loaders, backhoes, dozers, excavators, skip loaders, scrapers, concrete trucks, concrete pumps, concrete vibrators, laser screeds, and dump trucks for site preparation and rough grading.
- Cranes, forklifts, backhoes, skip loaders, trucking, compacting equipment, manlifts, welders, paving-skip loaders, grading equipment, trucking and rollers for building construction.
- Skip loaders, backhoes, trenchers and trucking for utility improvements.
- Bobcats, air compressors, forklifts, and delivery trucks for landscaping and irrigation.

The majority of construction staging areas would be provided within the boundaries of the project site. The existing parking lane on Sunset Boulevard, along the project site boundary, would also be occupied during project construction and used for construction material deliveries and concrete placement activities.

Construction workers' vehicles and construction trucks and equipment would be parked onsite and/or on nearby vacant lots that would be leased for use as construction staging/parking areas. Construction workers would also be encouraged to carpool or use mass transit.

2.3.2 Offsite Improvements

Under the proposed project, offsite improvements would include construction of utility laterals connecting to utility mains in surrounding roadways.



2.3.3 Construction Schedule

Project construction is expected to start in December 2022 and require approximately $\bf 21$ months. The construction schedule by phase is listed below in $\bf Table~2.2-1$.

Table 2.2-1
CONSTRUCTION PHASING: SCHEDULE AND EQUIPMENT

Construction Phase	Schedule			Construction Equipment	Estimated Number of Construction Workers per day
	Duration in weeks	Beginning	Ending	Type and Number	
Demolition	2	12/1/2022	12/15/2022	Concrete/Industrial Saw (1), Rubber Tired Dozer (1), Tractor/Loader/Backhoe (3), Excavator (1)	5
Site Preparation	2	12/16/2022	12/29/2022	Grader (1), Rubber Tired Dozer (1), Tractor/Loader/Backhoe (1)	6
Grading	12	12/30/2022	3/23/2023	Grader (1), Rubber Tired Dozer (1), Tractor/Loader/Backhoe (2), Excavator (1)	15
Building Construction	60	3/24/2023	5/16/2024	Crane (1), Forklift (1), Generator Set (1), Tractor/Loader/Backhoe (1),	75
Paving	5	5/17/2024	6/20/2024	Cement and Mortar Mixer (1), Paver (1), Roller (1), Paving Equipment (1), Tractor/Loader/Backhoe (1), Welders (3), Cement and Mortar Mixers (2),	8
Architectural Coating	8	6/21/2024	8/15/2024	Air Compressor (1)	10



3.0 EXISTING CONDITIONS

3.1 Regional Climate

Air quality is affected by both the rate and location of pollutant emissions, and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality.

The project site is located in the South Coast Air Basin (SCAB), which includes all of Orange County and the non-desert portions of Los Angeles County, most of Riverside County, and the western portion of San Bernardino County - including some portions of what was previously known as the Southeast Desert Air Basin. The distinctive climate of the SCAB is determined by its terrain and geographic location. The SCAB is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains around its remaining perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds.

The vertical dispersion of air pollutants in the SCAB is hampered by the presence of persistent temperature inversions. An upper layer of dry air that warms as it descends characterizes high-pressure systems, such as the semi-permanent high-pressure zone in which the SCAB is located. This upper layer restricts the mobility of cooler marine-influenced air near the ground surface and results in the formation of subsidence inversions. Such inversions restrict the vertical dispersion of air pollutants released into the marine layer and, together with strong sunlight, can produce worst-case conditions for the formation of photochemical smog.

The atmospheric pollution potential of an area is largely dependent on winds, atmospheric stability, solar radiation, and terrain. The combination of low wind speeds and low inversions produces the greatest concentration of air pollutants. On days without inversions, or on days of winds averaging over 15 mph, smog potential is greatly reduced (SCAQMD, 1993).

The nearest National Weather Service station to the Project Site is in Westwood, approximately 5.4 miles southeast of the Project Site, at 34.04°N, 118.27°W. At the UCLA, California (049152) station (WRCC, 2021), the National Climatic Data Center period of record is 1933 through 2016. During the period of record, the average annual rainfall measured 17.48 inches, which occurs mostly during the winter and relatively infrequently during the summer. Monthly precipitation averages approximately 3.58 inches during the winter (December, January, and February), approximately 1.38 inches during the spring (March, April, and May), approximately 0.81 inch during the fall (September, October, and November), and approximately 0.05 inch during the summer (June, July, and August).

The average maximum and minimum monthly temperatures during the period of record were 71.4°F and 55°F respectively. Average winter (December, January, and February) high and low temperatures are approximately 66.33°F and 49.97°F, respectively and average summer (June, July, and August) high and low temperatures are approximately 76.07°F and 59.97°F, respectively (WRCC, 2021).



3.2 Regulatory Setting

3.2.1 Pollutants of Concern

Criteria Pollutants

Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and an ambient air quality standard has been established by the U.S. Environmental Protection Agency (EPA) and/or the California Air Resources Board (ARB). The criteria air pollutants of concern are nitrogen dioxide (NO_2), carbon monoxide, particulate matter, sulfur dioxide, lead, and ozone, and their precursors. Since the proposed project would not generate appreciable sulfur dioxide (SO_2) or lead (Pb) emissions,⁴ it is not necessary for the analysis to include those two pollutants. Presented below is a description of the criteria pollutants of concern and their known health effects.

Nitrogen oxides (NO_X) serve as integral participants in the process of photochemical smog production and are precursors for certain particulate compounds that are formed in the atmosphere and for ozone. A precursor is a directly emitted air contaminant that, when released into the atmosphere, forms, causes to be formed, or contributes to the formation of a secondary air contaminant for which an ambient air quality standard (AAQS) has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more AAQSs. When NO_X and volatile organic compounds (VOC) are released in the atmosphere, they can chemically react with one another in the presence of sunlight to form ozone. The two major forms of NO_X are nitric oxide (NO_X) and NO_X . NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_X is a reddish-brown pungent gas formed by the combination of NO_X and oxygen. NO_X acts as an acute respiratory irritant and eye irritant and increases susceptibility to respiratory pathogens.

Carbon monoxide (CO) is a colorless, odorless non-reactive pollutant produced by incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for most CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions: primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Particulate matter (PM) consists of finely divided solids or liquids, such as soot, dust, aerosols, fumes and mists. Two forms of fine particulate matter are now regulated. Respirable particles, or PM_{10} , include that portion of the particulate matter with an aerodynamic diameter of 10 micrometers (i.e., 10 one-millionths of a meter or 0.0004 inch) or less. Fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 micrometers (i.e., 2.5 one-millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural,

⁴ Sulfur dioxide emissions will be about 0.03 pound per day during construction and about 0.007 pound per day during operations.



construction, and transportation activities. However, wind action on the arid landscape also contributes substantially to the local particulate loading. Fossil fuel combustion accounts for a significant portion of $PM_{2.5}$. In addition, particulate matter forms in the atmosphere through reactions of NO_x and other compounds (such as ammonia) to form inorganic nitrates and sulfates.

 PM_{10} and $PM_{2.5}$ deposition in the lungs results in irritation that triggers a range of inflammation responses, such as mucus secretion and bronchoconstriction, and exacerbates pulmonary dysfunctions, such as asthma, emphysema, and chronic bronchitis. Sufficiently small particles may penetrate the bloodstream and impact functions such as blood coagulation, cardiac autonomic control, and mobilization of inflammatory cells from the bone marrow. Individuals susceptible to higher health risks from exposure to PM_{10} airborne pollution include children, the elderly, smokers, and people of all ages with low pulmonary/cardiovascular function. For these individuals, adverse health effects of PM_{10} pollution include coughing, wheezing, shortness of breath, phlegm, bronchitis, and aggravation of lung or heart disease, leading for example to increased risks of hospitalization and mortality from asthma attacks and heart attacks.

Reactive organic gases (ROG) are compounds comprised primarily of atoms of hydrogen and carbon that have high photochemical reactivity. The major source of ROG is the incomplete combustion of fossil fuels in internal combustion engines. Other sources of ROG include the evaporative emissions associated with the use of paints and solvents, the application of asphalt paving and the use of household consumer products. Some ROG species are listed toxic air contaminants, which have been shown to cause adverse health effects; however, most adverse effects on human health are not caused directly by ROG, but rather by reactions of ROG to form other criteria pollutants such as ozone. ROG are also transformed into organic aerosols in the atmosphere, contributing to higher levels of fine particulate matter and lower visibility. It should be noted that there are no state or national ambient air quality standards for ROG because ROGs are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formation of ozone. The term "ROG" is used by the CARB for air quality analysis and is defined the same as the federal term "volatile organic compound" (VOC).

Ozone (O_3) is a secondary pollutant produced through a series of photochemical reactions involving ROG and NO_x. O_3 creation requires ROG and NO_x to be available for approximately three hours in a stable atmosphere with strong sunlight. Because of the long reaction time, peak ozone concentrations frequently occur downwind of the sites where the precursor pollutants are emitted. Thus, O_3 is considered a regional, rather than a local, pollutant. The health effects of O_3 include eye and respiratory irritation, reduction of resistance to lung infection and possible aggravation of pulmonary conditions in persons with lung disease. O_3 is also damaging to vegetation and untreated rubber.

Toxic Air Contaminants (TACs)

In addition to the above-listed criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. Assembly Bill (AB) 1807⁵ sets forth a procedure for the identification and control of TACs in California. It defines a TAC as an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Almost 200 compounds have been designated as TACs in California. The ten TACs posing the greatest known health risk in California, based primarily on ambient air quality data, are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium,

⁵ Enacted in September 1983. Health and Safety Code § 39650 et seq., Food and Agriculture Code § 14021 et seq.



formaldehyde, methylene chloride, para-dichlorobenzene, perchloroethylene, and diesel particulate matter (DPM).

TACs do not have AAQS. Since no safe levels of TACs can be determined, there are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure.

Greenhouse Gases

Constituent gases that trap heat in the Earth's atmosphere are called GHGs, analogous to the way a greenhouse retains heat. GHGs play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface, which would otherwise have escaped into space. Without the natural heat-trapping effect of GHG, the earth's surface would be about 34°F cooler (California Environmental Protection Agency, 2006, p. 7). This natural phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate. However, anthropogenic emissions of these GHGs in excess of natural ambient concentrations are responsible for the enhancement of the "greenhouse effect" and have led to a trend of unnatural warming of the Earth's climate, which is known as global warming or climate change, or more accurately global climate disruption. Emissions of these gases that induce global climate disruption are attributable to human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors.

GHGs are defined under the California Global Warming Solutions Act of 2006 (AB 32) as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6). Associated with each GHG species is a "global warming potential" (GWP), which is a value used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the heat-absorbing ability of each gas relative to that of CO_2 , as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years). The GWPs of CH_4 and N_2O are 25 and 298, respectively (GMI, 2018). "Carbon dioxide equivalent" (CO_2e) emissions are calculated by weighting each GHG compound's emissions by its GWP and then summing the products. HFCs, PFCs, and SF_6 are not emitted in significant amounts by project sources, so they are not discussed further.

Carbon Dioxide (CO_2). Carbon dioxide is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. CO_2 is produced when an organic carbon compound (such as wood) or fossilized organic matter (such as coal, oil, or natural gas) is burned in the presence of oxygen. Since the industrial revolution began in the mid-1700s, industrial activities have increased in scale and distribution. Prior to the industrial revolution, CO_2 concentrations were stable at a range of 275 to 285 ppm (IPCC, 2007a). The National Oceanic and Atmospheric Administration's Earth System Research Laboratory indicates that global concentration of CO_2 was 403.96 ppm in October 2017 (NOAA, 2018). These concentrations of CO_2 exceed by far the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores.

Methane (CH₄). Methane is a colorless, odorless non-toxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH₄ is combustible, and is the main constituent of natural gas, a fossil fuel. CH₄ is released when organic matter decomposes in low oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Anthropogenic sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies, and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added



to the atmospheric concentration of CH₄. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide (N_2O). Nitrous oxide is a colorless, non-flammable gas with a sweetish odor, commonly known as "laughing gas," and sometimes used as an anaesthetic. N_2O is naturally produced in the oceans and in rainforests. Manmade sources of N_2O include the use of fertilizers in agriculture, nylon and nitric acid production, cars with catalytic converters and the burning of organic matter. Concentrations of N_2O also began to rise at the beginning of the industrial revolution.

3.2.2 Applicable Air Quality Regulations

Federal Regulations

Criteria Pollutants

The Federal Clean Air Act (CAA), passed in 1970, established the national air pollution control program. The basic elements of the CAA are the National Ambient Air Quality Standards (NAAQS) for criteria air pollutants, hazardous air pollutants standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The NAAQS are the maximum allowable concentrations of criteria pollutants, over specified averaging periods, to protect human health. The CAA requires that the EPA establish NAAQS and reassess, at least every five years, whether they are adequate to protect public health, based on current scientific evidence. The NAAQS are divided into primary and secondary standards; the former are set to protect human health within an adequate margin of safety, and the latter to protect environmental values, such as plant and animal life.

Data collected at permanent monitoring stations are used by the EPA to classify regions as "attainment" or "nonattainment," depending on whether the regions have met the requirements stated in the primary NAAQS. Nonattainment areas are subject to additional restrictions, as required by the EPA.

The FCAA Amendments in 1990 substantially revised the planning provisions for those areas not currently meeting NAAQS. The Amendments identify specific emission reduction goals that require both a demonstration of reasonable further progress and attainment, and incorporate more stringent sanctions for failure to attain the NAAQS or to meet interim attainment milestones.

Greenhouse Gases

The USEPA collects several types of GHG emissions data. These data help policy makers, businesses, and the USEPA track GHG emissions trends and identify opportunities for reducing emissions and increasing efficiency. The USEPA has been maintaining a national inventory of GHG emissions since 1990 and in 2009 established mandatory reporting of GHG emissions from large GHG emissions sources.

Before January 20, 2017, the USEPA was implementing regulatory initiatives such as mobile source GHG emission standards and the Clean Power Plan; partnering with the private sector through voluntary energy and climate programs; and reducing USEPA's carbon footprint with the federal GHG requirements and USEPA's Strategic Sustainability Performance Plan. The recently concluded Trump



administration had a different strategy in relation to climate change and took the USEPA in a new direction (USEPA, 2017). Executive Order on Energy Independence (WH, 2017) (Executive Order 13783) specifically addressed revisions in the Clean Power Plan and standards of performance for GHGs for new stationary sources; CH₄ standards for the oil and gas sector; and light-duty vehicle GHG standards. On January 20, 2021, President Biden issued Executive Order 13990 (White House, 2021), which rescinded the Executive Order on Energy Independence, along with several other executive orders concerning energy, climate, and environmental protection. Among the stated goals of Executive Order 13990 are "to reduce greenhouse gas emissions" and "to bolster resilience to the impacts of climate change." Various federal agencies are restoring prior regulations and developing new ones to further these policies.

State Regulations

Criteria Pollutants

The State of California began to set California ambient air quality standards (CAAQS) in 1969 under the mandate of the Mulford-Carrell Act. There were no attainment deadlines for the CAAQS originally. However, the State Legislature passed the California Clean Air Act (California CAA) in 1988 to establish air quality goals, planning mechanisms, regulatory strategies, and standards of progress to promote their attainment. The ARB, which became part of the California Environmental Protection Agency (Cal/EPA) in 1991, is responsible for ensuring implementation of the California CAA, responding to the federal CAA, and for regulating emissions from motor vehicles and consumer products.

The California CAA requires attainment of CAAQS by the earliest practicable date. The state standards are generally more stringent than the corresponding federal standards. Attainment plans are required for air basins in violation of the State O_3 , PM_{10} , CO, SO_2 , or NO_2 standards. Responsibility for achieving state standards is placed on the CARB and local air pollution control districts. District plans for nonattainment areas must be designed to achieve a 5% annual reduction in emissions. Preparation of and adherence to attainment plans are the responsibility of the local air pollution districts or air quality management districts.

Table 3.2-1 lists the NAAQS and CAAQS for criteria pollutants.

<u>Table 3.2-1</u> AMBIENT AIR QUALITY STANDARDS FOR CRITERIA AIR POLLUTANTS

Dollutout	Averaging California		a Standards¹		Federal Standards ²		
Pollutant	Time	Concentration ³	Method ⁴	Primary ^{3,5}	Secondary 3,6	Method ⁷	
Ozone	1 Hour	0.09 ppm (180 μg/m³)	Ultraviolet	_	Same as Primary	Tile on the last	
(O ₃) ⁸	8 Hour	0.07 ppm (137 μg/m³)	Photometry	0.070 ppm (137 μg/m³)	Standard	Ultraviolet Photometry	
Respirable	24 Hour	50 μg/m ³		150 μg/m ³		Inertial Separation and Gravimetric Analysis	
Particulate Matter (PM ₁₀) ⁹	Annual Arithmetic Mean	20 μg/m ³	Gravimetric or Beta Attenuation	_	Same as Primary Standard		
Fine Particulate	24 Hour	No Separate State	e Standard	35 μg/m ³	Same as Primary Standard	Inertial Separation	
(PM _{2.5}) ⁹	Annual Arithmetic Mean	12 μg/m³	Gravimetric or Beta Attenuation	12 μg/m ³	15 μg/m ³	Analysis	



Pollutant	Averaging	Californi	a Standards ¹		Federal Standards ²		
Ponutant	Time	Concentration ³	Method ⁴	Primary ^{3,5}	Secondary 3,6	Method ⁷	
	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive	35 ppm (40 mg/m³)	_	Non-Dispersive Infrared Photometry	
(CO)	8 Hour	9.0 ppm (10 mg/m³)	Infrared Photometry (NDIR)	9 ppm (10 mg/m³)		(NDIR)	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		_	_	_	
Nitrogen Dioxide	1 Hour	0.18 ppm (339 μg/m³)	Gas Phase	100 ppm (188 μg/m³)	_	Gas Phase	
(NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	Chemiluminescence	0.053 ppm (100 μg/m³)	Same as Primary Standard	Chemiluminescence	
	1 Hour	0.25 ppm (655 μg/m³)		75 ppm (196 μg/m³)	_		
Sulfur Dioxide	3 Hour	_	Ultraviolet Fluorescence	_	0.5 ppm (1300 μg/m³)	Ultraviolet Fluorescence;	
(SO ₂) ¹¹	24 Hour	0.04 ppm (105 μg/m³)		0.14 ppm (for certain areas) ¹¹	_	Spectrophotometry (Pararosaniline Method)	
	Annual Arithmetic Mean			0.030 ppm (for certain areas) ¹¹			
	30 Day Average	1.5 μg/m ³		_		_	
Lead ^{12,13}	Calendar Quarter	_	Atomic Absorption	1.5 μg/m ³ (for certain areas) ¹²	Same as Primary	High Volume Sampler	
	Rolling 3-Month Average ^j	_		0.15 μg/m ³	Standard	and Atomic Absorption	
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape		No		
Sulfates	24 Hour 25 µg/m³		Ion Chromatography	National			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	Ultraviolet Fluorescence				
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 μg/m ³)	Gas Chromatography	Standards			

- 1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM₁₀, PM_{2.5}, and visibility reduction particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- 2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar with a 24-hour average concentration above 150 μg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- 4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by EPA.



Pollutant	Averaging	California Standards ¹		Federal Standards ²		
Ponutant	Time	Concentration ³	Method ⁴	Primary ^{3,5}	Secondary 3,6	Method ⁷

- 8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- 9. As of December 14, 2012, the annual primary $PM_{2.5}$ standard changed from 15 μ g/m³ to 12 μ g/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μ g/m³, as was the annual secondary standard of 15 μ g/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μ g/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

 * Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case,
- 12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.
- 15. Lake Tahoe Air Basin standards, respectively.

the national standard of 75 ppb is identical to 0.075 ppm.

Greenhouse Gas Emissions

Executive Order S 3-05. On June 1, 2005, the governor issued Executive Order (EO) S 3-05, which set the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels;
- By 2050, reduce GHG emissions to 80% below 1990 levels.

To meet these targets, the Climate Action Team (CAT)⁶ prepared a report to the Governor in 2006 that contains recommendations and strategies to help ensure the targets in EO S-3-05 are met.

Assembly Bill 32 (AB 32). In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. The ARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming to reduce emissions of GHGs. AB 32 also requires that by January 1, 2008, the ARB must determine what the statewide GHG emissions level was in 1990, and it must approve a statewide GHG emissions limit, so it may be applied to the 2020 benchmark. The ARB approved a 1990 GHG

The Climate Action Team (CAT) members are state agency secretaries and the heads of agencies, boards, and departments, led by the Secretary of the California Environmental Protection Agency (Cal/EPA). They coordinate statewide efforts to implement global warming emission reduction programs and the state's Climate Adaptation Strategy.



emissions level of 427 million metric tons of CO₂e (MMTCO₂e), on December 6, 2007 in its Staff Report. Therefore, in 2020, emissions in California were required to be at or below 427 MMTCO₂e.

Under the "business as usual or (BAU)" scenario established in 2008, statewide emissions were increasing at a rate of approximately one percent per year as noted below. It was estimated that the 2020 estimated BAU of 596 MMTCO₂e would have required a 28% reduction to reach the 1990 level of 427 MMTCO₂e.

Climate Change Scoping Plan. The Scoping Plan released by the ARB in 2008 (ARB, 2008) outlined the state's strategy to achieve the AB 32 goals. This Scoping Plan, developed by ARB in coordination with the CAT, proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. It was adopted by ARB at its December 2008 meeting. According to the Scoping Plan, the 2020 target of 427 MMTCO₂e requires the reduction of 169 MMTCO₂e, or approximately 28.3%, from the state's projected 2020 BAU emissions level of 596 MMTCO₂e.

In August 2011, the Scoping Plan was re-approved by the Board and includes the Final Supplement to the Scoping Plan Functional Equivalent Document (ARB, 2011). This document includes expanded analysis of project alternatives and updates the 2020 emission projections by considering updated economic forecasts. The updated 2020 BAU estimate of 507 MMTCO₂e yielded that only a 16% reduction below the estimated new BAU levels would be necessary to return to 1990 levels by 2020. The 2011 Scoping Plan expands the list of nine Early Action Measures into a list of 39 Recommended Actions contained in Appendices C and E of the Plan.

In May 2014, ARB developed, in collaboration with the CAT, the First Update to California's Climate Change Scoping Plan (Update) (ARB, 2014), which shows that California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32. In accordance with the United Nations Framework Convention on Climate Change, ARB has mostly transitioned to the use of the Intergovernmental Panel on Climate Change's (IPCC's) Fourth Assessment Report (AR4)'s 100-year GWPs (IPCC, 2007b) in its climate change programs. ARB recalculated the 1990 GHG emissions level with the AR4 GWPs to be 431 MMTCO₂e; therefore the 2020 GHG emissions limit established in response to AB 32 is now slightly higher than the 427 MMTCO₂e in the initial Scoping Plan.

