

APPENDIX 5



Prairie View Village

Energy Analysis

City of Perris

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LIST OF ABBREVIATED TERMS

%	Percent
(1)	Reference
AQIA	<i>Air Quality Impact Analysis</i>
BTU	British Thermal Units
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
City	City of Perris
CPUC	California Public Utilities Commission
EIA	Energy Information Administration
EPA	Environmental Protection Agency
EMFAC	EMissions FACtor
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse Gas
GWh	Gigawatt Hour
HHDT	Heavy-Heavy Duty Trucks
IEPR	Integrated Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
kWh	Kilowatt Hour
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1/LHDT2	Light-Heavy Duty Trucks
MDV	Medium Duty Trucks
MHDT	Medium-Heavy Duty Trucks
MMcfd	Million Cubic Feet Per Day
mpg	Miles Per Gallon
PG&E	Pacific Gas and Electric
Project	Prairie View Village
SCE	Southern California Edison
sf	Square Feet
SoCalGas	Southern California Gas
TEA-21	Transportation Equity Act for the 21 st Century
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

The results of this *Prairie View Village Energy Analysis* is summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the 2019 California Environmental Quality Act (CEQA) Statute and Guidelines (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for potential energy impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Energy Impact #1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	4.6	<i>Less Than Significant</i>	<i>n/a</i>
Energy Impact #2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	4.6	<i>Less Than Significant</i>	<i>n/a</i>

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the federal and state agencies that regulate energy use and consumption through various means and programs. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of energy usage include:

- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- The Transportation Equity Act for the 21st Century (TEA-21)
- Integrated Energy Policy Report (IEPR)
- State of California Energy Plan
- California Code Title 24, Part 6, Energy Efficiency Standards – Energy Code
- California Code Title 24, Part 11, Green Building Standards - CalGreen
- AB 1493 Pavley Regulations and Fuel Efficiency Standards
- California’s Renewable Portfolio Standard (RPS)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Prairie View Village (Project). The purpose of this report is to ensure that energy implication is considered by the City of Perris (Lead Agency), as the lead agency, and to quantify anticipated energy usage associated with construction and operation of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

1.1 SITE LOCATION

The proposed Prairie View Village (“Project”) is located north of Dale Street, between Wilson Avenue and Murrieta Road in the City of Perris. The Project’s location in relation to the surrounding area is shown on Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The proposed Project consists of the development of a 287-unit multifamily development with a club house/fitness building. Exhibit 1-B illustrates the preliminary Project site plan.