In January 2017, ARB published the 2017 Scoping Plan (ARB, 2017) which builds upon the former Scoping Plan and Update by outlining priorities and recommendations for the State to achieve its 2030 GHG target of a 40% reduction in GHGs by 2030, compared to 1990 levels. The major elements of the framework proposed are enhancement of the Renewables Portfolio Standard (RPS) and the Low Carbon Fuel Standard; a Mobile Source Strategy, Sustainable Freight Action Plan, Short-Lived Climate Pollutant Reduction Strategy, Sustainable Communities Strategies, and a Post-2020 Cap-and-Trade Program; a 20% reduction in GHG emissions from the refinery sector; and an Integrated Natural and Working Lands Action Plan.

Renewables Portfolio Standard (Scoping Action E-3). The California Energy Commission estimates that in 2000 about 12% of California's retail electric load was met with renewable resources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. California's current RPS is intended to



increase that share to 33% by 2020. Increased use of renewables will decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector. Most recently, Governor Brown signed into legislation Senate Bill (SB) 350 in October 2015, which requires retail sellers and publicly-owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030.

Senate Bill 375 (SB 375). SB 375 was signed by the governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions and is responsible for over 40% of the GHG emissions in California, with automobiles and light trucks alone contributing almost 30%. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology. However, significant reductions from changed land use patterns and improved transportation also are necessary. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Executive Order B-30-15. On April 29, 2015, the Governor issued EO B-30-15, which added an interim target of GHG emissions reductions to help ensure that the state meets its 80% reduction by 2050, as set in EO S-3-05. The interim target is reducing GHG emissions by 40% by 2030. It also directs state agencies to update the Scoping Plan, update the Adaptation Strategy every three years, and take climate change into account in agency planning and investment strategies. Additionally, it requires the state's Five-Year Infrastructure Plan to take current and future climate change impacts into account in all infrastructure projects.

Regional

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is responsible for maintaining and improving air quality in all of Orange County and the urbanized portions of Los Angeles, Riverside and San Bernardino Counties. Through its regulations and rules, it implements state and federal laws and regulations within its geographic distribution.

The SCAQMD is required to produce plans to show how air quality will be improved in the region. The CCAA requires that these plans be updated triennially to incorporate the most recent available technical information.⁸ A multi-level partnership of governmental agencies, at the federal, state, regional, and local levels, implements the programs contained in these plans. Agencies involved include the USEPA, the ARB, local governments, Southern California Association of Governments (SCAG), and the SCAQMD. The SCAQMD and the SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. The SCAQMD updates its AQMP every three years.

The 2016 AQMP was adopted by the SCAQMD Board on March 3, 2017, and was submitted to the ARB on March 10, 2017 to become part of the State Implementation Plan (SIP) (SCAQMD, 2017). The ARB adopted the 2016 AQMP, and the 2016 State SIP Strategy with its complementary commitments, on

⁷ This goal was surpassed in 2018.

⁸ CCAA of 1988.



March 23, 2017 and submitted them to USEPA as revisions to the California SIP on April 27, 2017 (ARB, 2017a; ARB, 2018b). The 2016 AQMP focuses largely on reducing NO $_{\rm X}$ emissions as a means of attaining the 1979 1-hour ozone standard by 2022, the 1997 8-hour ozone standard by 2023, and the 2008 8-hour standard by 2031 (SCAQMD, 2017). The AQMP prescribes a variety of current and proposed new control measures, including a request to the USEPA for increased regulation of mobile source emissions. The NO $_{\rm X}$ control measures will also help the Basin attain the 24-hour standard for PM $_{\rm 2.5}$.

All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction of the project may include, but are not limited to, the following:

Rule 401 - Visible Emissions

This Rule prohibits discharge into the atmosphere from any single source of emission whatsoever of any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

Rule 402 - Nuisance

This Rule prohibits discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Rule 403 - Fugitive Dust

This rule is intended to reduce the amount of PM entrained in the ambient air from anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or man-made condition capable of generating fugitive dust. Some specific requirements of Rule 403 that apply to all construction projects, regardless of the size of their disturbed areas, are addressed below:

- No person shall cause or allow emissions of fugitive dust to remain visible in the atmosphere beyond the property line of the emission source or to exceed 20% opacity if the dust emission is a result of a moving motorized vehicle.
- Apply applicable Best Available Control Measures in Table 1 of Rule 403 to minimize fugitive dust emissions during active operation.
- No person shall cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter when determined as the difference between upwind and downwind samples collected on high-volume PM samplers or other USEPA approved equivalent method for PM₁₀ monitoring at the project limits for a five-hour period during the time of Active Operations. Sampling will only occur if a complaint is reported to the SCAQMD, in which case the decision to conduct sampling will be made by SCAQMD, and SCAQMD will conduct sampling.

⁹ SCAQMD Rule 403(d), as Amended June 3, 2005.



- No person shall allow track-out to extend 25 feet or more in cumulative length from the point
 of origin from an active operation, and all track-out from an active operation shall be removed
 at the end of each workday or evening shift.
- No person shall conduct an active operation with a disturbed surface area of five or more acres, or with a daily import or export of 100 cubic yards or more of bulk material without at least one of the measures listed under subparagraph (d)(5) of Rule 403 at each vehicle egress.

Rule 445 - Wood-burning Devices

The purpose of this rule is to reduce the emission of PM from wood-burning devices. Section (d)(1) requires that no person shall permanently install a wood-burning device into any new development.¹⁰

Rule 1113 - Architectural Coatings

The purpose of this rule is to limit the VOC content of architectural coatings used in the District and applies to any person who supplies, sells, markets, offers for sale, or manufactures any architectural coating that is intended to be field applied within the District and any person who applies, stores at a worksite, or solicits the application of any architectural coating within the District.¹¹

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the federally-designated metropolitan planning agency for Ventura, Los Angeles, Riverside, San Bernardino and Imperial Counties. It works together with the SCAQMD to prepare the above-described AQMP.

Local

City of West Hollywood General Plan

As discussed, and documented in **Section 4.11** of the EIR for this project, the project site has a General Plan land use and zoning designation of Sunset Specific Plan (SSP) (City of West Hollywood, 2010; West Hollywood, 2018). More specifically, the project site is located within Area 8 – West End of the SSP. Area 8 – West End has the largest concentration of office buildings on the Sunset Strip, and has a goal to accommodate additional office buildings within this area and provide space for "creative" industries and anchor businesses (City of West Hollywood, 2019, p. 241). The following are the applicable air quality goals and policies from the City's Infrastructure, Resources, and Conservation Element (Rami + Associates, Inc., 2011, p. 9-16), and the Mobility Element (Rami + Associates, Inc., 2011, p. 6-24 to 6-30).

Infrastructure, Resources, and Conservation Element

The most relevant goal of this element is *Goal IRC-7: Improve air quality and reduce emissions of air pollution*. Its intent is to prioritize the regulation and limiting of stationary and mobile sources of air pollution, and support techniques and technologies that will reduce emissions within the City and region. Policies under this goal are:

¹⁰ SCAQMD Rule 445(d), as Adopted May 3, 2013.

¹¹ SCAQMD Rule 1113, as Amended February 5, 2016.



- **IRC-7.1** The City will protect its air quality and seek to improve overall respiratory health for residents through regulation of private and commercial, stationary, and mobile sources of air pollution.
- **IRC-7.2** The City supports land use and transportation strategies to reduce driving rates and resulting air pollution, including pollution from commercial and passenger vehicles.
- **IRC-7.3** The City will promote fuel efficiency and cleaner fuels for vehicles as well as construction and maintenance equipment by requesting that City contractors provide cleaner fleets.
- **IRC-7.4** The City prohibits combustion or gasoline powered engines in leaf blowers.
- **IRC-7.5** The City should discourage the use of equipment with two-stroke engines and publicize the benefits and importance of alternative technologies.
- IRC-7.6 The City will support increased local access to cleaner fuels and cleaner energy by encouraging fueling stations that provide cleaner fuels and energy to the community.
- IRC-7.7 The City will collaborate with other agencies within the region to improve air
 quality and meet or exceed state and federal air quality standards through regional
 efforts to reduce air pollution from mobile sources, including trucks and passenger
 vehicles.

Mobility Element

A comprehensive multi-modal transportation system is critical in West Hollywood's urbanized environment. In addition to the direct transportation-related benefits, there are many related co-benefits to a multi-modal transportation system and reduced auto use.

Public Health: In recent years, there has been significant research about the links between health and mobility. Walkable communities generally have lower rates of obesity and heart disease, fewer air quality issues, and higher levels of physical activity by residents

Environment: Less auto use means less air pollution, soil and water pollution, and greenhouse gas emissions. Today and into the future, autos and trucks will continue to emit significant amounts of pollutants. These pollutants undermine our air quality, flow into our storm drains, and coat our streets, buildings, and open spaces. In addition, transportation is responsible for the greatest proportion of greenhouse gas emissions in the City (62% as of 2008)

The Mobility Element contains the following goals and policies that affect air quality in the city and region:

Goal M-1: Develop a world-class transit system in West Hollywood

Goal M-2: Collaborate on regional transportation solutions that improve mobility, quality of life, and environmental outcomes



- **M-2.5** Develop programs and strategies that work to achieve greenhouse gas or VMT reduction standards established by regional, state, and/or federal agencies.
- **M-2.7** Pursue multi-jurisdictional car-sharing and bike-sharing programs with regional partners including the Westside Cities and SCAG.

Goal M-4: Create a comprehensive bicycle network throughout the City

• **M-4.1** Implement improvements identified in the adopted Bicycle and Pedestrian Mobility Plan (2003) as funding becomes available.

Goal M-5: Create an environmentally and financially sustainable transportation network that provides for the mobility and livability needs of West Hollywood residents, businesses, and visitors

- **M-5.2** Prioritize property access to promote transit, walking, and bicycling over auto access.
- **M-5.4** Where possible, optimize roadway and signal systems with appropriate technologies to support access and multi-modal travel.
- **M-5.10** Encourage the concept of shared streets in residential areas.

Goal M-6: Utilize Transportation Demand Management strategies to reduce auto travel

- **M-6.1** Maintain and periodically update a Transportation Demand Management (TDM) Ordinance to reduce auto trips associated with new development.
- **M-6.5** Regularly study the community's travel characteristics to identify actions and techniques for reducing travel demand.
- **M-6.8** Implement car-sharing and bike-sharing programs for City employees.

Goal M-7: Protect and preserve residential neighborhoods from intrusion of non-residential traffic

- **M-7.1** Support the Neighborhood Traffic Management Program.
- M-7.2 Maintain an established process of including neighborhood, businesses and other affected parties in discussions of neighborhood traffic management issues and resolutions.
- **M-7.4** Manage traffic speeds and volumes on neighborhood streets to reduce cut through traffic.

Goal M-8: Manage parking supply to serve residents, businesses and visitors

Goal M-9: Facilitate sustainable, effective, and safe movement of goods and commercial vehicles

- **M-9.1** Establish and designate a system of truck routes on specified arterial streets to minimize the negative impacts of trucking through the City.
- M-9.3 Utilize alleys for access to parking, delivery loading/unloading and trash collection and, where possible, provide additional green space and pedestrian amenities.
- **M-9.4** Encourage operators of commercial vehicles doing business in West Hollywood to utilize technologies that minimize air pollution, fuel use, and greenhouse gas emissions.
- **M-9.5** Prohibit commercial vehicles from excessive idling during deliveries and while parked.
- **M-9.7** Continue to prohibit mobile advertising to avoid unnecessary traffic congestion and air pollution.

City of West Hollywood Climate Action Plan

The City of West Hollywood approved its Climate Action Plan (CAP) in 2011. The purpose of the CAP includes reducing annual communitywide GHG emissions by 20 to 25 percent below 2008 business-as-usual emission levels by 2035 (City of West Hollywood, 2011, p. 1-1).

Greenhouse Gas Emission Sources

Communitywide GHG emissions are anticipated to increase by 11% in 2020 over 2008 levels, and by 22% in 2035 over 2008 levels. A summary of West Hollywood's communitywide 2008, 2020, and 2035 emissions is provided in **Table 3.2-2**.

Table 3.2-2
WEST HOLLYWOOD BASELINE AND PROJECTED GHG EMISSIONS AND PERCENT
CONTRIBUTIONS

Emissions Sector	2008 Baseline MT CO2e (percent of total emissions)	2020 Baseline MT CO ₂ e (percent of total emissions)	2035 Baseline MT CO2e (percent of total emissions)
Transportation	361,350 (62%)	412,450 (64%)	456,600 (64%)
Commercial/Industrial Energy Use	116,197 (20%)	116,028 (18%)	127,653 (18%)
Residential Energy Use	70,378 (12%)	77,519 (12%)	84,081 (12%)
Wastewater Treatment	20,981 (4%)	22,768 (4%)	24,974 (4%)
Solid Waste	8,543 (1%)	9,267 (1%)	10,172 (1%)
Water Consumption	5,764 (1%)	8,200 (1%)	8,971 (1%)



Total	583,213 (100%)	646,232 (100%)	712,451 (100%)
GHG Emissions per Service Population	9.7	9.9	9.8

Notes: CO_2e = carbon dioxide equivalent; MT= metric tons; service population includes population and jobs in the city of West Hollywood.

Source: City of West Hollywood, 2011, p. 2-3.

The City Council has established a GHG emissions reduction target of 20 to 25% below 2008 emission levels by 2035. To achieve 20%, communitywide GHG emissions must be reduced to approximately 466,000 MT CO2e per year by 2035. To achieve 25%, communitywide GHG emissions must be reduced to approximately 437,000 MT CO2e per year by 2035 (City of West Hollywood, 2011, p. 2-3).

Emission Reduction Strategies

The CAP lays out seven GHG reduction strategies for achieving the desired 20-25% GHG reduction targets. The seven strategies, with a brief summary for each strategy, are listed below (City of West Hollywood, 2011, p. 3-1):

Community Leadership and Engagement: the intent of this strategy is for the City to provide an example for the community by reducing municipal emissions and engage City staff to further facilitate sustainability practices and programs in municipal operations and throughout the community.

Land Use and Community Design: the land use and community design strategy encourages specific types of development in key areas to help achieve GHG emission reduction goals, promote transit, walking and bicycling as viable transportation modes, and help improve the physical health of residents.

Transportation and Mobility: the transportation and mobility strategy identifies opportunities to improve mobility such as walking, bicycling, and transit use, and to decrease the need to drive.

Energy Use and Efficiency: the energy use and efficiency strategy recommends ways to increase energy efficiency in existing buildings, enhance energy performance for new construction, and increase use of renewable energy.

Water Use and Efficiency: the intent of this strategy is to conserve water through efficient use and conservation.

Waste Reduction and Recycling: this strategy builds on past City successes by increasing waste diversion, reducing consumption of materials that otherwise end up in landfills, and increasing recycling.

Green Space: this strategy expands and improves green spaces to reduce the urban heat island effect, capture carbon emissions, and enhance the community



The following are the applicable measures from the seven strategies that apply to the proposed project (City of West Hollywood, 2011, p. 3-11 to 3-45).

Land Use and Community Design

LU-1.1: Facilitate the establishment of mixed-use, pedestrian- and transit-oriented development along the commercial corridors and in Transit Overlay Zones.

Transportation and Mobility

- **T-2.1:** Increase the bicycle mode share by providing accessible, convenient, and attractive bicycle infrastructure.
- **T-2.2:** Install bike racks and bike parking in the city where bike parking infrastructure currently does not exist.
- **T-3.2:** Expand locally-managed transportation services and provide education on public transportation options.
- **T-4.2:** Pursue a car sharing program with car-share providers and regional partners including the City of Los Angeles, SCAG, and the Westside Cities Council of Governments.
- **T-4.3:** Assess and implement parking strategies in commercial corridors and in the Transit Overlay Zone.

Energy Use and Efficiency

- **E-2.2:** Require all new construction to achieve California Building Code Tier II Energy Efficiency Standards (§ 503.1.2).
- **E-3.1:** Require that all new construction and condominium conversions be sub-metered to allow each tenant the ability to monitor their own energy and water use.
- **E-3.2:** Require the use of recycled materials for 20% of construction materials in all new construction.
- **E-3.4:** Facilitate the installation of solar photovoltaic systems on multi-family residential, commercial, and industrial buildings, and parking lots.

Waste Reduction and Recycling

SW-1.3: Encourage the use of reusable and biodegradable materials in retail and commercial establishments.

Green Space

G-1.1: Increase and enhance the City's urban forest to capture and store carbon and reduce building energy consumption.



G-1.2: Establish a green roof and roof garden program to standardize, promote, and incentivize green roofs and roof gardens throughout the City.

3.2.3 Air Quality Plans

The SCAQMD is required to produce plans to show how air quality will be improved in the region. The California Clean Air Act (CCAA) requires that these plans be updated triennially to incorporate the most recent available technical information. A multi-level partnership of governmental agencies at the federal, state, regional, and local levels implement the programs contained in these plans. Agencies involved include the USEPA, ARB, local governments, Southern California Association of Governments (SCAG), and SCAQMD. The SCAQMD and the SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SCAB. The SCAQMD updates its AQMP every three years.

The 2016 AQMP (SCAQMD, 2017) was adopted by the SCAQMD Board on March 3, 2017 and submitted to the ARB. On March 10, 2017 it was made part of the State Implementation Plan (SIP), which was submitted to the USEPA (Corey, 2017). It focuses largely on reducing NO_X emissions as a means of attaining the 1979 1-hour ozone standard by 2022, the 1997 8-hour ozone standard by 2023, and the 2008 8-hour standard by 2031. The AQMP prescribes a variety of current and proposed new control measures, including a request to the USEPA for increased regulation of mobile source emissions. The NO_X control measures will also help the Basin attain the 24-hour standard for $PM_{2.5}$.

3.3 Regional Air Quality

Table 3.3-1 shows the area designation status of the SCAB for each criteria pollutant for both the NAAQS and CAAQS. Based on regional monitoring data, the SCAB is currently designated as a non-attainment area for O_3 and $PM_{2.5}$; a federal maintenance area for CO and NO_2 ; and an attainment area for PM_{10} , $PM_{2.5}$, and SO_2 .^{13,14} Designation of the SCAB as a maintenance area means that, although the Basin has achieved compliance with the NAAQS for CO and NO_2 , control strategies that were used to achieve compliance must continue. The Federal ozone classification is "extreme" (USEPA, 2021a; USEPA, 2021b). An extreme non-attainment area has an 8-hour ozone design value of 0.175 ppm and above (USEPA, 2018), and has the attainment deadline of June 15, 2024. On June 26, 2013, the EPA approved, as a revision to the California State Implementation Plan (SIP), the State's request to redesignate the South Coast Air Basin to attainment for the 24-hour PM_{10} NAAQS. The EPA is also approving the PM_{10} maintenance plan and the associated PM_{10} motor vehicle emissions budgets for use in transportation conformity determinations necessary for the South Coast PM_{10} area. Finally, the EPA approved the attainment year emissions inventory. The EPA took these actions because the SIP revision meets the requirements of the Clean Air Act (CAA) and EPA guidance for such plans and motor vehicle emissions budgets.¹⁵

¹² CCAA of 1988.

According to the SCAQMD, the "Basin has met the PM_{10} standards at all stations and a request for re-designation to attainment is pending with U.S. EPA." (SCAQMD Board Meeting, December 7, 2012, Agenda Item 30, p. 6.)

¹⁴ On July 8, 2016, USEPA made a finding that the South Coast has attained the 1997 24-hour and annual PM_{2.5} standards based on 2011-2013 data. https://www.regulations.gov/document?D=EPA-R09-OAR-2014-0708-0081. This determination became effective August 24, 2016.

[&]quot;Approval and Promulgation of Implementation Plans; Designation of Areas for Air Quality Planning Purposes; California; South Coast Air Basin; Approval of PM10 Maintenance Plan and Redesignation to Attainment for the PM10 Standard." Federal Register 78 (123): 38223-38226. http://www.gpo.gov/fdsys/pkg/FR-2013-06-26/html/2013-15145.htm.



Table 3.3-1 FEDERAL AND STATE ATTAINMENT STATUS

Pollutants	Federal Classification	State Classification	
Ozone (O ₃)	Non-Attainment (Extreme)	Non-Attainment	
Particulate Matter (PM ₁₀)	Maintenance (Serious)	Non-Attainment	
Fine Particulate Matter (PM _{2.5}) (Annual)	Non-Attainment (Moderate)	Non-Attainment	
Fine Particulate Matter (PM _{2.5}) (24-Hour)	Non-Attainment (Serious)	Non-Attainment	
Carbon Monoxide (CO)	Maintenance	Attainment	
Nitrogen Dioxide (NO ₂)	Maintenance	Non-Attainment	
Sulfur Dioxide (SO ₂)	Attainment	Attainment	

Sources: USEPA, 2020a; USEPA, 2020b; USEPA, 2020c; USEPA, 2020d; USEPA, 2020e; ARB, 2019.

3.4 Local Air Quality

The SCAQMD has divided the Basin into source receptor areas (SRAs), based on distinctive meteorological and topographical features. The proposed Project Site is located in the Northwest Los Angeles County Coastal SRA (SRA 2), just outside SCAQMD's Central Los Angeles SRA (SRA 1). The stations most representative of the site are the Los Angeles-North Main Station and West Los Angeles VA Hospital. These stations are 9.7 miles southwest and 6.3 miles southeast of the Project Site, respectively. The Los Angeles North Main Station monitors PM_{10} and $PM_{2.5}$ and the West Los Angeles VA Hospital station monitors NO_2 and ozone. The ambient air quality data in the proposed project vicinity as recorded at these stations for 2018 to 2020 and the applicable federal and state standards are shown in **Table 3.4-1**.

Existing Health Risk in the Surrounding Area

Since 1986–87 the South Coast Air Quality Management District (SCAQMD) has been conducting Multiple Air Toxics Exposure Studies (MATES) to evaluate regional air toxics health risks in the Basin. The MATES V Study consists of several elements. These include a monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the Basin. Additionally, MATES V includes an exploratory analysis of chronic non-cancer health impacts (e.g., cardiovascular, respiratory, neurological health outcomes). The MATES analysis does not estimate impacts on mortality risk or other health effects from criteria air pollutant exposures; such analyses are instead conducted as part of the Air Quality Management Plans. The current study – MATES V – focuses on measurements during 2018 and 2019 with a comprehensive modeling analysis and emissions inventory based on 2018 data.

A network of 10 fixed sites was used to monitor toxic air contaminants once every six days for one year. The locations of the sites were generally the same as in MATES II, III, and IV to allow for comparisons over time. Several sites have been relocated over time due to site availability, however, relocated monitors were sited in nearby locations with similar air quality characteristics.

The nearest MATES V site to the project site is located at the Burbank Area station, as is the criteria pollutant monitoring activity discussed above. Regional modeling analysis shows carcinogenic risk from air toxics in the grid cell containing West Hollywood is 501 to 800 per million.



The population-weighted average Basin air toxics cancer risk using multiple-pathway factors is 454 in a million, and the average inhalation-only risk is 423 in a million. The areas of the Basin that are exposed to the higher air toxics cancer risk continue to be along the goods movement corridors. The MATES V risk in the SCAB constitutes a 54% reduction from the corresponding risk during the MATES IV period (997 in-a-million for multiple pathway risk). Diesel PM continues to be the primary risk driver, contributing to more than 72% of the inhalation-only risk and 67% of the overall multiple pathway air toxics cancer risk.

Table 3.4-1
AMBIENT AIR QUALITY MONITORING DATA

Station	Air Pollutant	Standard/Exceedance		Year			
			2019	2020	2021		
***		Max. 1-hour Concentration (ppm)	0.086	0.134	0.095		
West		Max. 8-hour Concentration (ppm)	0.075	0.092	0.082		
Los Angeles-	Ogono (O-)	# Days > Federal 8-hour Std. of 0.075 ppm	0	5	1		
VA	Ozone (O ₃)	# Days > Federal 8-hour Std. of 0.070 ppm	1	8	1		
Hospital		# Days > State 1-hour Std. of 0.09 ppm	0	6	1		
Hospital		# Days > State 8-hour Std. of 0.070 ppm	1	8	1		
Los	D : 11	State Max. 24-hour Concentration (µg/m³)	ND	93.9	138.5		
Angeles-	Respirable Particulate	# Days > Fed. 24-hour Std. of 150 μg/m³	ND	ND	0		
North	Matter	# Estimated Days > State 24-hour Std. of	ND	35.6	17.2		
Main	(PM ₁₀)	$50 \mu g/m^3$					
Street	(1 1410)	State Annual Average (µg/m³)	ND	33.9	30.9		
Loc		Federal Max. 24-hour Concentration	43.5	175.0	61.0		
Los Angeles-	Fine	$(\mu g/m^3)$					
North	Particulate	State Annual Average (µg/m³)	10.8	14.9	14.8		
Main	Matter	# Measured Days > Fed. 24-hour Std. of 35	1	12.1	13		
Street	$(PM_{2.5})$	μg/m³					
		Federal Annual Average (µg/m³)	10.8	13.7	12.8		
West		Federal Max. 1-hour Concentration (ppb)	48.8	76.6	60.6		
Los	Nitrogen	Annual Average (ppb)	9	10	10		
Angeles-	Dioxide	# Days > Federal 1-hour Std. of 100 ppb	0	0	0		
VA	(NO_2)	# Days > State 1-hour Std. of 0.18 ppm	0	0	0		
Hospital							

Sources: https://www.arb.ca.gov/adam/topfour/topfour1.php.

https://www.arb.ca.gov/adam/select8/sc8start.php. Accessed September 13, 2022.

ND - There were insufficient (or no) data available to determine the value.

3.5 Sensitive Receptors

Some people, such as individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14, are particularly sensitive to certain pollutants. Facilities and structures where these sensitive people live or spend considerable amounts of time are known as sensitive receptors. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. Commercial and industrial facilities are not included in the definition of sensitive receptor, because employees typically are present for



shorter periods of time, such as eight hours. Therefore, applying a 24-hour standard for PM_{10} is appropriate not only because the averaging period for the state standard is 24 hours, but because the sensitive receptor would be present at the location for the full 24 hours.

The nearest sensitive receptors to the proposed Project Site, with the highest potential to be adversely affected by the proposed Project, are listed in **Table 1**. Refer to **Figure 3.5-1**, which shows the sensitive receptors relative to the project site.

<u>Table 3.5-1</u> SENSITIVE RECEPTORS NEAR PROJECT SITE

#	Sensitive Receiver Name	Location	Approximate Distancea from Proposed Project (Feet)
1	Nearest Residence 1033 Carol Drive West Hollywood, CA 90069	Latitude: 34.090121 Longitude: -118.391617	19
2	Doheny School 968 N Doheny Dr, Los Angeles, CA 90069	Latitude: 34.089310 Longitude: -118.389599	668
3	West Hollywood Elementary School 970 Hammond St., West Hollywood, CA 90069	Latitude: 34.089308 Longitude: -118.387461	1,276
4	Beverly Hills Baptist Church 9025 Cynthia St, West Hollywood, CA 90069	Latitude: 34.087612 Longitude: -118.388667	1,276

^aDistances measured from nearest project boundary.

4.0 AIR QUALITY IMPACTS ANALYSIS

4.1 CEQA Impact Review Criteria

In accordance with *State CEQA Guidelines* Appendix G, implementation of the project would result in a potentially significant impact if it were to:

- Conflict with or obstruct implementation of the applicable air quality plan.
- 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
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.



- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Where available, the significance criteria established by the applicable air quality management district (AQMD) or air pollution control district (APCD) may be relied upon to make the significance determinations. As will be discussed in the next section, the SCAQMD has developed a *CEQA Air Quality Handbook* to provide a protocol for air quality analyses that are prepared under the requirements of CEQA. It has also developed criteria for evaluating the significance of GHG emissions.

4.1.1 Emission Thresholds for Regional Air Quality Impacts

The SCAQMD has developed criteria for determining whether emissions from a project are regionally significant. They are useful for estimating whether a project is likely to result in a violation of the NAAQS and/or whether the project is in conformity with plans to achieve attainment. The SCAQMD no longer has "indirect source" rules, e.g., rules that place restrictions on housing or commercial development, or require reductions in trip generation and/or vehicle miles traveled to developed commercial or industrial sites. Instead, the District has published guidance on conducting air quality analyses under CEQA (SCAQMD, 1993). SCAQMD's significance thresholds are summarized in **Table 4.1-1** for criteria pollutant emissions during construction activities and project operation. A project is considered to have a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding SCAQMD significance thresholds.

Table 4.1-1
SCAQMD EMISSIONS THRESHOLDS FOR SIGNIFICANT REGIONAL IMPACTS

Pollutant	Mass Daily Thresholds (Pounds/Day)	
	Construction	Operation
Nitrogen Oxides (NO _x)	100	55
Volatile Organic Compounds (VOC)	75	55
Respirable Particulate Matter (PM ₁₀)	150	150
Fine Particulate Matter (PM2.5)	55	55
Sulfur Oxides (SO _x)	150	150
Carbon Monoxide (CO)	550	550
Lead	3	3

Source: SCAQMD, 2019.

4.1.2 Emission Thresholds for Localized Air Quality Impacts

As part of its environmental justice program to address localized air quality impacts of development projects, SCAQMD developed localized significance thresholds (LSTs) in 2003 (Chico and Koizumi 2008). LSTs represent the maximum NO_x , CO, PM_{10} , and $PM_{2.5}$ emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state

¹⁶ Two indirect source rules (1501 - Work Trip Reduction Plans and 1501.1 - Alternatives to Work Trip Reduction Plans) were repealed in 1995.

¹⁷ Partially updated in 2006.



ambient air quality standard. NO_x and CO LSTs are based on the ambient concentrations of that pollutant for each source receptor area (SRA)¹⁸ and distance to the nearest offsite receptor. For PM_{10} , LSTs are based on requirements in SCAQMD Rule 403. Note that the LST analysis does not apply to ROG emissions, since there is no ambient air quality standard for ROG.

For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. Commercial and industrial facilities are not included in the definition of sensitive receptor, because employees typically are present for shorter periods of time, such as eight hours. Therefore, applying a 24-hour standard for PM_{10} is appropriate not only because the averaging period for the state standard is 24 hours, but because the sensitive receptor would be present at the location for the full 24 hours.

The SCAQMD has developed mass rate look-up tables that can be used to determine whether a project may generate significant localized air quality impacts to offsite receptors (including sensitive receptors). Note that the use of LSTs is voluntary, to be implemented at the discretion of the lead agency pursuant to CEQA.

4.1.3 Impacts of Carbon Monoxide Hotspots

Increased local vehicle traffic may contribute to offsite air quality impacts. The traffic increases in nearby intersections may contribute to traffic congestion, which may create "pockets" of CO called hotspots. These pockets have the potential to exceed the state 1-hour standard of 20 ppm and/or the 8-hour standard of 9.0 ppm, thus affecting sensitive receptors that are close to these roadways or intersections. CO hotspots typically are found at busy intersections, but can also occur along congested major arterials and freeways. They occur mostly in the early morning hours when winds are stagnant and ambient CO concentrations are elevated. In accordance with the California Department of Transportation (Caltrans) CO Protocol (Caltrans, 1997, p. 4-2), CO hotspots do not need to be evaluated in detail when the following conditions are true under the project:

- The project does not significantly increase the percentage of vehicles operating in cold start mode.
- The project does not significantly increase traffic volumes. Increases in traffic volumes in excess of 5% should be considered potentially significant.
- The project improves traffic flow. For intersection segments, higher average speeds and a decrease in average delay should be considered an improvement in traffic flow. Generally, a detailed analysis is not required if the project does not degrade the level of service (LOS) at a nearby signalized intersection to "E" or worse.
- The project does not move traffic closer to a receptor.

Typically, hotspots analyses are not performed for unsignalized intersections, which have lower traffic volumes than those with signals. This is particularly the case when a hotspots analysis shows no impacts for the most congested, signalized intersections.

¹⁸ The SCAQMD has defined 38 source receptor areas for various regulatory purposes. Each SRA is assumed to have a unique set of geographic and meteorological characteristics.



4.1.4 Odor Impacts

The aforementioned SCAQMD Air Quality Significance Thresholds define a significant impact for a situation in which a project creates an odor nuisance pursuant to SCAQMD Rule 402 (Nuisance).

4.1.5 Greenhouse Gas Emissions

Neither the City, the SCAQMD nor the State CEQA Guidelines Amendments has adopted specific quantitative thresholds of significance for addressing a project's GHG emissions. Nonetheless, § 15064.4 of the CEQA Guidelines serves to assist lead agencies in determining the significance of the impacts of GHGs. As required in § 15064.4 of the CEQA Guidelines, this analysis includes an impact determination based on the following: (1) an estimate of the amount of GHG emissions resulting from the project; (2) a qualitative analysis or performance based standards; (3) a quantification of the extent to which the project increases GHG emissions as compared to the existing environmental setting; and (4) 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.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, the SCAQMD Board adopted an Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans (SCAQMD, 2008). The Interim Guidance uses a tiered approach to determining significance. Although this Interim Guidance was developed primarily to apply to stationary source/industrial projects where the SCAQMD is the lead agency under CEQA, in absence of more directly applicable policy, the SCAQMD's Interim Guidance is often used as general guidance by local agencies to address the long-term adverse impacts associated with global climate change.

The threshold selected for this analysis is **Tier 3 - 90 Percent Capture Rate Emission Thresholds.** A 90% emission capture rate means that 90% of total emissions from all new or modified projects would be subject to CEQA analysis. For Tier 3, the SCAQMD presents lead agencies with two options: Option #1 – separate numerical thresholds for residential projects (3,500 MT CO₂e per year), commercial projects (1,400 MT CO₂e per year), and mixed-use projects (3,000 MT CO₂e per year); and Option #2 – a single numerical threshold for all non-industrial projects of 3,000 MT CO₂e per year. The SCAQMD staff's proposal was to recommend the use of option #2, but to allow lead agencies to choose Option #1 if they prefer that approach.

The present analysis uses 3,000 MT of CO_2e per year (option #2) as the significance threshold under the first impact criterion above.

4.2 Methodology

4.2.1 Construction

4.2.1.1 Regional Emissions

The California Emissions Estimator Model® (CalEEMod) Version 2020.4.0 (CAPCOA, 2017), which incorporates onroad emission factors from EMFAC2017 (v1.0.7) for applicable calendar years in the Los Angeles County portion of the SCAB, were used to estimate construction emissions for offroad equipment exhaust; onroad exhaust emissions from construction employee commute and vendor activity; and onroad exhaust emissions from hauling activity.



It was assumed that construction activities will be divided into six phases. **Table 4.2-1** shows the off-road equipment use in each phase. The "load factor" in the rightmost column is the fraction of the time that a given type of equipment is operating in a way to emit air pollutants.

Table 4.2-1
CONSTRUCTION EQUIPMENT BY PHASE

Phase	Equipment Type	No. of Pieces	Hours/ Day	Horse- power	Load Factor
	Concrete/Industrial Saws	1	8	81	0.73
Demolition	Excavators	1	8	158	0.38
Demontion	Rubber-Tired Dozers	1	8	247	0.40
	Tractors/Loaders/Backhoes	3	8	97	0.37
	Graders	1	8	187	0.41
Site Preparation	Rubber-Tired Dozers	1	7	247	0.40
	Tractors/Loaders/Backhoes	1	8	97	0.37
	Excavators	1	8	158	0.38
Cradina	Graders	1	8	187	0.41
Grading	Rubber-Tired Dozers	1	8	247	0.40
	Tractors/Loaders/Backhoes	2	7	97	0.37
	Cement and Mortar Mixers	2	6	9	0.56
	Cranes	1	6	231	0.29
Duilding Construction	Forklifts	1	6	89	0.20
Building Construction	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	1	6	97	0.37
	Welders	3	8	46	0.45
	Cement and Mortar Mixers	1	6	9	0.56
	Pavers	1	6	130	0.42
Paving	Paving Equipment	1	8	132	0.36
	Rollers	1	7	80	0.38
	Tractors/Loaders/Backhoes	1	8	97	0.37
Architectural Coating	Air Compressors	1	6	78	0.48

It was assumed in the modeling that all applicable provisions of SCAQMD Rule 403 would be followed. It was also assumed that all construction offroad equipment will be Tier 4 interim or better, where applicable. CalEEMod considers these control measures to be "mitigation," although, being legally mandatory, they are not considered as such in this EIR.

4.2.1.2 Localized Significance Analysis for Criteria Pollutants

The purpose of this analysis is to estimate whether ambient air quality standards for NO_2 , CO, PM_{10} or $PM_{2.5}$ would be violated in the immediate vicinity of the Project. To facilitate impact analysis, the SCAQMD developed a methodology for modeling for many combinations of project footprint area, source-receptor distance, and local meteorology in the SCAB (Chico and Koizumi, 2008). From the results of the analysis, SCAQMD developed mass rate look-up tables that can be used to determine whether a project's emissions may generate significant localized air quality impacts on offsite receptors (including sensitive receptors). Based on the SRA number, the distance to the receptor and the site area, the output of the modeling is a set of pollutant-specific emission thresholds.



4.2.1.3 Toxic Air Contaminants

The chief toxic air contaminant during construction is diesel particulate matter (DPM), a carcinogen. A detailed health risk assessment of project construction was conducted by Air Quality Dynamics in parallel with this air quality and GHG emissions study. 19 Criteria pollutant emissions developed here were used to estimate DPM emissions during construction. The results of the health risk assessment are presented in the EIR.

4.2.2 Operation

For the operational emissions calculations, CalEEMod's "default" assumptions were used, with two exceptions:

- No natural gas combustion-related emissions were included, given that no natural gas will be used.
- Following Project Design feature GHG-PDF-1, project energy conservation will exceed Title 24 requirements by 10 percent.

4.3 Air Quality Impacts

4.3.1 Regional Impacts

Construction

The Project will be built in six phases.²⁰ A tentative schedule for construction is shown in **Table 4.3-1.** Construction activities are proposed to begin in December 2022 and the project is expected to be fully operational in the fall of 2024.

Table 4.3-1 CONSTRUCTION SCHEDULE

Phase	Type of Activity	Start	End
1	Demolition	December 1, 2022	December 15, 2022
2	Site Preparation	December 16, 2022	December 29, 2022
3	Grading	December 30, 2022	March 23, 2023
4	Building Construction	March 24, 2023	May 16, 2024
5	Paving	May 1, 2024	June 20, 2024
6	Architectural Coating	June 21, 2024	August 15, 2024

⁹¹⁶⁰⁺⁹¹⁷⁶ Sunset Boulevard Project – Construction Health Risk Assessment. Prepared by Bill Piazza, Air Quality Dynamics, for City of West Hollywood Planning & Development Services Department. May 9, 2022.

The construction phases will not overlap in time, so their maximum daily emissions are not additive.



As shown in **Table 4.3-2**, all construction emissions associated with the Project would be below the regional significance thresholds. **Therefore, impacts related to air quality during project construction would be less than significant.**

Table 4.3-2 ESTIMATED CONSTRUCTION EMISSIONS

Construction Phase		Maximum Daily Emissions (lbs)				
Construction Phase	ROG	NOx	СО	PM ₁₀	PM _{2.5}	
Demolition	0.6	11.4	20.0	0.5	0.1	
Site Preparation	0.3	5.1	10.1	2.3	1.2	
Grading	0.9	23.6	19.7	4.3	1.9	
Building Construction	0.5	10.3	13.5	0.4	0.2	
Paving	0.3	5.7	10.3	0.2	0.1	
Architectural Coating	10.4	1.1	1.9	0.04	0.01	
SCAQMD Daily Regional Threshold	75	100	550	150	55	
Exceed Thresholds?	No	No	No	No	No	

Source: OB-1 Air Analyses, September 2021.

Operations

The primary source of operational emissions would be vehicle exhaust emissions generated from project-induced vehicle trips, known as "mobile source emissions." Other emissions, identified as "energy source emissions," would be generated from energy consumption for water, space heating, and cooking equipment while "area source emissions" would be generated from structural maintenance and landscaping activities, and use of consumer products. The CalEEMod-predicted area source, energy source, and mobile source emissions from operation of the proposed project are presented in **Table 4.3-3**.

As seen in **Table 4.3-3**, for each criteria pollutant, net emissions would be below the pollutant's SCAQMD significance threshold. **Therefore, operational criteria pollutant emissions would be less than significant.**

Table 4.3-3
MAXIMUM DAILY PROJECT OPERATIONAL EMISSIONS

Emission Source		Pol	lutant (lbs/d	ay)	
Emission source	ROG	NOx	со	PM ₁₀	PM _{2.5}
Area Sources	1.16	0.00005	0.005	0.00002	0.00002
Energy Sources ^a	0	0	0	0	0
Mobile Sources	3.48	2.93	28.65	6.28	1.70



Emission Counce	Pollutant (lbs/day)					
Emission Source	ROG	NOx	со	PM ₁₀	PM _{2.5}	
Project Total Emissions	4.6	2.9	28.7	6.3	1.7	
SCAQMD Significance Thresholds	55	55	550	150	55	
Significant (Yes or No)	No	No	No	No	No	

Source: UltraSystems, September 2022.

4.3.2 Localized Impacts

Impacts on Sensitive Receptors

Following SCAQMD LST Guidance (Chico and Koizumi, 2008), only onsite construction emissions were considered in the localized significance analysis. It was estimated that the largest area of construction activity on a single day would be less than one acre. The nearest sensitive receptor to the Project boundary is about 19 feet (about 5.8 meters) away. The SCAQMD LST Guidance recommends using 25 meters for cases in which the distance is less than that value. The activity with the largest onsite emissions of NO_x and CO would be demolition. The activity with the largest emissions of PM_{10} and $PM_{2.5}$ would be grading. LSTs were obtained from tables in Appendix C of the SCAQMD's LST Guidance. Since the proposed project site is on or near the boundary between SRA 1 and SRA 2, the lower (more stringent) threshold for the two SRAs was used for each pollutant. **Table 4.3-4** shows the results of the localized significance analysis for the proposed Project. Emissions of no criteria pollutant would exceed its threshold for significance. **Therefore, localized air pollution impacts from construction activity would be less than significant.**

Table 4.3-4
RESULTS OF LOCALIZED SIGNIFICANCE ANALYSIS

Name of Consisting Department	Maximum Onsite Emissions (lbs/day)					
Nearest Sensitive Receptor	NOx	со	PM ₁₀	PM _{2.5}		
Residence	10.8	19.3	2.4	1.3		
SCAQMD LST for 1 acre @ 25 meters	74	562	4	3		
Significant (Yes or No)	No	No	No	No		

Source:

OB-1 Air Analyses, September 2021.

The localized significance analysis that was done here for construction is not normally done for the operational phase of projects of this type. The reason, as explained by the SCAQMD (Krause and Smith, 2006), is that by far the highest emissions from operations are from onroad motor vehicles,

^aNo natural gas combustion sources will be used by the project.



which travel over a large geographical area. "Local" receptors are highly dispersed, so that each one receives a tiny fraction of the emissions. Meanwhile, emissions from onsite sources are minor.

As noted above, Air Quality Dynamics performed a health risk assessment for diesel particulate matter emissions during construction. Results are presented in the EIR for this project.

Asbestos

Many buildings constructed before the late 1990s contain asbestos.²¹ Asbestos was widely used in the construction industry in thousands of materials. Some asbestos containing materials (ACM) are judged to be more dangerous than others due to the species of asbestos, amount of ACM and the material's friable nature. Sprayed coatings, pipe insulation, and asbestos insulating board are thought to be the most dangerous due to their high content of amphibole asbestos and friable nature. Since the existing buildings were built in 1942, asbestos will be expected and must be abated to comply with SCAQMD Rule 1403. To comply with this Rule, the contractor is required to have an asbestos survey performed by a Cal/OSHA Certified Asbestos Consultant (CA Department of Industrial Relations, 2018) and to submit an asbestos notification form with a fee to the SCAQMD at least 10 working days prior to any demolition activity.²² **Compliance will result in a less than significant effect from exposure to asbestos**.

CO Hotspots

As discussed in **Section 4.2.3.1**, if a project intersection does not exceed 400,000 vehicles per day, then the project does not need to prepare a detailed CO hotspots analysis.

At buildout of the Project, the highest number of average daily trips at an intersection under the "Future Post Project (With Project) Conditions"²³ would be approximately 15,510 at the Monterey Road and Huntington Drive intersection (KOA, 2019),²⁴ which is significantly below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP.²⁵ This daily trip estimate is based on the peak hour conditions of the intersection. There is no reason unique to the Air Basin meteorology to conclude that the CO concentrations at the Monterey Road and Huntington Drive intersection would exceed the 1-hour CO standard if modeled in detail, based on the studies undertaken for the 2003 AQMP.²⁶ Therefore, the Project does not trigger the need for a detailed CO hotspots model and would not cause any new or exacerbate any existing CO hotspots. **As**

Asbestos is also discussed in **Section 4.7**.