EXHIBIT 1-A: LOCATION MAP

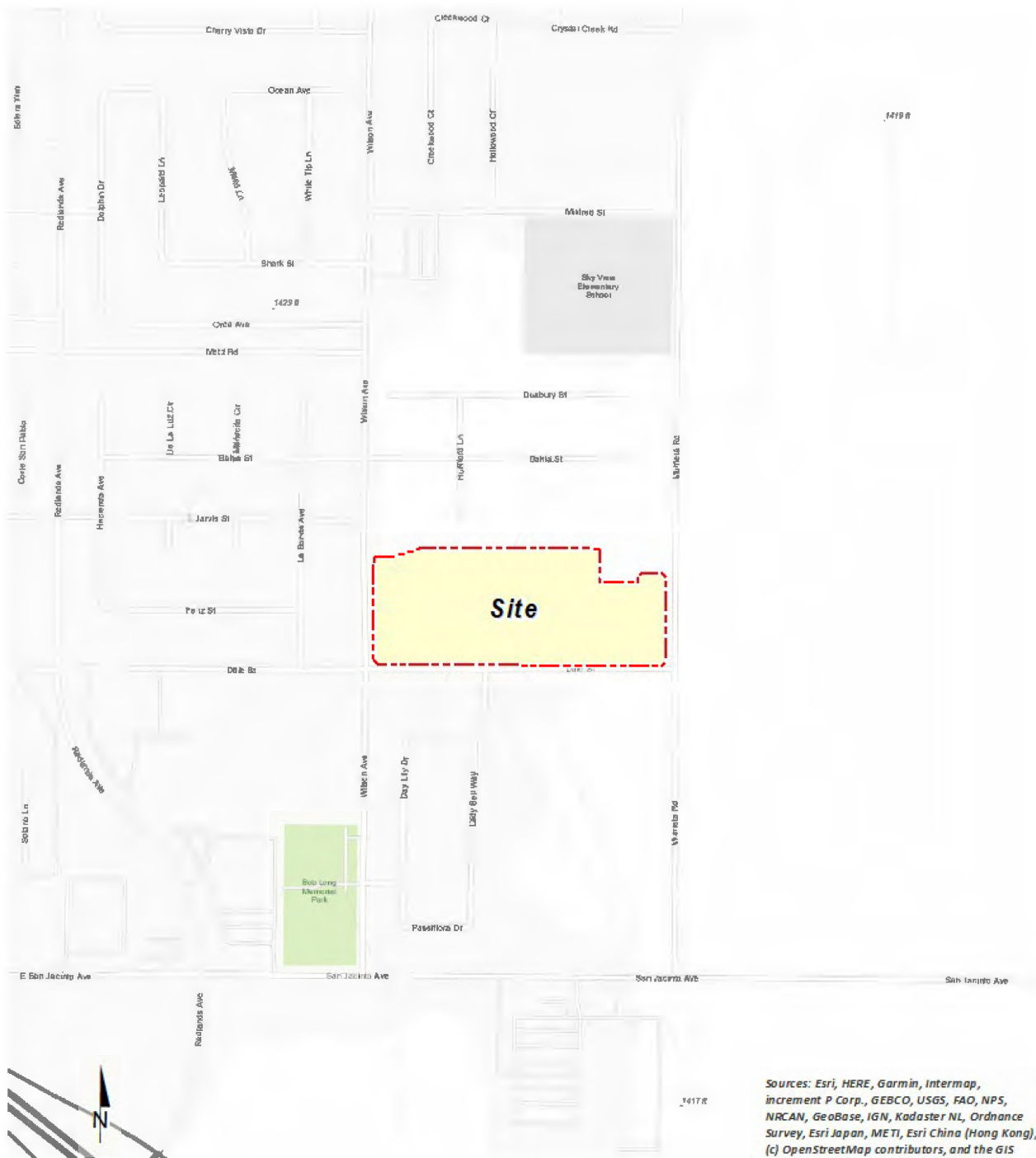


EXHIBIT 1-B: SITE PLAN



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2 EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the Project region.

2.1 OVERVIEW

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2018, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2020 and included (2):

- Approximately 7,900 trillion British Thermal Unit (BTU) of energy was consumed;
- Approximately 3,444 trillion BTU of petroleum;
- Approximately 2,210 trillion BTU of natural gas;
- Approximately 33.3 trillion BTU coal (2)

The California Energy Commission's (CEC) Transportation Energy Demand Forecast 2018-2030 was released in order to support the 2017 Integrated Energy Policy Report. The Transportation energy Demand Forecast 2018-2030 lays out graphs and data supporting their projections of California's future transportation energy demand. The projected inputs consider expected variable changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand included:

Gasoline demand in the transportation sector is expected to decline from approximately 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030 (3)

Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030 (3)

- Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2017 (4)

The most recent data provided by the EIA for energy use in California by demand sector is from 2017 and is reported as follows:

Approximately 40.3% transportation;
 Approximately 23.1% industrial;
 Approximately 18.0% residential; and
 Approximately 18.7% commercial (5)

The most recent data provided by the EIA for energy use in California by demand sector is from 2018 and is reported as follows:

- Approximately 39.1% transportation;
- Approximately 23.5% industrial;
- Approximately 18.3% residential; and
- Approximately 19.2% commercial (5)