Additional compliance information was published in a SCAQMD Advisory Notice dated March 27, 2019 and titled "Important Notice to all Facility Owners and Contractors Performing Renovations or Demolitions Re: Asbestos." http://www.aqmd.gov/docs/default-source/compliance/Asbestos-Demolition-/rule-1403-compliance-advisory.pdf?sfvrsn=8.

²³ Defined in **Section 4.12.3**.

The maximum peak hour traffic (AM) at this intersection is estimated to be 1,551. An estimate of daily traffic through the intersection was obtained by multiplying the peak hour value by 10. Personal communication from Brian Marchetti, KOA Corporation to Michael Rogozen, UltraSystems Environmental Inc. March 26, 2019.

The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.

It should be noted that CO background concentrations within the vicinity of the modeled intersection have substantially decreased since preparation of the 2003 AQMP. In 2003, the 1-hour background CO concentration was 5 ppm and has decreased to 2 ppm in 2014.



a result, impacts related to localized mobile-source CO emissions are considered less than significant.

4.3.3 Conformity with General Plan

As discussed in **Section 3.2.5**, the project is compatible with the General Plan land use designation and the zoning for its location.

4.3.4 Conformity with Air Quality Management Plan

The SCAQMD's 2016 AQMP, discussed above, is based upon population, employment and housing projections in SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG, 2016). The RTP/SCS is in turn based upon local plans and policies, including the City of West Hollywood General Plan.

The Project would be consistent with the growth projections in both the AQMP and the 2016-2040 RTP/SCS. This means that these two documents took into account developments such as the Project in their modeling and analyses and the 2016-2040 RTP/SCS vehicle trip and VMT reduction goals and policies. Since these growth assumptions are built into the 2016 AQMP demonstration of attainment with NAAQS and CAAQS, it is also expected that the Project would not delay the attainment of those standards.

Additionally, to assist the implementation of the AQMP, projects must not create regionally significant emissions of regulated pollutants from either short-term construction or long-term operations. As demonstrated under Threshold (b) below, neither short-term (construction) nor long-term (operational) emissions would exceed the significance thresholds established by the SCAQMD.

Based on the discussion above, project impacts related to consistency with applicable air quality plans would be less than significant.

4.4 Greenhouse Gas Emissions

Temporary construction and long-term operational GHG emissions from the project's onsite and offsite activities were calculated using CalEEMod, and using custom spreadsheets for situations for which CalEEMod is unsuitable. To assess the overall lifetime project GHG emissions, the SCAQMD developed an Interim Guidance (SCAQMD, 2008) that recommends that construction emissions should be amortized over the life of the project, defined in the guidance as 30 years. Annualized GHG emissions are then added to the operational emissions and the sum is compared to the applicable interim GHG significance threshold.

4.4.1 Construction Emissions

Construction is an episodic, temporary source of GHG emissions. Emissions are generally associated with the operation of construction equipment and the disposal of construction waste. To be consistent with the guidance from the SCAQMD for calculating criteria pollutants from construction activities, only GHG emissions from onsite construction activities and offsite hauling and construction worker commuting are considered as project-generated. As explained by California Air Pollution Control Officers Association (CAPCOA) in its 2008 white paper (CAPCOA, 2008), the information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction



materials would be speculative at the CEQA analysis level. CEQA does not require an evaluation of speculative impacts (*CEQA Guidelines* § 15145). Therefore, the construction analysis does not consider such GHG emissions, but does consider non-speculative onsite construction activities, and offsite hauling and construction worker trips. All GHG emissions are identified on an annual basis.

Construction emissions are from offroad equipment and onroad vehicles such as worker and vendor commuting and trucks for soil and material hauling. CalEEMod defaults were used for construction activity and equipment usage, except that phase lengths were proportionately adjusted to reflect estimated durations supplied by the project proponent. To assess the temporary construction effect on the project's overall lifetime GHG emissions, the SCAQMD developed an Interim Guidance (SCAQMD, 2008) recommending that construction emissions should be amortized over the life of the project, defined in the Guidance as 30 years, which is then added to the operational emissions and compared to the applicable GHG significance threshold.

Table 4.4-1 shows the predicted GHG emissions during each construction year. Total GHG emissions are estimated to be **609** MT CO_2e , which would amortize to **20.3** MT CO_2e per year. The amortized value, **20.3 tonnes**, has been added to the project's annual operational GHG emissions. (See below.)

Table 4.4-1
PROJECT CONSTRUCTION GHG EMISSIONS

Construction Voor	Annual CO2e Emissions (metric tons)				
Construction Year	CO ₂	CH ₄	N_2O	CO ₂ e	
2022	27.8	0.0068	0.00065	28	
2023	443.7	0.063	0.0274	453	
2024	127.5	0.021	0.0011	128	
Totals	599.0	0.091	0.029	609	
	_	30-Year Amo	20.3		

4.4.2 Operational Emissions

Operational GHG emissions are shown in **Table 4.4-2**. Annual GHG emissions would be **1,538** metric tons per year, which is less than the significance threshold of 3,000 metric tons per year. Therefore, the project's impacts would be less than significant, and no mitigation would be necessary.

Table 4.4-2
PROJECT OPERATIONAL GHG EMISSIONS

Emissions Source	Annual CO ₂ e Emissions (metric tons)
Amortized Construction	20.3
Area Sources	0.0014
Energy (Building Electricity)	278.0
Energy (Electronic Billboard)	337.9
Mobile (Motor Vehicles)	773.6
Solid Waste Generation	64.9



Emissions Source	Annual CO ₂ e Emissions (metric tons)
Water Demand	63.5
Project Site Totals	1,538

4.4.3 Compatibility With GHG Reduction Plans

The CEQA Guidelines require analysis of the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The City of West Hollywood has a Climate Action Plan, **Table 4.4-3** compares various aspects of the project with provisions of the City of West Hollywood Climate Action Plan. In view of the findings in **Table 4.4-3** below, the project would be consistent with the GHG reduction-related actions and strategies in the City of West Hollywood Climate Action Plan, and related impacts would be less than significant.



 $\frac{Table\ 4.4-3}{CONSISTENCY\ ANALYSIS\ -\ CITY\ OF\ WEST\ HOLLYWOOD\ CLIMATE\ ACTION\ PLAN\ AND\ PROPOSED\ PROJECT$

Actions and Strategies	Responsible Party(ies)ª	Project Consistency Analysis
Energy		
EN-2: Promote, support, and expand the use of local solar power and battery energy storage.	CDD	Consistent. The project would include installation of PV panels and other energy efficiency measures.
EN-3: Decarbonize the future building stock and implement best practices in sustainable and resilient new construction.	CDD	Consistent. The project would include a number of sustainability features including site location; ²⁷ natural heating and cooling features; use of recycled foundation materials; construction of an all-electric building; waterefficient plumbing fixtures; improved insulation; installation of PV panels and other energy efficiency measures; improvements to indoor air quality; use of efficient and durable roofing materials and exterior finishes; and use of efficient interior finishes.
EN-4: Enhance community energy resilience. Sub-action: Implement heat preparation and response measures such as passive cooling design, cool/green roofs, weatherization, and low-energy active cooling systems; additional shade canopies and shade trees; and cooling centers, pools, drinking water fountains and filling stations.	CDD	Consistent. The project design includes natural heating and cooling features and improved insulation.
EN-5: Promote electric vehicle readiness.	CDD	Consistent. The project design includes 20 electric vehicle capable parking stalls.
Transportation, Mobility and the Public Realm	1	
TM-1: Increase sustainable mode share (Walking, Bicycling, Transit)	CDD	Consistent. The project includes 16 bicycle parking spaces; and the project site is in a high-quality transit area with several bus stops within 0.5 mile of the site.
TM-2: Promote zero and near zero carbon transportation	CDD	Consistent.

²⁷ The project site is previously developed and located in a developed urban area with existing road and public utilities infrastructure.



Actions and Strategies	Responsible Party(ies) ^a	Project Consistency Analysis
		The project design includes 20 electric vehicle capable parking stalls and 16 bicycle parking spaces.
TM-4: Implement transportation demand management (TDM) solutions	CDD	Consistent. The proposed project is required to adhere to the city's Municipal Code § 10.16, TDM Requirements, and would create a TDM plan that consists of at least eight traffic trip reduction strategies, to include bikeshare and carshare programs.
Zero Waste		
ZW-1: Improve source reduction and recycling	CDD	Consistent. The project design includes use of recycled foundation materials. The project design includes storage areas for recyclable materials and organic wastes.
ZW-2: Divert organic waste	CDD	Consistent. The project design includes storage areas for organic wastes.
Natural Environment		
NE-1: Protect and expand the urban tree canopy	CDD	Consistent. Project landscaping would include eight trees, five Chinese pistache and three Brisbane box. The project design would protect two existing street trees and involve removal of two street trees.
NE-3: Improve water management	CDD	Consistent. The project design includes water-efficient plumbing fixtures and lowand very-low water use plants.
NE-4: Encourage green infrastructure	CDD	Consistent. The project would include a number of sustainability features including natural heating and cooling features; use of recycled foundation materials; construction of an all-electric building; water-efficient plumbing fixtures; improved insulation; and installation of PV panels and other energy efficiency measures.

Source: City of West Hollywood, 2021, pp. 77-101.

aCC = City Council, CDD = Community Development Department, DPW = Department of Public Works, HSD = Human Services Department.



5.0 CUMULATIVE IMPACTS

It is widely recognized that no single project could generate enough GHG emissions to noticeably change the global climate. However, the combination of GHG emissions from past, present, and future projects could contribute substantially to global climate change. Thus, project-specific GHG emissions should be evaluated in terms of whether they would result in a cumulatively significant impact on global climate change. Climate change impacts may include an increase in extreme heat days, higher concentrations of air pollutants, sea level rise, impacts on water supply and water quality, public health impacts, impacts on ecosystems, impacts on agriculture, and other environmental impacts.

As was shown in **Section 4.4.3**, the project is consistent with state and local plans and programs to reduce state and regional GHG emissions, including the City of West Hollywood's Clean Action Plan. The project's incremental contribution to GHG emissions and their effects on climate change would not be cumulatively considerable. For these reasons, the project's cumulative contribution to global climate change would be less than significant.

6.0 EMISSION REDUCTION MEASURES

Both the short-term and long-term air pollution and GHG emissions impacts of the project will be less than significant. Mitigation measures for these impacts will not be necessary.

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ATTACHMENTS

ATTACHMENT 1 CALEEMOD OUTPUTS

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Sunset Blvd Commercial Project

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Urbanization

(lb/MWhr)

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.03	1000sqft	0.24	45,032.00	0
High Turnover (Sit Down Restaurant)	7.97	1000sqft	0.18	7,967.00	0

Precipitation Freq (Days)

(lb/MWhr)

1.2 Other Project Characteristics

Urban

Climate Zone	11			Operational Year	2025
Utility Company	Los Angeles Depa	artment of Water & Power			
CO2 Intensity	690.4	CH4 Intensity	0.049	N2O Intensity	0.007

2.2

Wind Speed (m/s)

(lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - New CalEEMod says non-default entered - not so

Land Use - Footprint of office + footprint of restaurant = total lot acreage

Construction Phase - Schedule provided by client

Off-road Equipment -

Off-road Equipment - Cement for underground garage

Off-road Equipment - Added excavation

Off-road Equipment - Includes excavation for garage

Off-road Equipment -

Off-road Equipment -

Trips and VMT - To Chiquita Canyon landfill in Santa Clarita

Demolition -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading - Three level underground parking

Vehicle Trips - Trip rates from Sunset Boulevard Transportation Study. Omar Sarsour. September 2022.

Construction Off-road Equipment Mitigation - All equipment is at least Tier 4 Interim or better where applicable

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Project design feature = 10% reduction beyond Title 24 requirement

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	26,500.00	22,379.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	79,499.00	67,137.00
tblAreaCoating	Area_Nonresidential_Exterior	26500	22379
tblAreaCoating	Area_Nonresidential_Interior	79499	67137
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	5.00	40.00
tblConstructionPhase	NumDays	100.00	300.00
tblConstructionPhase	NumDays	10.00	11.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	5.00	25.00
tblConstructionPhase	NumDays	1.00	10.00
tblGrading	AcresOfGrading	60.00	4.00
tblGrading	AcresOfGrading	9.38	1.88
tblGrading	MaterialExported	0.00	25,000.00
tblLandUse	LandUseSquareFeet	45,030.00	45,032.00
tblLandUse	LandUseSquareFeet	7,970.00	7,967.00
tblLandUse	LotAcreage	1.03	0.24
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	UsageHours	4.00	6.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.049
tblProjectCharacteristics	CO2IntensityFactor	691.98	690.4
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.007
tblSolidWaste	SolidWasteGenerationRate	41.88	34.28
tblTripsAndVMT	HaulingTripLength	20.00	36.00
tblTripsAndVMT	VendorTripNumber	9.00	7.00
tblTripsAndVMT	WorkerTripNumber	18.00	15.00
tblTripsAndVMT	WorkerTripNumber	4.00	3.00
tblWater	IndoorWaterUseRate	8,003,350.67	6,551,265.95
tblWater	OutdoorWaterUseRate	4,905,279.44	4,015,292.03

2.0 Emissions Summary

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					ton	s/yr							МТ	-/yr		
2022	0.0186	0.1950	0.1434	3.1000e- 004	0.0401	8.7000e- 003	0.0488	0.0179	8.0700e- 003	0.0260	0.0000	27.8295	27.8295	6.8100e- 003	6.5000e- 004	28.1932
2023	0.2182	2.0954	1.8201	4.9800e- 003	0.2539	0.0765	0.3304	0.1179	0.0730	0.1909	0.0000	443.6569	443.6569	0.0630	0.0274	453.3934
2024	0.2967	0.6888	0.8247	1.5300e- 003	0.0128	0.0282	0.0410	3.4400e- 003	0.0272	0.0306	0.0000	127.5091	127.5091	0.0207	1.1000e- 003	128.3535
Maximum	0.2967	2.0954	1.8201	4.9800e- 003	0.2539	0.0765	0.3304	0.1179	0.0730	0.1909	0.0000	443.6569	443.6569	0.0630	0.0274	453.3934

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2022	5.3300e- 003	0.1004	0.1705	3.1000e- 004	0.0172	5.0000e- 004	0.0177	7.4000e- 003	5.0000e- 004	7.9000e- 003	0.0000	27.8294	27.8294	6.8100e- 003	6.5000e- 004	28.1932
2023	0.0645	1.6497	1.9818	4.9800e- 003	0.1434	0.0200	0.1634	0.0581	0.0199	0.0780	0.0000	443.6566	443.6566	0.0630	0.0274	453.3931
2024	0.2343	0.6034	0.8627	1.5300e- 003	0.0128	8.4800e- 003	0.0212	3.4400e- 003	8.4700e- 003	0.0119	0.0000	127.5090	127.5090	0.0207	1.1000e- 003	128.3534
Maximum	0.2343	1.6497	1.9818	4.9800e- 003	0.1434	0.0200	0.1634	0.0581	0.0199	0.0780	0.0000	443.6566	443.6566	0.0630	0.0274	453.3931

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	42.99	21.00	-8.13	0.00	43.50	74.42	51.85	50.51	73.31	60.48	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2022	2-28-2023	0.8447	0.5574
2	3-1-2023	5-31-2023	0.5950	0.4397
3	6-1-2023	8-31-2023	0.4676	0.3533
4	9-1-2023	11-30-2023	0.4630	0.3499
5	12-1-2023	2-29-2024	0.4470	0.3499
6	3-1-2024	5-31-2024	0.4059	0.3278
7	6-1-2024	8-31-2024	0.2825	0.2728
		Highest	0.8447	0.5574

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Area	0.2123	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e- 003	1.3200e- 003	0.0000	0.0000	1.4000e- 003
Energy	0.0124	0.1127	0.0947	6.8000e- 004		8.5700e- 003	8.5700e- 003		8.5700e- 003	8.5700e- 003	0.0000	406.9346	406.9346	0.0225	5.1300e- 003	409.0269
Mobile	0.4834	0.4633	4.1830	8.2200e- 003	0.8834	6.2900e- 003	0.8897	0.2357	5.8400e- 003	0.2415	0.0000	760.9023	760.9023	0.0618	0.0376	773.6478
Waste						0.0000	0.0000		0.0000	0.0000	26.2102	0.0000	26.2102	1.5490	0.0000	64.9346
Water						0.0000	0.0000		0.0000	0.0000	2.8459	51.0856	53.9315	0.2959	7.4200e- 003	63.5408
Total	0.7081	0.5760	4.2783	8.9000e- 003	0.8834	0.0149	0.8983	0.2357	0.0144	0.2501	29.0561	1,218.9239	1,247.9800	1.9292	0.0501	1,311.1516

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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					ton	s/yr							MT	/yr		
Area	0.2123	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e- 003	1.3200e- 003	0.0000	0.0000	1.4000e- 003
Energy	0.0120	0.1089	0.0914	6.5000e- 004		8.2700e- 003	8.2700e- 003		8.2700e- 003	8.2700e- 003	0.0000	395.1394	395.1394	0.0219	4.9800e- 003	397.1703
Mobile	0.4834	0.4633	4.1830	8.2200e- 003	0.8834	6.2900e- 003	0.8897	0.2357	5.8400e- 003	0.2415	0.0000	760.9023	760.9023	0.0618	0.0376	773.6478
Waste						0.0000	0.0000		0.0000	0.0000	26.2102	0.0000	26.2102	1.5490	0.0000	64.9346
Water						0.0000	0.0000		0.0000	0.0000	2.8459	51.0856	53.9315	0.2959	7.4200e- 003	63.5408
Total	0.7077	0.5722	4.2751	8.8700e- 003	0.8834	0.0146	0.8980	0.2357	0.0141	0.2498	29.0561	1,207.1287	1,236.1848	1.9286	0.0500	1,299.2950

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.06	0.67	0.08	0.34	0.00	2.02	0.03	0.00	2.08	0.12	0.00	0.97	0.95	0.03	0.30	0.90

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	12/1/2022	12/15/2022	5	11	
2	Site Preparation	Site Preparation	12/16/2022	12/29/2022	5	10	
3	Grading	Grading	12/30/2022	3/23/2023	5	60	

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ľ		g -	•		5/16/2024	5	300	
1	5	Paving	Paving	5/17/2024	6/20/2024	5	25	
		Architectural Coating	T	•	8/15/2024	5	40	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 67,137; Non-Residential Outdoor: 22,379; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

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Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00		0.42
Paving	Paving Equipment	1	8.00		0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00		0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	34.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	3,125.00	14.70	6.90	36.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	15.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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3.2 Demolition - 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					ton	s/yr							МТ	/yr		
Fugitive Dust					3.7100e- 003	0.0000	3.7100e- 003	5.6000e- 004	0.0000	5.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.1012	0.0947	1.6000e- 004		5.0800e- 003	5.0800e- 003		4.7400e- 003	4.7400e- 003	0.0000	14.0876	14.0876	3.7600e- 003	0.0000	14.1816
Total	0.0104	0.1012	0.0947	1.6000e- 004	3.7100e- 003	5.0800e- 003	8.7900e- 003	5.6000e- 004	4.7400e- 003	5.3000e- 003	0.0000	14.0876	14.0876	3.7600e- 003	0.0000	14.1816

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Hauling	8.0000e- 005	3.0100e- 003	6.7000e- 004	1.0000e- 005	2.9000e- 004	2.0000e- 005	3.1000e- 004	8.0000e- 005	2.0000e- 005	1.0000e- 004	0.0000	1.0500	1.0500	6.0000e- 005	1.7000e- 004	1.1011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.4000e- 004	3.0600e- 003	1.0000e- 005	9.0000e- 004	1.0000e- 005	9.1000e- 004	2.4000e- 004	1.0000e- 005	2.5000e- 004	0.0000	0.7435	0.7435	2.0000e- 005	2.0000e- 005	0.7501
Total	3.6000e- 004	3.2500e- 003	3.7300e- 003	2.0000e- 005	1.1900e- 003	3.0000e- 005	1.2200e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.7936	1.7936	8.0000e- 005	1.9000e- 004	1.8512

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3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Fugitive Dust					1.4500e- 003	0.0000	1.4500e- 003	2.2000e- 004	0.0000	2.2000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e- 003	0.0595	0.1063	1.6000e- 004		2.5000e- 004	2.5000e- 004		2.5000e- 004	2.5000e- 004	0.0000	14.0875	14.0875	3.7600e- 003	0.0000	14.1816
Total	2.9000e- 003	0.0595	0.1063	1.6000e- 004	1.4500e- 003	2.5000e- 004	1.7000e- 003	2.2000e- 004	2.5000e- 004	4.7000e- 004	0.0000	14.0875	14.0875	3.7600e- 003	0.0000	14.1816

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	8.0000e- 005	3.0100e- 003	6.7000e- 004	1.0000e- 005	2.9000e- 004	2.0000e- 005	3.1000e- 004	8.0000e- 005	2.0000e- 005	1.0000e- 004	0.0000	1.0500	1.0500	6.0000e- 005	1.7000e- 004	1.1011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.4000e- 004	3.0600e- 003	1.0000e- 005	9.0000e- 004	1.0000e- 005	9.1000e- 004	2.4000e- 004	1.0000e- 005	2.5000e- 004	0.0000	0.7435	0.7435	2.0000e- 005	2.0000e- 005	0.7501
Total	3.6000e- 004	3.2500e- 003	3.7300e- 003	2.0000e- 005	1.1900e- 003	3.0000e- 005	1.2200e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.7936	1.7936	8.0000e- 005	1.9000e- 004	1.8512

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3.3 Site Preparation - 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					ton	s/yr							МТ	⁻/yr		
Fugitive Dust					0.0273	0.0000	0.0273	0.0146	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5600e- 003	0.0731	0.0355	9.0000e- 005		3.1100e- 003	3.1100e- 003		2.8600e- 003	2.8600e- 003	0.0000	7.5576	7.5576	2.4400e- 003	0.0000	7.6187
Total	6.5600e- 003	0.0731	0.0355	9.0000e- 005	0.0273	3.1100e- 003	0.0305	0.0146	2.8600e- 003	0.0175	0.0000	7.5576	7.5576	2.4400e- 003	0.0000	7.6187

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e- 004	1.1000e- 004	1.4800e- 003	0.0000	4.4000e- 004	0.0000	4.4000e- 004	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.3605	0.3605	1.0000e- 005	1.0000e- 005	0.3637
Total	1.4000e- 004	1.1000e- 004	1.4800e- 003	0.0000	4.4000e- 004	0.0000	4.4000e- 004	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.3605	0.3605	1.0000e- 005	1.0000e- 005	0.3637

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3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	⁻/yr		
Fugitive Dust					0.0107	0.0000	0.0107	5.6900e- 003	0.0000	5.6900e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e- 003	0.0253	0.0491	9.0000e- 005		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004	0.0000	7.5576	7.5576	2.4400e- 003	0.0000	7.6187
Total	1.5000e- 003	0.0253	0.0491	9.0000e- 005	0.0107	1.4000e- 004	0.0108	5.6900e- 003	1.4000e- 004	5.8300e- 003	0.0000	7.5576	7.5576	2.4400e- 003	0.0000	7.6187

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e- 004	1.1000e- 004	1.4800e- 003	0.0000	4.4000e- 004	0.0000	4.4000e- 004	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.3605	0.3605	1.0000e- 005	1.0000e- 005	0.3637
Total	1.4000e- 004	1.1000e- 004	1.4800e- 003	0.0000	4.4000e- 004	0.0000	4.4000e- 004	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.3605	0.3605	1.0000e- 005	1.0000e- 005	0.3637

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3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Fugitive Dust					6.5500e- 003	0.0000	6.5500e- 003	2.1000e- 003	0.0000	2.1000e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.7000e- 004	9.3800e- 003	6.2400e- 003	1.0000e- 005		4.1000e- 004	4.1000e- 004		3.8000e- 004	3.8000e- 004	0.0000	1.1319	1.1319	3.7000e- 004	0.0000	1.1411
Total	8.7000e- 004	9.3800e- 003	6.2400e- 003	1.0000e- 005	6.5500e- 003	4.1000e- 004	6.9600e- 003	2.1000e- 003	3.8000e- 004	2.4800e- 003	0.0000	1.1319	1.1319	3.7000e- 004	0.0000	1.1411

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	1.9000e- 004	7.8900e- 003	1.5600e- 003	3.0000e- 005	8.1000e- 004	6.0000e- 005	8.6000e- 004	2.2000e- 004	6.0000e- 005	2.8000e- 004	0.0000	2.8397	2.8397	1.5000e- 004	4.5000e- 004	2.9778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 005	2.0000e- 005	2.4000e- 004	0.0000	7.0000e- 005	0.0000	7.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0586	0.0586	0.0000	0.0000	0.0591
Total	2.1000e- 004	7.9100e- 003	1.8000e- 003	3.0000e- 005	8.8000e- 004	6.0000e- 005	9.3000e- 004	2.4000e- 004	6.0000e- 005	3.0000e- 004	0.0000	2.8983	2.8983	1.5000e- 004	4.5000e- 004	3.0369

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3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Fugitive Dust					2.5500e- 003	0.0000	2.5500e- 003	8.2000e- 004	0.0000	8.2000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e- 004	4.3200e- 003	8.0300e- 003	1.0000e- 005		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	1.1319	1.1319	3.7000e- 004	0.0000	1.1411
Total	2.2000e- 004	4.3200e- 003	8.0300e- 003	1.0000e- 005	2.5500e- 003	2.0000e- 005	2.5700e- 003	8.2000e- 004	2.0000e- 005	8.4000e- 004	0.0000	1.1319	1.1319	3.7000e- 004	0.0000	1.1411

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Hauling	1.9000e- 004	7.8900e- 003	1.5600e- 003	3.0000e- 005	8.1000e- 004	6.0000e- 005	8.6000e- 004	2.2000e- 004	6.0000e- 005	2.8000e- 004	0.0000	2.8397	2.8397	1.5000e- 004	4.5000e- 004	2.9778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 005	2.0000e- 005	2.4000e- 004	0.0000	7.0000e- 005	0.0000	7.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0586	0.0586	0.0000	0.0000	0.0591
Total	2.1000e- 004	7.9100e- 003	1.8000e- 003	3.0000e- 005	8.8000e- 004	6.0000e- 005	9.3000e- 004	2.4000e- 004	6.0000e- 005	3.0000e- 004	0.0000	2.8983	2.8983	1.5000e- 004	4.5000e- 004	3.0369

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3.4 Grading - 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					ton	s/yr							MT	/yr		
Fugitive Dust					0.1812	0.0000	0.1812	0.0981	0.0000	0.0981	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0449	0.4725	0.3529	7.6000e- 004		0.0201	0.0201		0.0185	0.0185	0.0000	66.7903	66.7903	0.0216	0.0000	67.3304
Total	0.0449	0.4725	0.3529	7.6000e- 004	0.1812	0.0201	0.2013	0.0981	0.0185	0.1166	0.0000	66.7903	66.7903	0.0216	0.0000	67.3304

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	Γ/yr		
Hauling	4.5800e- 003	0.3574	0.0783	1.5900e- 003	0.0476	2.2700e- 003	0.0498	0.0131	2.1700e- 003	0.0152	0.0000	158.1656	158.1656	8.7900e- 003	0.0251	165.8711
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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	9.7000e- 004	0.0131	4.0000e- 005	4.2000e- 003	3.0000e- 005	4.2300e- 003	1.1200e- 003	2.0000e- 005	1.1400e- 003	0.0000	3.3451	3.3451	9.0000e- 005	9.0000e- 005	3.3732
Total	5.8000e- 003	0.3584	0.0913	1.6300e- 003	0.0518	2.3000e- 003	0.0541	0.0142	2.1900e- 003	0.0164	0.0000	161.5107	161.5107	8.8800e- 003	0.0252	169.2444

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3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Fugitive Dust					0.0707	0.0000	0.0707	0.0383	0.0000	0.0383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.2549	0.4739	7.6000e- 004		1.2400e- 003	1.2400e- 003		1.2400e- 003	1.2400e- 003	0.0000	66.7903	66.7903	0.0216	0.0000	67.3303
Total	0.0128	0.2549	0.4739	7.6000e- 004	0.0707	1.2400e- 003	0.0719	0.0383	1.2400e- 003	0.0395	0.0000	66.7903	66.7903	0.0216	0.0000	67.3303

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	¯/yr		
Hauling	4.5800e- 003	0.3574	0.0783	1.5900e- 003	0.0476	2.2700e- 003	0.0498	0.0131	2.1700e- 003	0.0152	0.0000	158.1656	158.1656	8.7900e- 003	0.0251	165.8711
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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	9.7000e- 004	0.0131	4.0000e- 005	4.2000e- 003	3.0000e- 005	4.2300e- 003	1.1200e- 003	2.0000e- 005	1.1400e- 003	0.0000	3.3451	3.3451	9.0000e- 005	9.0000e- 005	3.3732
Total	5.8000e- 003	0.3584	0.0913	1.6300e- 003	0.0518	2.3000e- 003	0.0541	0.0142	2.1900e- 003	0.0164	0.0000	161.5107	161.5107	8.8800e- 003	0.0252	169.2444

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3.5 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Off-Road	0.1619	1.2324	1.3139	2.3200e- 003		0.0539	0.0539		0.0521	0.0521	0.0000	189.4156	189.4156	0.0317	0.0000	190.2084
Total	0.1619	1.2324	1.3139	2.3200e- 003		0.0539	0.0539		0.0521	0.0521	0.0000	189.4156	189.4156	0.0317	0.0000	190.2084

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9000e- 004	0.0284	0.0106	1.3000e- 004	4.4300e- 003	1.4000e- 004	4.5700e- 003	1.2800e- 003	1.3000e- 004	1.4100e- 003	0.0000	12.7912	12.7912	4.3000e- 004	1.8400e- 003	13.3505
Worker	4.7800e- 003	3.8000e- 003	0.0514	1.4000e- 004	0.0165	1.0000e- 004	0.0166	4.3900e- 003	9.0000e- 005	4.4800e- 003	0.0000	13.1491	13.1491	3.5000e- 004	3.4000e- 004	13.2598
Total	5.5700e- 003	0.0322	0.0620	2.7000e- 004	0.0210	2.4000e- 004	0.0212	5.6700e- 003	2.2000e- 004	5.8900e- 003	0.0000	25.9403	25.9403	7.8000e- 004	2.1800e- 003	26.6103

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3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0403	1.0042	1.3546	2.3200e- 003		0.0163	0.0163		0.0163	0.0163	0.0000	189.4154	189.4154	0.0317	0.0000	190.2081
Total	0.0403	1.0042	1.3546	2.3200e- 003		0.0163	0.0163		0.0163	0.0163	0.0000	189.4154	189.4154	0.0317	0.0000	190.2081

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9000e- 004	0.0284	0.0106	1.3000e- 004	4.4300e- 003	1.4000e- 004	4.5700e- 003	1.2800e- 003	1.3000e- 004	1.4100e- 003	0.0000	12.7912	12.7912	4.3000e- 004	1.8400e- 003	13.3505
Worker	4.7800e- 003	3.8000e- 003	0.0514	1.4000e- 004	0.0165	1.0000e- 004	0.0166	4.3900e- 003	9.0000e- 005	4.4800e- 003	0.0000	13.1491	13.1491	3.5000e- 004	3.4000e- 004	13.2598
Total	5.5700e- 003	0.0322	0.0620	2.7000e- 004	0.0210	2.4000e- 004	0.0212	5.6700e- 003	2.2000e- 004	5.8900e- 003	0.0000	25.9403	25.9403	7.8000e- 004	2.1800e- 003	26.6103

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3.5 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0747	0.5750	0.6425	1.1400e- 003		0.0234	0.0234		0.0226	0.0226	0.0000	93.3003	93.3003	0.0153	0.0000	93.6834
Total	0.0747	0.5750	0.6425	1.1400e- 003		0.0234	0.0234		0.0226	0.0226	0.0000	93.3003	93.3003	0.0153	0.0000	93.6834

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				МТ	-/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e- 004	0.0140	5.1200e- 003	6.0000e- 005	2.1800e- 003	7.0000e- 005	2.2500e- 003	6.3000e- 004	6.0000e- 005	6.9000e- 004	0.0000	6.2056	6.2056	2.1000e- 004	8.9000e- 004	6.4773
Worker	2.2000e- 003	1.6700e- 003	0.0235	7.0000e- 005	8.1400e- 003	5.0000e- 005	8.1800e- 003	2.1600e- 003	4.0000e- 005	2.2100e- 003	0.0000	6.2933	6.2933	1.6000e- 004	1.6000e- 004	6.3439
Total	2.5800e- 003	0.0157	0.0286	1.3000e- 004	0.0103	1.2000e- 004	0.0104	2.7900e- 003	1.0000e- 004	2.9000e- 003	0.0000	12.4989	12.4989	3.7000e- 004	1.0500e- 003	12.8212

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3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Off-Road	0.0199	0.4946	0.6672	1.1400e- 003		8.0100e- 003	8.0100e- 003		8.0100e- 003	8.0100e- 003	0.0000	93.3002	93.3002	0.0153	0.0000	93.6833
Total	0.0199	0.4946	0.6672	1.1400e- 003		8.0100e- 003	8.0100e- 003		8.0100e- 003	8.0100e- 003	0.0000	93.3002	93.3002	0.0153	0.0000	93.6833

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e- 004	0.0140	5.1200e- 003	6.0000e- 005	2.1800e- 003	7.0000e- 005	2.2500e- 003	6.3000e- 004	6.0000e- 005	6.9000e- 004	0.0000	6.2056	6.2056	2.1000e- 004	8.9000e- 004	6.4773
Worker	2.2000e- 003	1.6700e- 003	0.0235	7.0000e- 005	8.1400e- 003	5.0000e- 005	8.1800e- 003	2.1600e- 003	4.0000e- 005	2.2100e- 003	0.0000	6.2933	6.2933	1.6000e- 004	1.6000e- 004	6.3439
Total	2.5800e- 003	0.0157	0.0286	1.3000e- 004	0.0103	1.2000e- 004	0.0104	2.7900e- 003	1.0000e- 004	2.9000e- 003	0.0000	12.4989	12.4989	3.7000e- 004	1.0500e- 003	12.8212

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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					ton	s/yr							МТ	⊺/yr		
Off-Road	7.7200e- 003	0.0733	0.1103	1.7000e- 004		3.5100e- 003	3.5100e- 003		3.2400e- 003	3.2400e- 003	0.0000	14.7176	14.7176	4.6700e- 003	0.0000	14.8342
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.7200e- 003	0.0733	0.1103	1.7000e- 004		3.5100e- 003	3.5100e- 003		3.2400e- 003	3.2400e- 003	0.0000	14.7176	14.7176	4.6700e- 003	0.0000	14.8342

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	·/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e- 004	3.7000e- 004	5.1500e- 003	2.0000e- 005	1.7800e- 003	1.0000e- 005	1.7900e- 003	4.7000e- 004	1.0000e- 005	4.8000e- 004	0.0000	1.3773	1.3773	3.0000e- 005	3.0000e- 005	1.3884
Total	4.8000e- 004	3.7000e- 004	5.1500e- 003	2.0000e- 005	1.7800e- 003	1.0000e- 005	1.7900e- 003	4.7000e- 004	1.0000e- 005	4.8000e- 004	0.0000	1.3773	1.3773	3.0000e- 005	3.0000e- 005	1.3884

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3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	Г/уг		
Off-Road	2.6900e- 003	0.0714	0.1231	1.7000e- 004		2.7000e- 004	2.7000e- 004		2.7000e- 004	2.7000e- 004	0.0000	14.7176	14.7176	4.6700e- 003	0.0000	14.8342
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6900e- 003	0.0714	0.1231	1.7000e- 004		2.7000e- 004	2.7000e- 004		2.7000e- 004	2.7000e- 004	0.0000	14.7176	14.7176	4.6700e- 003	0.0000	14.8342

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	·/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e- 004	3.7000e- 004	5.1500e- 003	2.0000e- 005	1.7800e- 003	1.0000e- 005	1.7900e- 003	4.7000e- 004	1.0000e- 005	4.8000e- 004	0.0000	1.3773	1.3773	3.0000e- 005	3.0000e- 005	1.3884
Total	4.8000e- 004	3.7000e- 004	5.1500e- 003	2.0000e- 005	1.7800e- 003	1.0000e- 005	1.7900e- 003	4.7000e- 004	1.0000e- 005	4.8000e- 004	0.0000	1.3773	1.3773	3.0000e- 005	3.0000e- 005	1.3884

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Archit. Coating	0.2075					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6200e- 003	0.0244	0.0362	6.0000e- 005		1.2200e- 003	1.2200e- 003		1.2200e- 003	1.2200e- 003	0.0000	5.1065	5.1065	2.9000e- 004	0.0000	5.1137
Total	0.2111	0.0244	0.0362	6.0000e- 005		1.2200e- 003	1.2200e- 003		1.2200e- 003	1.2200e- 003	0.0000	5.1065	5.1065	2.9000e- 004	0.0000	5.1137

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	·/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e- 004	1.3000e- 004	1.9000e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5086	0.5086	1.0000e- 005	1.0000e- 005	0.5126
Total	1.8000e- 004	1.3000e- 004	1.9000e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5086	0.5086	1.0000e- 005	1.0000e- 005	0.5126

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3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Archit. Coating	0.2075					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e- 003	0.0212	0.0367	6.0000e- 005		8.0000e- 005	8.0000e- 005		8.0000e- 005	8.0000e- 005	0.0000	5.1065	5.1065	2.9000e- 004	0.0000	5.1137
Total	0.2085	0.0212	0.0367	6.0000e- 005		8.0000e- 005	8.0000e- 005		8.0000e- 005	8.0000e- 005	0.0000	5.1065	5.1065	2.9000e- 004	0.0000	5.1137

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e- 004	1.3000e- 004	1.9000e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5086	0.5086	1.0000e- 005	1.0000e- 005	0.5126
Total	1.8000e- 004	1.3000e- 004	1.9000e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5086	0.5086	1.0000e- 005	1.0000e- 005	0.5126

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Mitigated	0.4834	0.4633	4.1830	8.2200e- 003	0.8834	6.2900e- 003	0.8897	0.2357	5.8400e- 003	0.2415	0.0000	760.9023	760.9023	0.0618	0.0376	773.6478
Unmitigated	0.4834	0.4633	4.1830	8.2200e- 003	0.8834	6.2900e- 003	0.8897	0.2357	5.8400e- 003	0.2415	0.0000	760.9023	760.9023	0.0618	0.0376	773.6478

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	438.59	99.52	31.52	1,069,524	1,069,524
High Turnover (Sit Down Restaurant)	894.07	975.53	1136.84	1,281,595	1,281,595
Total	1,332.67	1,075.04	1,168.36	2,351,119	2,351,119

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C- W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
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

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.540171		0.189075	0.126673	0.023412		0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
General Office Building	0.540171		0.189075	0.126673	0.023412		0.010926			0.000597	0.025155	•	0.003335

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	276.6319	276.6319	0.0196	2.8000e- 003	277.9585
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	284.2342	284.2342	0.0202	2.8800e- 003	285.5973
NaturalGas Mitigated	0.0120	0.1089	0.0914	6.5000e- 004		8.2700e- 003	8.2700e- 003		8.2700e- 003	8.2700e- 003	0.0000	118.5076	118.5076	2.2700e- 003	2.1700e- 003	119.2118
NaturalGas Unmitigated	0.0124	0.1127	0.0947	6.8000e- 004		8.5700e- 003	8.5700e- 003		8.5700e- 003	8.5700e- 003	0.0000	122.7004	122.7004	2.3500e- 003	2.2500e- 003	123.4296

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
General Office Building	464280	2.5000e- 003	0.0228	0.0191	1.4000e- 004		1.7300e- 003	1.7300e- 003		1.7300e- 003	1.7300e- 003	0.0000	24.7757	24.7757	4.7000e- 004	4.5000e- 004	24.9230
High Turnover (Sit Down Restaurant)		9.8900e- 003	0.0900	0.0756	5.4000e- 004		6.8400e- 003	6.8400e- 003		6.8400e- 003	6.8400e- 003	0.0000	97.9247	97.9247	1.8800e- 003	1.8000e- 003	98.5066
Total		0.0124	0.1127	0.0947	6.8000e- 004		8.5700e- 003	8.5700e- 003		8.5700e- 003	8.5700e- 003	0.0000	122.7004	122.7004	2.3500e- 003	2.2500e- 003	123.4296

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	-/yr		
General Office Building	419608	2.2600e- 003	0.0206	0.0173	1.2000e- 004		1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003	0.0000	22.3919	22.3919	4.3000e- 004	4.1000e- 004	22.5250
High Turnover (Sit Down Restaurant)	1.80114e +006	9.7100e- 003	0.0883	0.0742	5.3000e- 004		6.7100e- 003	6.7100e- 003		6.7100e- 003	6.7100e- 003	0.0000	96.1157	96.1157	1.8400e- 003	1.7600e- 003	96.6868
Total		0.0120	0.1089	0.0914	6.5000e- 004		8.2700e- 003	8.2700e- 003		8.2700e- 003	8.2700e- 003	0.0000	118.5076	118.5076	2.2700e- 003	2.1700e- 003	119.2118

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5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
General Office Building	562900	176.2779	0.0125	1.7900e- 003	177.1233
High Turnover (Sit Down Restaurant)	344732	107.9564	7.6600e- 003	1.0900e- 003	108.4741
Total		284.2342	0.0202	2.8800e- 003	285.5973

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	√yr	
General Office Building	544392	170.4818	0.0121	1.7300e- 003	171.2994
High Turnover (Sit Down Restaurant)	338964	106.1500	7.5300e- 003	1.0800e- 003	106.6591
Total		276.6319	0.0196	2.8100e- 003	277.9585

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.2123	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e- 003	1.3200e- 003	0.0000	0.0000	1.4000e- 003
Unmitigated	0.2123	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e- 003	1.3200e- 003	0.0000	0.0000	1.4000e- 003

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr						MT/yr									
Architectural Coating	0.0208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1915					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e- 005	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e- 003	1.3200e- 003	0.0000	0.0000	1.4000e- 003
Total	0.2123	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e- 003	1.3200e- 003	0.0000	0.0000	1.4000e- 003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr						MT/yr									
Architectural Coating	0.0208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1915					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e- 005	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e- 003	1.3200e- 003	0.0000	0.0000	1.4000e- 003
Total	0.2123	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e- 003	1.3200e- 003	0.0000	0.0000	1.4000e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e			
Category	MT/yr						
Mitigated	53.9315	0.2959	7.4200e- 003	63.5408			
Unmitigated	53.9315	0.2959	7.4200e- 003	63.5408			

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

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
General Office Building	6.55127 / 4.01529	42.7623	0.2164	5.4500e- 003	49.7963
High Turnover (Sit Down Restaurant)	2.41916 / 0.154415		0.0796	1.9700e- 003	13.7445
Total		53.9315	0.2959	7.4200e- 003	63.5408

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
General Office Building	6.55127 / 4.01529	42.7623	0.2164	5.4500e- 003	49.7963
High Turnover (Sit Down Restaurant)	2.41916 / 0.154415	11.1693	0.0796	1.9700e- 003	13.7445
Total		53.9315	0.2959	7.4200e- 003	63.5408

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e			
	MT/yr						
Mitigated	26.2102	1.5490	0.0000	64.9346			
Unmitigated	26.2102	1.5490	0.0000	64.9346			

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
General Office Building	34.28	6.9585	0.4112	0.0000	17.2395
High Turnover (Sit Down Restaurant)	94.84	19.2517	1.1377	0.0000	47.6952
Total		26.2102	1.5490	0.0000	64.9346

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
General Office Building	34.28	6.9585	0.4112	0.0000	17.2395
High Turnover (Sit Down Restaurant)	94.84	19.2517	1.1377	0.0000	47.6952
Total		26.2102	1.5490	0.0000	64.9346

9.0 Operational Offroad

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
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11.0 Vegetation

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Sunset Blvd Commercial Project

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Urbanization

(lb/MWhr)

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.03	1000sqft	0.24	45,032.00	0
High Turnover (Sit Down Restaurant)	7.97	1000sqft	0.18	7,967.00	0

Precipitation Freq (Days)

(lb/MWhr)

1.2 Other Project Characteristics

Urban

Climate Zone	11			Operational Year	2025
Utility Company	Los Angeles Depar	rtment of Water & Power			
CO2 Intensity	690 4	CH4 Intensity	0.049	N2O Intensity	0.007

2.2

Wind Speed (m/s)

(lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - New CalEEMod says non-default entered - not so

Land Use - Footprint of office + footprint of restaurant = total lot acreage

Construction Phase - Schedule provided by client

Off-road Equipment -

Off-road Equipment - Cement for underground garage

Off-road Equipment - Added excavation

Off-road Equipment - Includes excavation for garage

Off-road Equipment -

Off-road Equipment -

Trips and VMT - To Chiquita Canyon landfill in Santa Clarita

Demolition -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading - Three level underground parking

Vehicle Trips - Trip rates from Sunset Boulevard Transportation Study. Omar Sarsour. September 2022.

Construction Off-road Equipment Mitigation - All equipment is at least Tier 4 Interim or better where applicable

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Project design feature = 10% reduction beyond Title 24 requirement

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	26,500.00	22,379.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	79,499.00	67,137.00
tblAreaCoating	Area_Nonresidential_Exterior	26500	22379
tblAreaCoating	Area_Nonresidential_Interior	79499	67137
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	5.00	40.00
tblConstructionPhase	NumDays	100.00	300.00
tblConstructionPhase	NumDays	10.00	11.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	5.00	25.00
tblConstructionPhase	NumDays	1.00	10.00
tblGrading	AcresOfGrading	60.00	4.00
tblGrading	AcresOfGrading	9.38	1.88
tblGrading	MaterialExported	0.00	25,000.00
tblLandUse	LandUseSquareFeet	45,030.00	45,032.00
tblLandUse	LandUseSquareFeet	7,970.00	7,967.00
tblLandUse	LotAcreage	1.03	0.24
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	UsageHours	4.00	6.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.049
tblProjectCharacteristics	CO2IntensityFactor	691.98	690.4
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.007
tblSolidWaste	SolidWasteGenerationRate	41.88	34.28
tblTripsAndVMT	HaulingTripLength	20.00	36.00
tblTripsAndVMT	VendorTripNumber	9.00	7.00
tblTripsAndVMT	WorkerTripNumber	18.00	15.00
tblTripsAndVMT	WorkerTripNumber	4.00	3.00
tblWater	IndoorWaterUseRate	8,003,350.67	6,551,265.95
tblWater	OutdoorWaterUseRate	4,905,279.44	4,015,292.03

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	day		
2022	2.1795	33.7490	17.9270	0.0842	7.9253	0.9455	8.8708	3.8131	0.8742	4.6873	0.0000	8,889.8765	8,889.8765	1.1464	0.9966	9,215.5144
2023	1.7217	27.5287	15.0756	0.0808	7.9254	0.7578	8.6831	3.8131	0.7000	4.5131	0.0000	8,534.3441	8,534.3441	1.1392	0.9414	8,843.3493
2024	10.5624	11.9152	13.5853	0.0258	0.2125	0.4744	0.6869	0.0574	0.4584	0.5158	0.0000	2,361.5476	2,361.5476	0.4144	0.0231	2,377.1647
Maximum	10.5624	33.7490	17.9270	0.0842	7.9254	0.9455	8.8708	3.8131	0.8742	4.6873	0.0000	8,889.8765	8,889.8765	1.1464	0.9966	9,215.5144

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/d	day		
2022	0.8697	23.6279	20.0449	0.0842	4.1800	0.1594	4.3394	1.7849	0.1543	1.9392	0.0000	8,889.8765	8,889.8765	1.1464	0.9966	9,215.5144
2023	0.6330	20.1519	19.1771	0.0808	4.1800	0.1641	4.2997	1.7849	0.1640	1.9012	0.0000	8,534.3441	8,534.3441	1.1392	0.9414	8,843.3493
2024	10.4361	10.2916	14.0842	0.0258	0.2125	0.1641	0.3766	0.0574	0.1639	0.2213	0.0000	2,361.5476	2,361.5476	0.4144	0.0231	2,377.1647
Maximum	10.4361	23.6279	20.0449	0.0842	4.1800	0.1641	4.3394	1.7849	0.1640	1.9392	0.0000	8,889.8765	8,889.8765	1.1464	0.9966	9,215.5144

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	17.46	26.12	-14.42	0.00	46.63	77.61	50.57	52.79	76.28	58.20	0.00	0.00	0.00	0.00	0.00	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Energy	0.0679	0.6176	0.5188	3.7100e- 003		0.0469	0.0469		0.0469	0.0469		741.1181	741.1181	0.0142	0.0136	745.5222
Mobile	3.4793	2.9287	28.6508	0.0587	6.2370	0.0435	6.2805	1.6614	0.0403	1.7018		5,989.6977	5,989.6977	0.4525	0.2722	6,082.1112
Total	4.7108	3.5463	29.1749	0.0625	6.2370	0.0904	6.3275	1.6614	0.0873	1.7487		6,730.8274	6,730.8274	0.4667	0.2858	6,827.6457

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Area	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Energy	0.0656	0.5965	0.5011	3.5800e- 003		0.0453	0.0453		0.0453	0.0453		715.7930	715.7930	0.0137	0.0131	720.0466
Mobile	3.4793	2.9287	28.6508	0.0587	6.2370	0.0435	6.2805	1.6614	0.0403	1.7018		5,989.6977	5,989.6977	0.4525	0.2722	6,082.1112
Total	4.7084	3.5252	29.1572	0.0623	6.2370	0.0888	6.3258	1.6614	0.0857	1.7471		6,705.5023	6,705.5023	0.4662	0.2853	6,802.1701

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.05	0.60	0.06	0.21	0.00	1.78	0.03	0.00	1.84	0.09	0.00	0.38	0.38	0.10	0.16	0.37

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	12/1/2022	12/15/2022	5	11	
2	Site Preparation	Site Preparation	12/16/2022	12/29/2022	5	10	
3	Grading	Grading	12/30/2022	3/23/2023	5	60	
4	Building Construction	Building Construction	3/24/2023	5/16/2024	5	300	
5	Paving	Paving	5/17/2024	6/20/2024	5	25	
6	Architectural Coating	Architectural Coating	6/21/2024	8/15/2024	5	40	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 67,137; Non-Residential Outdoor: 22,379; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	34.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	3,125.00	14.70	6.90	36.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	15.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment Water Exposed Area

3.2 **Demolition - 2022**

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/	day		
Fugitive Dust					0.6746	0.0000	0.6746	0.1022	0.0000	0.1022			0.0000			0.0000
Off-Road	1.8914	18.3987	17.2156	0.0293		0.9238	0.9238		0.8619	0.8619		2,823.4321	2,823.4321	0.7538		2,842.2772
Total	1.8914	18.3987	17.2156	0.0293	0.6746	0.9238	1.5985	0.1022	0.8619	0.9641		2,823.4321	2,823.4321	0.7538		2,842.2772

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022 Unmitigated Construction Off-Site

ROG PM2.5 Total Bio- CO2 NBio-CO2 Total CO2 CH4 N20 CO2e NOx CO SO2 Fugitive Exhaust PM10 **Fugitive** Exhaust PM2.5 PM10 PM10 Total PM2.5 Category lb/day lb/day 3.8600e-Hauling 0.0144 0.5191 0.1210 1.9200e-0.0541 0.0580 0.0148 3.6900e-0.0185 210.4216 210.4216 0.0112 0.0334 220.6500 003 003 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Vendor 0.1687 0.0519 0.0379 0.5904 1.5300e-0.1677 1.0700e-0.0445 9.9000e-0.0455 155.0163 155.0163 4.2200e-3.7500e-156.2404 Worker 003 003 003 004 003 0.0663 0.5570 0.7114 3.4500e-0.2218 4.9300e-0.2267 0.0593 4.6800e-0.0640 365.4378 365.4378 0.0154 0.0371 376.8904 Total 003 003 003

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.2631	0.0000	0.2631	0.0398	0.0000	0.0398			0.0000			0.0000
Off-Road	0.5265	10.8201	19.3335	0.0293		0.0460	0.0460		0.0460	0.0460	0.0000	2,823.4321	2,823.4321	0.7538		2,842.2772
Total	0.5265	10.8201	19.3335	0.0293	0.2631	0.0460	0.3091	0.0398	0.0460	0.0858	0.0000	2,823.4321	2,823.4321	0.7538		2,842.2772

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0144	0.5191	0.1210	1.9200e- 003	0.0541	3.8600e- 003	0.0580	0.0148	3.6900e- 003	0.0185		210.4216	210.4216	0.0112	0.0334	220.6500
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0519	0.0379	0.5904	1.5300e- 003	0.1677	1.0700e- 003	0.1687	0.0445	9.9000e- 004	0.0455		155.0163	155.0163	4.2200e- 003	3.7500e- 003	156.2404
Total	0.0663	0.5570	0.7114	3.4500e- 003	0.2218	4.9300e- 003	0.2267	0.0593	4.6800e- 003	0.0640		365.4378	365.4378	0.0154	0.0371	376.8904

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					5.4687	0.0000	5.4687	2.9180	0.0000	2.9180			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727		1,666.1738	1,666.1738	0.5389		1,679.6457
Total	1.3122	14.6277	7.0939	0.0172	5.4687	0.6225	6.0912	2.9180	0.5727	3.4907		1,666.1738	1,666.1738	0.5389		1,679.6457

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3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0202	0.3149	8.2000e- 004	0.0894	5.7000e- 004	0.0900	0.0237	5.3000e- 004	0.0242		82.6754	82.6754	2.2500e- 003	2.0000e- 003	83.3282
Total	0.0277	0.0202	0.3149	8.2000e- 004	0.0894	5.7000e- 004	0.0900	0.0237	5.3000e- 004	0.0242		82.6754	82.6754	2.2500e- 003	2.0000e- 003	83.3282

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					2.1328	0.0000	2.1328	1.1380	0.0000	1.1380			0.0000			0.0000
Off-Road	0.2998	5.0659	9.8221	0.0172		0.0281	0.0281		0.0281	0.0281	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457
Total	0.2998	5.0659	9.8221	0.0172	2.1328	0.0281	2.1609	1.1380	0.0281	1.1661	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0202	0.3149	8.2000e- 004	0.0894	5.7000e- 004	0.0900	0.0237	5.3000e- 004	0.0242		82.6754	82.6754	2.2500e- 003	2.0000e- 003	83.3282
Total	0.0277	0.0202	0.3149	8.2000e- 004	0.0894	5.7000e- 004	0.0900	0.0237	5.3000e- 004	0.0242		82.6754	82.6754	2.2500e- 003	2.0000e- 003	83.3282

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					6.1399	0.0000	6.1399	3.3250	0.0000	3.3250			0.0000			0.0000
Off-Road	1.7428	18.7606	12.4753	0.0258		0.8282	0.8282		0.7619	0.7619		2,495.4977	2,495.4977	0.8071		2,515.6751
Total	1.7428	18.7606	12.4753	0.0258	6.1399	0.8282	6.9681	3.3250	0.7619	4.0869		2,495.4977	2,495.4977	0.8071		2,515.6751

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.3918	14.9556	3.0972	0.0571	1.6401	0.1164	1.7565	0.4496	0.1114	0.5610		6,260.0313	6,260.0313	0.3357	0.9933	6,564.4310
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0450	0.0328	0.5117	1.3300e- 003	0.1453	9.3000e- 004	0.1462	0.0385	8.6000e- 004	0.0394		134.3475	134.3475	3.6600e- 003	3.2500e- 003	135.4083
Total	0.4368	14.9884	3.6088	0.0585	1.7854	0.1173	1.9027	0.4881	0.1122	0.6003		6,394.3788	6,394.3788	0.3393	0.9966	6,699.8393

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lb/day										
Fugitive Dust					2.3946	0.0000	2.3946	1.2968	0.0000	1.2968			0.0000			0.0000
Off-Road	0.4330	8.6395	16.0630	0.0258		0.0421	0.0421		0.0421	0.0421	0.0000	2,495.4977	2,495.4977	0.8071		2,515.6751
Total	0.4330	8.6395	16.0630	0.0258	2.3946	0.0421	2.4367	1.2968	0.0421	1.3388	0.0000	2,495.4977	2,495.4977	0.8071		2,515.6751

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lb/day										
Hauling	0.3918	14.9556	3.0972	0.0571	1.6401	0.1164	1.7565	0.4496	0.1114	0.5610		6,260.0313	6,260.0313	0.3357	0.9933	6,564.4310
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0450	0.0328	0.5117	1.3300e- 003	0.1453	9.3000e- 004	0.1462	0.0385	8.6000e- 004	0.0394		134.3475	134.3475	3.6600e- 003	3.2500e- 003	135.4083
Total	0.4368	14.9884	3.6088	0.0585	1.7854	0.1173	1.9027	0.4881	0.1122	0.6003		6,394.3788	6,394.3788	0.3393	0.9966	6,699.8393

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d			lb/d	day							
Fugitive Dust					6.1399	0.0000	6.1399	3.3250	0.0000	3.3250			0.0000			0.0000
Off-Road	1.5217	16.0163	11.9615	0.0258		0.6802	0.6802		0.6257	0.6257		2,495.7204	2,495.7204	0.8072		2,515.8995
Total	1.5217	16.0163	11.9615	0.0258	6.1399	0.6802	6.8201	3.3250	0.6257	3.9507		2,495.7204	2,495.7204	0.8072		2,515.8995

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3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lb/day										
Hauling	0.1584	11.4834	2.6443	0.0538	1.6401	0.0767	1.7169	0.4496	0.0734	0.5230		5,908.6140	5,908.6140	0.3287	0.9384	6,196.4639
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0416	0.0290	0.4698	1.2900e- 003	0.1453	8.7000e- 004	0.1462	0.0385	8.0000e- 004	0.0393		130.0098	130.0098	3.2800e- 003	3.0000e- 003	130.9859
Total	0.2000	11.5124	3.1141	0.0550	1.7854	0.0776	1.8631	0.4881	0.0742	0.5624		6,038.6238	6,038.6238	0.3320	0.9414	6,327.4498

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lb/day										
Fugitive Dust					2.3946	0.0000	2.3946	1.2968	0.0000	1.2968			0.0000			0.0000
Off-Road	0.4330	8.6395	16.0630	0.0258		0.0421	0.0421		0.0421	0.0421	0.0000	2,495.7204	2,495.7204	0.8072		2,515.8995
Total	0.4330	8.6395	16.0630	0.0258	2.3946	0.0421	2.4367	1.2968	0.0421	1.3388	0.0000	2,495.7204	2,495.7204	0.8072		2,515.8995

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3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lb/day										
Hauling	0.1584	11.4834	2.6443	0.0538	1.6401	0.0767	1.7169	0.4496	0.0734	0.5230		5,908.6140	5,908.6140	0.3287	0.9384	6,196.4639
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0416	0.0290	0.4698	1.2900e- 003	0.1453	8.7000e- 004	0.1462	0.0385	8.0000e- 004	0.0393		130.0098	130.0098	3.2800e- 003	3.0000e- 003	130.9859
Total	0.2000	11.5124	3.1141	0.0550	1.7854	0.0776	1.8631	0.4881	0.0742	0.5624		6,038.6238	6,038.6238	0.3320	0.9414	6,327.4498

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	1.6114	12.2627	13.0736	0.0231		0.5360	0.5360		0.5183	0.5183		2,077.5622	2,077.5622	0.3478		2,086.2569			
Total	1.6114	12.2627	13.0736	0.0231		0.5360	0.5360		0.5183	0.5183		2,077.5622	2,077.5622	0.3478		2,086.2569			

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0600e- 003	0.2687	0.1041	1.3000e- 003	0.0448	1.3500e- 003	0.0462	0.0129	1.2900e- 003	0.0142		140.1977	140.1977	4.7000e- 003	0.0202	146.3218
Worker	0.0480	0.0335	0.5421	1.4800e- 003	0.1677	1.0100e- 003	0.1687	0.0445	9.3000e- 004	0.0454		150.0113	150.0113	3.7800e- 003	3.4600e- 003	151.1375
Total	0.0561	0.3021	0.6462	2.7800e- 003	0.2125	2.3600e- 003	0.2149	0.0574	2.2200e- 003	0.0596		290.2090	290.2090	8.4800e- 003	0.0236	297.4593

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	0.4010	9.9925	13.4786	0.0231		0.1617	0.1617		0.1617	0.1617	0.0000	2,077.5622	2,077.5622	0.3478		2,086.2569
Total	0.4010	9.9925	13.4786	0.0231		0.1617	0.1617		0.1617	0.1617	0.0000	2,077.5622	2,077.5622	0.3478		2,086.2569

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023 Mitigated Construction Off-Site

PM2.5 Total Bio- CO2 NBio-CO2 Total CO2 CH4 ROG NOx CO SO2 **Fugitive** Exhaust PM10 **Fugitive** Exhaust N20 CO2e PM2.5 PM10 PM10 Total PM2.5 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 0.0000 0.0462 8.0600e-0.2687 0.1041 1.3000e-0.0448 1.3500e-0.0129 1.2900e-0.0142 140.1977 140.1977 4.7000e-0.0202 146.3218 Vendor 003 003 003 003 003 0.1687 0.0480 0.0335 0.5421 0.1677 0.0445 9.3000e-0.0454 150.0113 150.0113 3.7800e-3.4600e-151.1375 Worker 1.4800e-1.0100e-003 003 004 003 003 0.0561 0.3021 0.6462 2.7800e-0.2125 2.3600e-0.2149 0.0574 2.2200e-0.0596 290.2090 290.2090 8.4800e 0.0236 297.4593 Total 003 003 003 003

3.5 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.5081	11.6161	12.9797	0.0231		0.4721	0.4721		0.4563	0.4563		2,077.6959	2,077.6959	0.3413		2,086.2274
Total	1.5081	11.6161	12.9797	0.0231		0.4721	0.4721		0.4563	0.4563		2,077.6959	2,077.6959	0.3413		2,086.2274

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3.5 Building Construction - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8100e- 003	0.2692	0.1019	1.2800e- 003	0.0448	1.3600e- 003	0.0462	0.0129	1.3000e- 003	0.0142		138.0922	138.0922	4.7200e- 003	0.0199	144.1328
Worker	0.0447	0.0299	0.5037	1.4400e- 003	0.1677	9.7000e- 004	0.1686	0.0445	8.9000e- 004	0.0454		145.7595	145.7595	3.4200e- 003	3.2200e- 003	146.8045
Total	0.0525	0.2991	0.6056	2.7200e- 003	0.2125	2.3300e- 003	0.2148	0.0574	2.1900e- 003	0.0596		283.8517	283.8517	8.1400e- 003	0.0231	290.9373

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.4010	9.9925	13.4786	0.0231		0.1617	0.1617		0.1617	0.1617	0.0000	2,077.6959	2,077.6959	0.3413		2,086.2274
Total	0.4010	9.9925	13.4786	0.0231		0.1617	0.1617		0.1617	0.1617	0.0000	2,077.6959	2,077.6959	0.3413		2,086.2274

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8100e- 003	0.2692	0.1019	1.2800e- 003	0.0448	1.3600e- 003	0.0462	0.0129	1.3000e- 003	0.0142		138.0922	138.0922	4.7200e- 003	0.0199	144.1328
Worker	0.0447	0.0299	0.5037	1.4400e- 003	0.1677	9.7000e- 004	0.1686	0.0445	8.9000e- 004	0.0454		145.7595	145.7595	3.4200e- 003	3.2200e- 003	146.8045
Total	0.0525	0.2991	0.6056	2.7200e- 003	0.2125	2.3300e- 003	0.2148	0.0574	2.1900e- 003	0.0596		283.8517	283.8517	8.1400e- 003	0.0231	290.9373

3.6 Paving - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
0	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688			1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688	0.4114		1,308.1547

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0259	0.4366	1.2500e- 003	0.1453	8.4000e- 004	0.1462	0.0385	7.7000e- 004	0.0393		126.3249	126.3249	2.9700e- 003	2.7900e- 003	127.2305
Total	0.0388	0.0259	0.4366	1.2500e- 003	0.1453	8.4000e- 004	0.1462	0.0385	7.7000e- 004	0.0393		126.3249	126.3249	2.9700e- 003	2.7900e- 003	127.2305

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
0	0.2149	5.7133	9.8512	0.0136		0.0213	0.0213		0.0213	0.0213		1,297.8688				1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2149	5.7133	9.8512	0.0136		0.0213	0.0213		0.0213	0.0213	0.0000	1,297.8688	1,297.8688	0.4114		1,308.1547

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0259	0.4366	1.2500e- 003	0.1453	8.4000e- 004	0.1462	0.0385	7.7000e- 004	0.0393		126.3249	126.3249	2.9700e- 003	2.7900e- 003	127.2305
Total	0.0388	0.0259	0.4366	1.2500e- 003	0.1453	8.4000e- 004	0.1462	0.0385	7.7000e- 004	0.0393		126.3249	126.3249	2.9700e- 003	2.7900e- 003	127.2305

3.7 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	10.3727					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	10.5534	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9400e- 003	5.9700e- 003	0.1008	2.9000e- 004	0.0335	1.9000e- 004	0.0337	8.8900e- 003	1.8000e- 004	9.0700e- 003		29.1519	29.1519	6.8000e- 004	6.4000e- 004	29.3609
Total	8.9400e- 003	5.9700e- 003	0.1008	2.9000e- 004	0.0335	1.9000e- 004	0.0337	8.8900e- 003	1.8000e- 004	9.0700e- 003		29.1519	29.1519	6.8000e- 004	6.4000e- 004	29.3609

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	10.3727					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	10.4272	1.0598	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0159		281.8443

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9400e- 003	5.9700e- 003	0.1008	2.9000e- 004	0.0335	1.9000e- 004	0.0337	8.8900e- 003	1.8000e- 004	9.0700e- 003		29.1519	29.1519	6.8000e- 004	6.4000e- 004	29.3609
Total	8.9400e- 003	5.9700e- 003	0.1008	2.9000e- 004	0.0335	1.9000e- 004	0.0337	8.8900e- 003	1.8000e- 004	9.0700e- 003		29.1519	29.1519	6.8000e- 004	6.4000e- 004	29.3609

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	3.4793	2.9287	28.6508	0.0587	6.2370	0.0435	6.2805	1.6614	0.0403	1.7018		5,989.6977	5,989.6977	0.4525	0.2722	6,082.1112
Unmitigated	3.4793	2.9287	28.6508	0.0587	6.2370	0.0435	6.2805	1.6614	0.0403	1.7018		5,989.6977	5,989.6977	0.4525	0.2722	6,082.1112

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	438.59	99.52	31.52	1,069,524	1,069,524
High Turnover (Sit Down Restaurant)	894.07	975.53	1136.84	1,281,595	1,281,595
Total	1,332.67	1,075.04	1,168.36	2,351,119	2,351,119

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W H-S or C-C H-O or C-NV			H-W or C- W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.540171		0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
General Office Building	0.540171		0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
NaturalGas Mitigated	0.0656	0.5965	0.5011	3.5800e- 003		0.0453	0.0453		0.0453	0.0453		715.7930	715.7930	0.0137	0.0131	720.0466
NaturalGas Unmitigated	0.0679	0.6176	0.5188	3.7100e- 003		0.0469	0.0469		0.0469	0.0469		741.1181	741.1181	0.0142	0.0136	745.5222

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	lay		
General Office Building	1272	0.0137	0.1247	0.1048	7.5000e- 004		9.4800e- 003	9.4800e- 003		9.4800e- 003	9.4800e- 003		149.6470	149.6470	2.8700e- 003	2.7400e- 003	150.5363
High Turnover (Sit Down Restaurant)	5027.5	0.0542	0.4929	0.4140	2.9600e- 003		0.0375	0.0375		0.0375	0.0375		591.4711	591.4711	0.0113	0.0108	594.9859
Total		0.0679	0.6176	0.5188	3.7100e- 003		0.0469	0.0469		0.0469	0.0469		741.1181	741.1181	0.0142	0.0136	745.5222

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/d	lay		
General Office Building	1.14961	0.0124	0.1127	0.0947	6.8000e- 004		8.5700e- 003	8.5700e- 003		8.5700e- 003	8.5700e- 003		135.2484	135.2484	2.5900e- 003	2.4800e- 003	136.0521
High Turnover (Sit Down Restaurant)	4.93463	0.0532	0.4838	0.4064	2.9000e- 003		0.0368	0.0368		0.0368	0.0368		580.5446	580.5446	0.0111	0.0106	583.9945
Total		0.0656	0.5965	0.5011	3.5800e- 003		0.0453	0.0453		0.0453	0.0453		715.7930	715.7930	0.0137	0.0131	720.0466

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Mitigated	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Unmitigated	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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/d	day							lb/d	lay		
Architectural Coating	0.1137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e- 004	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Total	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.1137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e- 004	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Total	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124

7.0 Water Detail

7.1 Mitigation Measures Water

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
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11.0 Vegetation

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Sunset Blvd Commercial Project

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Urbanization

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	General Office Building 45.03		0.24	45,032.00	0
High Turnover (Sit Down Restaurant)	7.97	1000sqft	0.18	7,967.00	0

Precipitation Freq (Days)

1.2 Other Project Characteristics

Urban

Climate Zone	11			Operational Year	2025
Utility Company	Los Angeles Dep	artment of Water & Power			
CO2 Intensity (lb/MWhr)	690.4	CH4 Intensity (lb/MWhr)	0.049	N2O Intensity (lb/MWhr)	0.007

2.2

Wind Speed (m/s)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - New CalEEMod says non-default entered - not so

Land Use - Footprint of office + footprint of restaurant = total lot acreage

Construction Phase - Schedule provided by client

Off-road Equipment -

Off-road Equipment - Cement for underground garage

Off-road Equipment - Added excavation

Off-road Equipment - Includes excavation for garage

Off-road Equipment -

Off-road Equipment -

Trips and VMT - To Chiquita Canyon landfill in Santa Clarita

Demolition -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading - Three level underground parking

Vehicle Trips - Trip rates from Sunset Boulevard Transportation Study. Omar Sarsour. September 2022.

Construction Off-road Equipment Mitigation - All equipment is at least Tier 4 Interim or better where applicable

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Project design feature = 10% reduction beyond Title 24 requirement

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	26,500.00	22,379.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	79,499.00	67,137.00
tblAreaCoating	Area_Nonresidential_Exterior	26500	22379
tblAreaCoating	Area_Nonresidential_Interior	79499	67137
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	5.00	40.00
tblConstructionPhase	NumDays	100.00	300.00
tblConstructionPhase	NumDays	10.00	11.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	5.00	25.00
tblConstructionPhase	NumDays	1.00	10.00
tblGrading	AcresOfGrading	60.00	4.00
tblGrading	AcresOfGrading	9.38	1.88
tblGrading	MaterialExported	0.00	25,000.00
tblLandUse	LandUseSquareFeet	45,030.00	45,032.00
tblLandUse	LandUseSquareFeet	7,970.00	7,967.00
tblLandUse	LotAcreage	1.03	0.24
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	UsageHours	4.00	6.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.049
tblProjectCharacteristics	CO2IntensityFactor	691.98	690.4
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.007
tblSolidWaste	SolidWasteGenerationRate	41.88	34.28
tblTripsAndVMT	HaulingTripLength	20.00	36.00
tblTripsAndVMT	VendorTripNumber	9.00	7.00
tblTripsAndVMT	WorkerTripNumber	18.00	15.00
tblTripsAndVMT	WorkerTripNumber	4.00	3.00
tblWater	IndoorWaterUseRate	8,003,350.67	6,551,265.95
tblWater	OutdoorWaterUseRate	4,905,279.44	4,015,292.03

2.0 Emissions Summary

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Sunset Blvd Commercial Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day								lb/day							
2022	2.1768	34.3487	17.8809	0.0842	7.9253	0.9457	8.8710	3.8131	0.8743	4.6874	0.0000	8,883.8103	8,883.8103	1.1461	0.9970	9,209.5674
2023	1.7175	28.0143	15.0611	0.0808	7.9254	0.7579	8.6832	3.8131	0.7001	4.5132	0.0000	8,531.0160	8,531.0160	1.1388	0.9422	8,840.2492
2024	10.5631	11.9310	13.5483	0.0258	0.2125	0.4744	0.6869	0.0574	0.4585	0.5158	0.0000	2,354.1144	2,354.1144	0.4145	0.0234	2,369.8127
Maximum	10.5631	34.3487	17.8809	0.0842	7.9254	0.9457	8.8710	3.8131	0.8743	4.6874	0.0000	8,883.8103	8,883.8103	1.1461	0.9970	9,209.5674

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/d	day				
2022	0.8671	24.2276	19.9987	0.0842	4.1800	0.1596	4.3395	1.7849	0.1545	1.9393	0.0000	8,883.8103	8,883.8103	1.1461	0.9970	9,209.5674
2023	0.6288	20.6376	19.1626	0.0808	4.1800	0.1641	4.2998	1.7849	0.1640	1.9013	0.0000	8,531.0160	8,531.0160	1.1388	0.9422	8,840.2492
2024	10.4368	10.3073	14.0471	0.0258	0.2125	0.1641	0.3766	0.0574	0.1639	0.2213	0.0000	2,354.1144	2,354.1144	0.4145	0.0234	2,369.8127
Maximum	10.4368	24.2276	19.9987	0.0842	4.1800	0.1641	4.3395	1.7849	0.1640	1.9393	0.0000	8,883.8103	8,883.8103	1.1461	0.9970	9,209.5674

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	17.46	25.74	-14.45	0.00	46.63	77.61	50.57	52.79	76.27	58.20	0.00	0.00	0.00	0.00	0.00	0.00

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Energy	0.0679	0.6176	0.5188	3.7100e- 003		0.0469	0.0469		0.0469	0.0469		741.1181	741.1181	0.0142	0.0136	745.5222
Mobile	3.3861	3.1617	28.7154	0.0563	6.2370	0.0435	6.2805	1.6614	0.0404	1.7018		5,743.5211	5,743.5211	0.4721	0.2846	5,840.1297
Total	4.6176	3.7794	29.2396	0.0600	6.2370	0.0904	6.3275	1.6614	0.0873	1.7488		6,484.6508	6,484.6508	0.4864	0.2982	6,585.6643

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Area	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Energy	0.0656	0.5965	0.5011	3.5800e- 003		0.0453	0.0453		0.0453	0.0453		715.7930	715.7930	0.0137	0.0131	720.0466
Mobile	3.3861	3.1617	28.7154	0.0563	6.2370	0.0435	6.2805	1.6614	0.0404	1.7018		5,743.5211	5,743.5211	0.4721	0.2846	5,840.1297
Total	4.6153	3.7583	29.2219	0.0599	6.2370	0.0888	6.3259	1.6614	0.0857	1.7472		6,459.3257	6,459.3257	0.4859	0.2977	6,560.1886

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.05	0.56	0.06	0.22	0.00	1.78	0.03	0.00	1.84	0.09	0.00	0.39	0.39	0.10	0.16	0.39

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	12/1/2022	12/15/2022	5	11	
2	Site Preparation	Site Preparation	12/16/2022	12/29/2022	5	10	
3	Grading	Grading	12/30/2022	3/23/2023	5	60	
4	Building Construction	Building Construction	3/24/2023	5/16/2024	5	300	
5	Paving	Paving	5/17/2024	6/20/2024	5	25	
6	Architectural Coating	Architectural Coating	6/21/2024	8/15/2024	5	40	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 67,137; Non-Residential Outdoor: 22,379; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41

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Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	34.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	3,125.00	14.70	6.90	36.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	15.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment Water Exposed Area

3.2 **Demolition - 2022**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.6746	0.0000	0.6746	0.1022	0.0000	0.1022			0.0000			0.0000
Off-Road	1.8914	18.3987	17.2156	0.0293		0.9238	0.9238		0.8619	0.8619		2,823.4321	2,823.4321	0.7538		2,842.2772
Total	1.8914	18.3987	17.2156	0.0293	0.6746	0.9238	1.5985	0.1022	0.8619	0.9641		2,823.4321	2,823.4321	0.7538		2,842.2772

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0141	0.5402	0.1232	1.9200e- 003	0.0541	3.8600e- 003	0.0580	0.0148	3.7000e- 003	0.0185		210.4832	210.4832	0.0112	0.0334	220.7145
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0556	0.0419	0.5421	1.4500e- 003	0.1677	1.0700e- 003	0.1687	0.0445	9.9000e- 004	0.0455		146.8205	146.8205	4.2700e- 003	4.0100e- 003	148.1225
Total	0.0696	0.5820	0.6652	3.3700e- 003	0.2218	4.9300e- 003	0.2267	0.0593	4.6900e- 003	0.0640		357.3037	357.3037	0.0154	0.0374	368.8370

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.2631	0.0000	0.2631	0.0398	0.0000	0.0398			0.0000			0.0000
Off-Road	0.5265	10.8201	19.3335	0.0293		0.0460	0.0460		0.0460	0.0460	0.0000	2,823.4321	2,823.4321	0.7538		2,842.2772
Total	0.5265	10.8201	19.3335	0.0293	0.2631	0.0460	0.3091	0.0398	0.0460	0.0858	0.0000	2,823.4321	2,823.4321	0.7538		2,842.2772

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0141	0.5402	0.1232	1.9200e- 003	0.0541	3.8600e- 003	0.0580	0.0148	3.7000e- 003	0.0185		210.4832	210.4832	0.0112	0.0334	220.7145
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0556	0.0419	0.5421	1.4500e- 003	0.1677	1.0700e- 003	0.1687	0.0445	9.9000e- 004	0.0455		146.8205	146.8205	4.2700e- 003	4.0100e- 003	148.1225
Total	0.0696	0.5820	0.6652	3.3700e- 003	0.2218	4.9300e- 003	0.2267	0.0593	4.6900e- 003	0.0640		357.3037	357.3037	0.0154	0.0374	368.8370

3.3 Site Preparation - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					5.4687	0.0000	5.4687	2.9180	0.0000	2.9180			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727		1,666.1738	1,666.1738	0.5389		1,679.6457
Total	1.3122	14.6277	7.0939	0.0172	5.4687	0.6225	6.0912	2.9180	0.5727	3.4907		1,666.1738	1,666.1738	0.5389		1,679.6457

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3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0223	0.2891	7.7000e- 004	0.0894	5.7000e- 004	0.0900	0.0237	5.3000e- 004	0.0242		78.3043	78.3043	2.2800e- 003	2.1400e- 003	78.9987
Total	0.0296	0.0223	0.2891	7.7000e- 004	0.0894	5.7000e- 004	0.0900	0.0237	5.3000e- 004	0.0242		78.3043	78.3043	2.2800e- 003	2.1400e- 003	78.9987

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					2.1328	0.0000	2.1328	1.1380	0.0000	1.1380			0.0000			0.0000
Off-Road	0.2998	5.0659	9.8221	0.0172		0.0281	0.0281		0.0281	0.0281	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457
Total	0.2998	5.0659	9.8221	0.0172	2.1328	0.0281	2.1609	1.1380	0.0281	1.1661	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457

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3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0223	0.2891	7.7000e- 004	0.0894	5.7000e- 004	0.0900	0.0237	5.3000e- 004	0.0242		78.3043	78.3043	2.2800e- 003	2.1400e- 003	78.9987
Total	0.0296	0.0223	0.2891	7.7000e- 004	0.0894	5.7000e- 004	0.0900	0.0237	5.3000e- 004	0.0242		78.3043	78.3043	2.2800e- 003	2.1400e- 003	78.9987

3.4 Grading - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					6.1399	0.0000	6.1399	3.3250	0.0000	3.3250			0.0000			0.0000
Off-Road	1.7428	18.7606	12.4753	0.0258		0.8282	0.8282		0.7619	0.7619		2,495.4977	2,495.4977	0.8071		2,515.6751
Total	1.7428	18.7606	12.4753	0.0258	6.1399	0.8282	6.9681	3.3250	0.7619	4.0869		2,495.4977	2,495.4977	0.8071		2,515.6751

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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/d	day							lb/d	day		
Hauling	0.3859	15.5518	3.1315	0.0571	1.6401	0.1165	1.7566	0.4496	0.1115	0.5611		6,261.0681	6,261.0681	0.3353	0.9935	6,565.5195
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0482	0.0363	0.4698	1.2600e- 003	0.1453	9.3000e- 004	0.1462	0.0385	8.6000e- 004	0.0394		127.2444	127.2444	3.7000e- 003	3.4800e- 003	128.3729
Total	0.4341	15.5881	3.6013	0.0584	1.7854	0.1175	1.9029	0.4881	0.1124	0.6005		6,388.3126	6,388.3126	0.3390	0.9970	6,693.8923

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					2.3946	0.0000	2.3946	1.2968	0.0000	1.2968			0.0000			0.0000
Off-Road	0.4330	8.6395	16.0630	0.0258		0.0421	0.0421		0.0421	0.0421	0.0000	2,495.4977	2,495.4977	0.8071		2,515.6751
Total	0.4330	8.6395	16.0630	0.0258	2.3946	0.0421	2.4367	1.2968	0.0421	1.3388	0.0000	2,495.4977	2,495.4977	0.8071		2,515.6751

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/	day		
Hauling	0.3859	15.5518	3.1315	0.0571	1.6401	0.1165	1.7566	0.4496	0.1115	0.5611		6,261.0681	6,261.0681	0.3353	0.9935	6,565.5195
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0482	0.0363	0.4698	1.2600e- 003	0.1453	9.3000e- 004	0.1462	0.0385	8.6000e- 004	0.0394		127.2444	127.2444	3.7000e- 003	3.4800e- 003	128.3729
Total	0.4341	15.5881	3.6013	0.0584	1.7854	0.1175	1.9029	0.4881	0.1124	0.6005		6,388.3126	6,388.3126	0.3390	0.9970	6,693.8923

3.4 Grading - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					6.1399	0.0000	6.1399	3.3250	0.0000	3.3250			0.0000			0.0000
	1.5217	16.0163	11.9615	0.0258		0.6802	0.6802		0.6257	0.6257		2,495.7204	2,495.7204	0.8072		2,515.8995
Total	1.5217	16.0163	11.9615	0.0258	6.1399	0.6802	6.8201	3.3250	0.6257	3.9507		2,495.7204	2,495.7204	0.8072		2,515.8995

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 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/d	day							lb/d	day		
Hauling	0.1511	11.9660	2.6677	0.0538	1.6401	0.0769	1.7170	0.4496	0.0735	0.5231		5,912.1397	5,912.1397	0.3283	0.9390	6,200.1556
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0447	0.0320	0.4318	1.2200e- 003	0.1453	8.7000e- 004	0.1462	0.0385	8.0000e- 004	0.0393		123.1560	123.1560	3.3200e- 003	3.2000e- 003	124.1941
Total	0.1958	11.9981	3.0996	0.0550	1.7854	0.0777	1.8632	0.4881	0.0743	0.5625		6,035.2957	6,035.2957	0.3316	0.9422	6,324.3497

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					2.3946	0.0000	2.3946	1.2968	0.0000	1.2968			0.0000			0.0000
Off-Road	0.4330	8.6395	16.0630	0.0258		0.0421	0.0421		0.0421	0.0421	0.0000	2,495.7204	2,495.7204	0.8072		2,515.8995
Total	0.4330	8.6395	16.0630	0.0258	2.3946	0.0421	2.4367	1.2968	0.0421	1.3388	0.0000	2,495.7204	2,495.7204	0.8072		2,515.8995

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.1511	11.9660	2.6677	0.0538	1.6401	0.0769	1.7170	0.4496	0.0735	0.5231		5,912.1397	5,912.1397	0.3283	0.9390	6,200.1556
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0447	0.0320	0.4318	1.2200e- 003	0.1453	8.7000e- 004	0.1462	0.0385	8.0000e- 004	0.0393		123.1560	123.1560	3.3200e- 003	3.2000e- 003	124.1941
Total	0.1958	11.9981	3.0996	0.0550	1.7854	0.0777	1.8632	0.4881	0.0743	0.5625		6,035.2957	6,035.2957	0.3316	0.9422	6,324.3497

3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.6114	12.2627	13.0736	0.0231		0.5360	0.5360		0.5183	0.5183		2,077.5622	2,077.5622	0.3478		2,086.2569
Total	1.6114	12.2627	13.0736	0.0231		0.5360	0.5360		0.5183	0.5183		2,077.5622	2,077.5622	0.3478		2,086.2569

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7800e- 003	0.2813	0.1074	1.3100e- 003	0.0448	1.3600e- 003	0.0462	0.0129	1.3000e- 003	0.0142		140.4342	140.4342	4.6800e- 003	0.0202	146.5738
Worker	0.0516	0.0370	0.4983	1.4100e- 003	0.1677	1.0100e- 003	0.1687	0.0445	9.3000e- 004	0.0454		142.1030	142.1030	3.8300e- 003	3.7000e- 003	143.3009
Total	0.0594	0.3183	0.6056	2.7200e- 003	0.2125	2.3700e- 003	0.2149	0.0574	2.2300e- 003	0.0596		282.5373	282.5373	8.5100e- 003	0.0239	289.8746

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.4010	9.9925	13.4786	0.0231		0.1617	0.1617		0.1617	0.1617	0.0000	2,077.5622	2,077.5622	0.3478		2,086.2569
Total	0.4010	9.9925	13.4786	0.0231		0.1617	0.1617		0.1617	0.1617	0.0000	2,077.5622	2,077.5622	0.3478		2,086.2569

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7800e- 003	0.2813	0.1074	1.3100e- 003	0.0448	1.3600e- 003	0.0462	0.0129	1.3000e- 003	0.0142		140.4342	140.4342	4.6800e- 003	0.0202	146.5738
Worker	0.0516	0.0370	0.4983	1.4100e- 003	0.1677	1.0100e- 003	0.1687	0.0445	9.3000e- 004	0.0454		142.1030	142.1030	3.8300e- 003	3.7000e- 003	143.3009
Total	0.0594	0.3183	0.6056	2.7200e- 003	0.2125	2.3700e- 003	0.2149	0.0574	2.2300e- 003	0.0596		282.5373	282.5373	8.5100e- 003	0.0239	289.8746

3.5 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.5081	11.6161	12.9797	0.0231		0.4721	0.4721		0.4563	0.4563		2,077.6959	2,077.6959	0.3413		2,086.2274	
Total	1.5081	11.6161	12.9797	0.0231		0.4721	0.4721		0.4563	0.4563		2,077.6959	2,077.6959	0.3413		2,086.2274	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.5200e- 003	0.2819	0.1051	1.2800e- 003	0.0448	1.3700e- 003	0.0462	0.0129	1.3100e- 003	0.0142		138.3300	138.3300	4.6900e- 003	0.0199	144.3857
Worker	0.0482	0.0330	0.4634	1.3700e- 003	0.1677	9.7000e- 004	0.1686	0.0445	8.9000e- 004	0.0454		138.0884	138.0884	3.4700e- 003	3.4400e- 003	139.1997
Total	0.0557	0.3149	0.5685	2.6500e- 003	0.2125	2.3400e- 003	0.2148	0.0574	2.2000e- 003	0.0596		276.4185	276.4185	8.1600e- 003	0.0234	283.5853

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.4010	9.9925	13.4786	0.0231		0.1617	0.1617		0.1617	0.1617	0.0000	2,077.6959	2,077.6959	0.3413		2,086.2274
Total	0.4010	9.9925	13.4786	0.0231		0.1617	0.1617		0.1617	0.1617	0.0000	2,077.6959	2,077.6959	0.3413		2,086.2274

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.5200e- 003	0.2819	0.1051	1.2800e- 003	0.0448	1.3700e- 003	0.0462	0.0129	1.3100e- 003	0.0142		138.3300	138.3300	4.6900e- 003	0.0199	144.3857
Worker	0.0482	0.0330	0.4634	1.3700e- 003	0.1677	9.7000e- 004	0.1686	0.0445	8.9000e- 004	0.0454		138.0884	138.0884	3.4700e- 003	3.4400e- 003	139.1997
Total	0.0557	0.3149	0.5685	2.6500e- 003	0.2125	2.3400e- 003	0.2148	0.0574	2.2000e- 003	0.0596		276.4185	276.4185	8.1600e- 003	0.0234	283.5853

3.6 Paving - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688	0.4114		1,308.1547

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0418	0.0286	0.4016	1.1800e- 003	0.1453	8.4000e- 004	0.1462	0.0385	7.7000e- 004	0.0393		119.6767	119.6767	3.0100e- 003	2.9800e- 003	120.6397
Total	0.0418	0.0286	0.4016	1.1800e- 003	0.1453	8.4000e- 004	0.1462	0.0385	7.7000e- 004	0.0393		119.6767	119.6767	3.0100e- 003	2.9800e- 003	120.6397

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
0	0.2149	5.7133	9.8512	0.0136		0.0213	0.0213		0.0213	0.0213		1,297.8688				1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2149	5.7133	9.8512	0.0136		0.0213	0.0213		0.0213	0.0213	0.0000	1,297.8688	1,297.8688	0.4114		1,308.1547

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0418	0.0286	0.4016	1.1800e- 003	0.1453	8.4000e- 004	0.1462	0.0385	7.7000e- 004	0.0393		119.6767	119.6767	3.0100e- 003	2.9800e- 003	120.6397
Total	0.0418	0.0286	0.4016	1.1800e- 003	0.1453	8.4000e- 004	0.1462	0.0385	7.7000e- 004	0.0393		119.6767	119.6767	3.0100e- 003	2.9800e- 003	120.6397

3.7 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	10.3727					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
1	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	10.5534	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6400e- 003	6.6000e- 003	0.0927	2.7000e- 004	0.0335	1.9000e- 004	0.0337	8.8900e- 003	1.8000e- 004	9.0700e- 003		27.6177	27.6177	6.9000e- 004	6.9000e- 004	27.8399
Total	9.6400e- 003	6.6000e- 003	0.0927	2.7000e- 004	0.0335	1.9000e- 004	0.0337	8.8900e- 003	1.8000e- 004	9.0700e- 003		27.6177	27.6177	6.9000e- 004	6.9000e- 004	27.8399

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Archit. Coating	10.3727					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	10.4272	1.0598	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0159		281.8443

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6400e- 003	6.6000e- 003	0.0927	2.7000e- 004	0.0335	1.9000e- 004	0.0337	8.8900e- 003	1.8000e- 004	9.0700e- 003		27.6177	27.6177	6.9000e- 004	6.9000e- 004	27.8399
Total	9.6400e- 003	6.6000e- 003	0.0927	2.7000e- 004	0.0335	1.9000e- 004	0.0337	8.8900e- 003	1.8000e- 004	9.0700e- 003		27.6177	27.6177	6.9000e- 004	6.9000e- 004	27.8399

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	3.3861	3.1617	28.7154	0.0563	6.2370	0.0435	6.2805	1.6614	0.0404	1.7018		5,743.5211	5,743.5211	0.4721	0.2846	5,840.1297
Unmitigated	3.3861	3.1617	28.7154	0.0563	6.2370	0.0435	6.2805	1.6614	0.0404	1.7018		5,743.5211	5,743.5211	0.4721	0.2846	5,840.1297

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	438.59	99.52	31.52	1,069,524	1,069,524
High Turnover (Sit Down Restaurant)	894.07	975.53	1136.84	1,281,595	1,281,595
Total	1,332.67	1,075.04	1,168.36	2,351,119	2,351,119

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W H-S or C-C H-O or C-NW			H-W or C- W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
General Office Building	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335

Sunset Blvd Commercial Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
NaturalGas Mitigated	0.0656	0.5965	0.5011	3.5800e- 003		0.0453	0.0453		0.0453	0.0453		715.7930	715.7930	0.0137	0.0131	720.0466
NaturalGas Unmitigated	0.0679	0.6176	0.5188	3.7100e- 003		0.0469	0.0469		0.0469	0.0469		741.1181	741.1181	0.0142	0.0136	745.5222

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
General Office Building	1272	0.0137	0.1247	0.1048	7.5000e- 004		9.4800e- 003	9.4800e- 003		9.4800e- 003	9.4800e- 003		149.6470	149.6470	2.8700e- 003	2.7400e- 003	150.5363
High Turnover (Sit Down Restaurant)		0.0542	0.4929	0.4140	2.9600e- 003		0.0375	0.0375		0.0375	0.0375		591.4711	591.4711	0.0113	0.0108	594.9859
Total		0.0679	0.6176	0.5188	3.7100e- 003		0.0469	0.0469		0.0469	0.0469		741.1181	741.1181	0.0142	0.0136	745.5222

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/d	lay		
General Office Building	1.14961	0.0124	0.1127	0.0947	6.8000e- 004		8.5700e- 003	8.5700e- 003		8.5700e- 003	8.5700e- 003		135.2484	135.2484	2.5900e- 003	2.4800e- 003	136.0521
High Turnover (Sit Down Restaurant)	4.93463	0.0532	0.4838	0.4064	2.9000e- 003		0.0368	0.0368		0.0368	0.0368		580.5446	580.5446	0.0111	0.0106	583.9945
Total		0.0656	0.5965	0.5011	3.5800e- 003		0.0453	0.0453		0.0453	0.0453		715.7930	715.7930	0.0137	0.0131	720.0466

6.0 Area Detail

Sunset Blvd Commercial Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Mitigated	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Unmitigated	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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/d	day							lb/d	lay		
Architectural Coating	0.1137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e- 004	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Total	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.1137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e- 004	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124
Total	1.1636	5.0000e- 005	5.4000e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005		0.0116	0.0116	3.0000e- 005		0.0124

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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Sunset Blvd Commercial Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied Los Angeles-South Coast County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
				Percent	Reduction							
Architectural Coating	0.01	0.13	-0.01	0.00	0.93	0.93	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.72	0.17	-0.03	0.00	0.68	0.67	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.70	0.40	-0.12	0.00	0.95	0.94	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.63	0.26	-0.27	0.00	0.84	0.83	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.61	0.02	-0.11	0.00	0.92	0.91	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.76	0.65	-0.37	0.00	0.95	0.95	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

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Sunset Blvd Commercial Project

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 4 Interim	1	1	No Change	0.00
Cement and Mortar Mixers	Diesel	Tier 4 Interim	3	3	No Change	0.00
Concrete/Industrial Saws	Diesel	Tier 4 Interim	1	1	No Change	0.00
Cranes	Diesel	Tier 4 Interim	1	1	No Change	0.00
Excavators	Diesel	Tier 4 Interim	2	2	No Change	0.00
Forklifts	Diesel	Tier 4 Interim	1	1	No Change	0.00
Generator Sets	Diesel	Tier 4 Interim	1	1	No Change	0.00
Graders	Diesel	Tier 4 Interim	2	2	No Change	0.00
Pavers	Diesel	Tier 4 Interim	1	1	No Change	0.00
Paving Equipment	Diesel	Tier 4 Interim	1	1	No Change	0.00
Rollers	Diesel	Tier 4 Interim	1	1	No Change	0.00
Rubber Tired Dozers	Diesel	Tier 4 Interim	3	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	8	8	No Change	0.00
Welders	Diesel	Tier 4 Interim	3	3	No Change	0.00

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Sunset Blvd Commercial Project

Equipment Type	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
		Uı	nmitigated tons/yr						Unmitiga	ited mt/yr		
Air Compressors	3.62000E-003	2.43800E-002	3.62000E-002	6.00000E-005	1.22000E-003	1.22000E-003	0.00000E+000	5.10651E+000	5.10651E+000	2.90000E-004	0.00000E+000	5.11370E+000
Cement and Mortar Mixers	1.37700E-002	8.62900E-002	7.22700E-002	1.70000E-004	3.35000E-003	3.35000E-003	0.00000E+000	1.07409E+001	1.07409E+001	1.12000E-003	0.00000E+000	1.07687E+001
Concrete/Industria I Saws	1.97000E-003	1.54100E-002	2.01600E-002	3.00000E-005	8.30000E-004	8.30000E-004	0.00000E+000	2.95711E+000	2.95711E+000	1.60000E-004	0.00000E+000	2.96114E+000
Cranes	3.88000E-002	4.17690E-001	2.04160E-001	6.50000E-004	1.74200E-002	1.60300E-002	0.00000E+000	5.70317E+001	5.70317E+001	1.84500E-002	0.00000E+000	5.74929E+001
Excavators	6.78000E-003	5.63500E-002	1.15630E-001	1.80000E-004	2.75000E-003	2.53000E-003	0.00000E+000	1.61054E+001	1.61054E+001	5.21000E-003	0.00000E+000	1.62357E+001
Forklifts	1.12300E-002	1.05140E-001	1.28590E-001	1.70000E-004	6.36000E-003	5.86000E-003	0.00000E+000	1.51078E+001	1.51078E+001	4.89000E-003	0.00000E+000	1.52299E+001
Generator Sets	4.48500E-002	3.98870E-001	5.50130E-001	9.90000E-004	1.83700E-002	1.83700E-002	0.00000E+000	8.47811E+001	8.47811E+001	3.63000E-003	0.00000E+000	8.48719E+001
Graders	1.35900E-002	1.66180E-001	5.94000E-002	2.30000E-004	5.37000E-003	4.94000E-003	0.00000E+000	2.03502E+001	2.03502E+001	6.58000E-003	0.00000E+000	2.05148E+001
Pavers	1.72000E-003	1.63300E-002	2.71200E-002	4.00000E-005	7.60000E-004	7.00000E-004	0.00000E+000	3.87109E+000	3.87109E+000	1.25000E-003	0.00000E+000	3.90239E+000
Paving Equipment	2.06000E-003	1.87000E-002	3.21200E-002	5.00000E-005	9.00000E-004	8.30000E-004	0.00000E+000	4.47317E+000	4.47317E+000	1.45000E-003	0.00000E+000	4.50933E+000
Rollers	1.59000E-003	1.66700E-002	2.02400E-002	3.00000E-005	8.80000E-004	8.10000E-004	0.00000E+000	2.52172E+000	2.52172E+000	8.20000E-004	0.00000E+000	2.54211E+000
Rubber Tired Dozers	2.88800E-002	3.01490E-001	1.28800E-001	3.40000E-004	1.38000E-002	1.26900E-002	0.00000E+000	2.99162E+001	2.99162E+001	9.68000E-003	0.00000E+000	3.01581E+001
Tractors/Loaders/ Backhoes	3.00500E-002	3.04390E-001	4.44390E-001	6.20000E-004	1.49400E-002	1.37500E-002	0.00000E+000	5.44453E+001	5.44453E+001	1.76100E-002	0.00000E+000	5.48855E+001
Welders	1.11740E-001	6.33340E-001	7.52960E-001	1.15000E-003	2.36700E-002	2.36700E-002	0.00000E+000	8.46993E+001	8.46993E+001	9.04000E-003	0.00000E+000	8.49254E+001

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Equipment Type	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	ROG		itigated tons/yr	302	LAHAUST FINITO	LAHaust FIVIZ.5	BIO- CO2	NDIO- CO2		ed mt/yr	NZO	COZE
Air Compressors	1.09000E-003	2.12000E-002	3.66500E-002	6.00000E-005	8.00000E-005	8.00000E-005	0.00000E+000	5.10650E+000	5.10650E+000	2.90000E-004	0.00000E+000	5.11369E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	1.70000E-004	0.00000E+000	0.00000E+000	0.00000E+000	1.07408E+001	1.07408E+001	1.12000E-003	0.00000E+000	1.07687E+001
Concrete/Industrial Saws	6.30000E-004	1.22700E-002	2.12200E-002	3.00000E-005	5.00000E-005	5.00000E-005	0.00000E+000	2.95711E+000	2.95711E+000	1.60000E-004	0.00000E+000	2.96114E+000
Cranes	1.06300E-002	1.71470E-001	3.45590E-001	6.50000E-004	1.06000E-003	1.06000E-003	0.00000E+000	5.70317E+001	5.70317E+001	1.84500E-002	0.00000E+000	5.74928E+001
Excavators	2.26000E-003	8.08200E-002	1.39090E-001	1.80000E-004	3.00000E-004	3.00000E-004	0.00000E+000	1.61054E+001	1.61054E+001	5.21000E-003	0.00000E+000	1.62356E+001
Forklifts	3.88000E-003	7.55800E-002	1.30680E-001	1.70000E-004	2.80000E-004	2.80000E-004	0.00000E+000	1.51078E+001	1.51078E+001	4.89000E-003	0.00000E+000	1.52299E+001
Generator Sets	1.80900E-002	3.51920E-001	6.08450E-001	9.90000E-004	1.32000E-003	1.32000E-003	0.00000E+000	8.47810E+001	8.47810E+001	3.63000E-003	0.00000E+000	8.48718E+001
Graders	3.79000E-003	6.10500E-002	1.23050E-001	2.30000E-004	3.80000E-004	3.80000E-004	0.00000E+000	2.03502E+001	2.03502E+001	6.58000E-003	0.00000E+000	2.05147E+001
Pavers	5.40000E-004	1.94100E-002	3.34000E-002	4.00000E-005	7.00000E-005	7.00000E-005	0.00000E+000	3.87108E+000	3.87108E+000	1.25000E-003	0.00000E+000	3.90238E+000
Paving Equipment	6.30000E-004	2.25200E-002	3.87600E-002	5.00000E-005	8.00000E-005	8.00000E-005	0.00000E+000	4.47316E+000	4.47316E+000	1.45000E-003	0.00000E+000	4.50933E+000
Rollers	6.50000E-004	1.25500E-002	2.17000E-002	3.00000E-005	5.00000E-005	5.00000E-005	0.00000E+000	2.52172E+000	2.52172E+000	8.20000E-004	0.00000E+000	2.54210E+000
Rubber Tired Dozers	5.56000E-003	8.96300E-002	1.80660E-001	3.40000E-004	5.60000E-004	5.60000E-004	0.00000E+000	2.99162E+001	2.99162E+001	9.68000E-003	0.00000E+000	3.01581E+001
Tractors/Loaders/Ba ckhoes	1.38600E-002	2.69570E-001	4.66070E-001	6.20000E-004	1.01000E-003	1.01000E-003	0.00000E+000	5.44452E+001	5.44452E+001	1.76100E-002	0.00000E+000	5.48854E+001
Welders	1.97100E-002	7.47510E-001	6.73580E-001	1.15000E-003	2.10300E-002	2.10300E-002	0.00000E+000	8.46992E+001	8.46992E+001	9.04000E-003	0.00000E+000	8.49253E+001

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
					Pe	rcent Reduction						
Air Compressors	6.98895E-001	1.30435E-001	-1.24309E-002	0.00000E+000	9.34426E-001	9.34426E-001	0.00000E+000	1.95828E-006	1.95828E-006	0.00000E+000	0.00000E+000	1.95553E-006
Cement and Mortar Mixers	1.00000E+000	1.00000E+000	1.00000E+000	0.00000E+000	1.00000E+000	1.00000E+000	0.00000E+000	9.31025E-007	9.31025E-007	0.00000E+000	0.00000E+000	9.28615E-007
Concrete/Industrial Saws	6.80203E-001	2.03764E-001	-5.25794E-002	0.00000E+000	9.39759E-001	9.39759E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	7.26031E-001	5.89480E-001	-6.92741E-001	0.00000E+000	9.39150E-001	9.33874E-001	0.00000E+000	1.22739E-006	1.22739E-006	0.00000E+000	0.00000E+000	1.21754E-006
Excavators	6.66667E-001	-4.34250E-001	-2.02889E-001	0.00000E+000	8.90909E-001	8.81423E-001	0.00000E+000	1.24182E-006	1.24182E-006	0.00000E+000	0.00000E+000	1.23186E-006
Forklifts	6.54497E-001	2.81149E-001	-1.62532E-002	0.00000E+000	9.55975E-001	9.52218E-001	0.00000E+000	1.32382E-006	1.32382E-006	0.00000E+000	0.00000E+000	1.31320E-006
Generator Sets	5.96656E-001	1.17708E-001	-1.06011E-001	0.00000E+000	9.28144E-001	9.28144E-001	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17825E-006
Graders	7.21118E-001	6.32627E-001	-1.07155E+000	0.00000E+000	9.29236E-001	9.23077E-001	0.00000E+000	1.47419E-006	1.47419E-006	0.00000E+000	0.00000E+000	1.46236E-006
Pavers	6.86047E-001	-1.88610E-001	-2.31563E-001	0.00000E+000	9.07895E-001	9.00000E-001	0.00000E+000	2.58325E-006	2.58325E-006	0.00000E+000	0.00000E+000	2.56253E-006
Paving Equipment	6.94175E-001	-2.04278E-001	-2.06725E-001	0.00000E+000	9.11111E-001	9.03614E-001	0.00000E+000	2.23555E-006	2.23555E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	5.91195E-001	2.47151E-001	-7.21344E-002	0.00000E+000	9.43182E-001	9.38272E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.93374E-006
Rubber Tired Dozers	8.07479E-001	7.02710E-001	-4.02640E-001	0.00000E+000	9.59420E-001	9.55871E-001	0.00000E+000	1.00280E-006	1.00280E-006	0.00000E+000	0.00000E+000	1.32634E-006
Tractors/Loaders/Ba ckhoes	5.38769E-001	1.14393E-001	-4.87860E-002	0.00000E+000	9.32396E-001	9.26545E-001	0.00000E+000	1.28570E-006	1.28570E-006	0.00000E+000	0.00000E+000	1.09319E-006
Welders	8.23608E-001	-1.80267E-001	1.05424E-001	0.00000E+000	1.11534E-001	1.11534E-001	0.00000E+000	1.18065E-006	1.18065E-006	0.00000E+000	0.00000E+000	1.17750E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

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No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)			
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitig	gated	Mitig	gated	Percent Re	duction
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.03	0.01	0.03	0.01	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.61	0.61
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.19	0.10	0.07	0.04	0.61	0.61
Grading	Roads	0.05	0.01	0.05	0.01	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.03	0.01	0.01	0.01	0.61	0.61
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

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Sunset Blvd Commercial Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Operational Percent Reduction Summary

Category	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
			Percen	t Reduction								
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	3.39	3.42	3.42	4.41	3.50	3.50	0.00	3.42	3.42	3.40	3.56	3.42
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting: Urban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.34		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			

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No	Land Use	Integrate Below Market Rate Housing	0.00	
	Land Use	Land Use SubTotal	0.00	
No	Neighborhood Enhancements	Improve Pedestrian Network		
No	Neighborhood Enhancements	Provide Traffic Calming Measures		
No	Neighborhood Enhancements	Implement NEV Network	0.00	
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00	
No	Parking Policy Pricing	Limit Parking Supply	0.00	
No	Parking Policy Pricing	Unbundle Parking Costs	0.00	
No	Parking Policy Pricing	On-street Market Pricing	0.00	
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00	
No	Transit Improvements	Provide BRT System	0.00	
No	Transit Improvements	Expand Transit Network	0.00	
No	Transit Improvements	Increase Transit Frequency	0.00	
	Transit Improvements	Transit Improvements Subtotal	0.00	
		Land Use and Site Enhancement Subtotal	0.00	
No	Commute	Implement Trip Reduction Program		
No	Commute	Transit Subsidy		
No	Commute	Implement Employee Parking "Cash Out"	7.70	
No	Commute	Workplace Parking Charge		
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00	2.00	
No	Commute	Provide Ride Sharing Program	15.00		
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
Yes	Use Low VOC Paint (Non-residential Interior)	100.00
Yes	Use Low VOC Paint (Non-residential Exterior)	100.00
Yes	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
1	Exceed Title 24	10.00	
	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

No \	Water Efficient Landscape		
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Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	



ATTACHMENT 2 SUPPLEMENTAL CALCULATIONS FOR CONSTRUCTION ENERGY USE

<u>Table 1</u>
DIESEL FUEL USE BY ONSITE CONSTRUCTION EQUIPMENT

Construction Phase	Equipment Type	HP	Number	Hours/Day	Daily Factor	Load Factor	No. of Days	HP-hours	Gallons	Total Gallons
	Concrete/Industrial Saws	81	1	8	0.6	0.73	11	3,122.06	156.10	
Demolition	Excavators	158	1	8	0.6	0.38	11	3,170.11	158.51	
Demolition	Rubber-Tired Dozers	247	1	8	0.6	0.4	11	5,216.64	260.83	
	Tractors/Loaders/Backhoes	97	3	8	0.6	0.37	11	5,684.98	284.25	
										860
	Graders	187	1	8	0.6	0.41	10	3,680.16	184.01	
Site Preparation	Rubber-Tired Dozers	247	1	7	0.6	0.4	10	4,149.60	207.48	
	Tractors/Loaders/Backhoes	97	1	8	0.6	0.37	10	1,722.72	86.14	
										478
	Excavators	158	1	8	0.6	0.38	60	17,291.52	864.58	
Grading	Graders	187	1	8	0.6	0.41	60	22,080.96	1,104.05	
Grauing	Rubber-Tired Dozers	247	1	8	0.6	0.4	60	28,454.40	1,422.72	
	Tractors/Loaders/Backhoes	97	2	7	0.6	0.37	60	18,088.56	904.43	
										4,296
	Cement and Mortar Mixers	9	2	6	0.6	0.56	300	10,886.40	544.32	
	Cranes	231	1	6	0.6	0.29	300	72,349.20	3,617.46	
Building Construction	Forklifts	89	1	6	0.6	0.2	300	19,224.00	961.20	
bulluling Constituction	Generator Sets	84	1	8	0.6	0.74	300	89,510.40	4,475.52	
	Tractors/Loaders/Backhoes	97	1	6	0.6	0.37	300	38,761.20	1,938.06	
	Welders	46	3	8	0.6	0.45	300	89,424.00	4,471.20	
										16,008
	Cement and Mortar Mixers	9	1	6	0.6	0.56	25	453.60	22.68	
	Pavers	130	1	6	0.6	0.42	25	4,914.00	245.70	
Paving	Paving Equipment	132	1	8	0.6	0.36	25	5,702.40	285.12	
	Rollers	80	1	7	0.6	0.38	25	3,192.00	159.60	
	Tractors/Loaders/Backhoes	97	1	8	0.6	0.37	25	4,306.80	215.34	
										928
Architectural Coating	Air Compressors	78	1	6	0.6	0.48	40	5,391.36	269.57	
										270

Total 22,840

<u>Table 2</u> ELECTRICITY REQUIRED TO PROVIDE WATER FOR DUST CONTROL

Construction Phase	No. of Days	Daily Acreage	Gallons/acre-day	Gallons	kW-hr per Gallon	kW-hr
Site Preparation	10	1	3,020	30,200	0.009727	294
Grading	60	1	3,020	181,200	0.009727	1,763

Total 2,057

<u>Table 3</u> CONSTRUCTION ONROAD VEHICLE FUEL USE

		Constructi	Construction Worker Commuting			Vendor Trips			Materials and Waste Hauling Trips		
Construction Phase	Days	Trips per Day	Miles/Trip	VMT	Trips per Day	Miles/Trip	VMT	Trips per Day ^b	Miles/Trip	νмτ	
Demolition	11	15	14.7	2,426	0	6.9	0	34	20	7480	
Site Preparation	10	8	14.7	1,176	0	6.9	0	0	20	0	
Grading	60	13	14.7	11,466	0	6.9	0	52.08	36	112500	
Building Construction	300	15	14.7	66,150	7	6.9	14490	0	20	0	
Paving	25	13	14.7	4,778	0	6.9	0	0	20	0	
Architectural Coating	40	3	14.7	1,764	0	6.9	0	0	20	0	

 Total VMT
 87,759
 14,490
 119,980

 Grand Total
 222,229

FUEL CALCULATION

	VMT	Gasoline or Diesel	Miles per Gallon ^c	Gallons Gasoline	Gallons Diesel
Workers	87,759	Gasoline	26.1	3,362	0
Vendors	14,490	Diesel	14.7	0	986
Haulers	119,980	Diesel	14.7	0	8,162

Total	3,362	9.148
	-,	-, -

^aTrips per day and miles per trip were calculated by CalEEMod for workers and vendors.

Export volume 25000 cubic yards
Truck capacity 16 cubic yards
Total one-way trips 1562.5 trips
Total round trips 3125 trips
Grading phase duration 60 days
Average round trips per day 52.0833333 trips per day

^bCalEEMod reports total trips for waste hauling trucks; see below for daily trip calculation.

^bComposite miles per gallon for Los Angeles County, from EMFAC2017.