In 2020, total system electric generation for California was 277,704 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 200,475 GWh which accounted for approximately 72.2% of the electricity it uses; the rest was imported

from the Pacific Northwest (8.6%) and the U.S. Southwest (19.2%) (6). Natural gas is the main source for electricity generation at 34.23% of the total in-state electric generation system power as shown in Table 2-1. Renewables account for 31.7% of the total electrical system power.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2020)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	317	0.17%	194	6,963	7,474	2.74%
Natural Gas	92,298	48.35%	70	8,654	101,022	37.06%
Oil	30	0.02%	-	-	30	0.01%
Other	384	0.20%	125	9	518	0.19%
Nuclear	16,280	8.53%	672	8,481	25,434	9.33%
Large Hydro	17,938	9.40%	14,078	1,259	33,275	12.21%
Unspecified	0	0.00%	12,870	1,745	14,615	5.36%
Total Non-Renewables and Unspecified Energy	127,248	66.65%	28,009	27,111	182,368	66.91%
Biomass	5,680	2.97%	975	25	6,679	2.45%
Geothermal	11,345	5.94%	166	1,825	13,336	4.89%
Small Hydro	3,476	1.82%	320	2	3,798	1.39%
Solar	29,456	15.43%	284	6,312	36,052	13.23%
Wind	13,708	7.18%	11,438	5,197	30,343	11.13%
Total Renewables	63,665	33.35%	13,184	13,359	90,208	33.09%
Total System Energy	190,913	100.00%	41,193	40,471	272,576	100.00%

Source: CEC, 2020 Total System Electric Generation

An updated summary of, and context for energy consumption and energy demands within the State is presented in “U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts” excerpted below:

- California was the seventh-largest producer of crude oil among the 50 states in 2018, and, as of January 2019, it ranked third in oil refining capacity.
- California is the largest consumer of jet fuel among the 50 states and accounted for one-fifth of the nation’s jet fuel consumption in 2018. (7)
- California's total energy consumption is second highest in the nation, but, in 2018, the state's per capita energy consumption was the fourth-lowest, due in part to its mild climate and its energy efficiency programs. (8)
- In 2018, California ranked first in the nation as a producer of electricity from solar, geothermal, and biomass resources and fourth in the nation in conventional hydroelectric power generation.
- In 2018, large- and small-scale solar photovoltaic (PV) and solar thermal installations provided 19% of California’s net electricity generation (9).

As indicated above, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

2.2 ELECTRICITY

The usage associated with electricity use were calculated using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0. The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the South California Air Basin and the San Diego Air Basin region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts (10). Similarly, the subsequent 2020 IEPR's identifies broad strategies that are aimed at maintaining electricity system reliability.

Electricity is currently provided to the Project by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2019 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms (11). SCE also purchases from independent power producers and utilities, including out-of-state suppliers (12).

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator ISO is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (13).

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO

reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Electricity is currently provided to the Project by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE’s 2018 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (12).

Tables 2-2 identifies SCE’s specific proportional shares of electricity sources in 2020. As indicated in Table 2-2, the 2020 SCE Power Mix has renewable energy at 30.9% of the overall energy resources. Geothermal resources are at 5.5%, wind power is at 9.4%, large hydroelectric sources are at 3.3%, solar energy is at 15.1%, and coal is at 0% (14).

TABLE 2-2: SCE 2020 POWER CONTENT MIX

Energy Resources	2020 SCE Power Mix
<i>Eligible Renewable</i>	30.9%
Biomass & Waste	0.1%
Geothermal	5.5%
Eligible Hydroelectric	0.8%
Solar	15.1%
Wind	9.4%
<i>Coal</i>	0.0%
<i>Large Hydroelectric</i>	3.3%
<i>Natural Gas</i>	15.2%
<i>Nuclear</i>	8.4%
<i>Other</i>	0.3%
Unspecified Sources of power*	42.0%
Total	100%

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources

2.3 NATURAL GAS

The following summary of natural gas customers & volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC).

“The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800,000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.

The overwhelming majority of natural gas utility customers in California are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border, and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipelines systems (commonly referred to as California's "backbone" pipeline

system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements.

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.

The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone

transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights system in 2008, and it is now referred to as the backbone transmission system framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California." (15)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. In March 2019, the Department of Motor Vehicles identified 36.4 million registered vehicles in California (16), and those vehicles consume an estimated 17.8 billion gallons of fuel each year¹. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 394,383 land miles, more than 27.5 million passenger vehicles and light trucks, and almost 8.1 million medium- and heavy-duty vehicles (16). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. Petroleum comprises about 91% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels (17). Nearly 17.8 billion gallons of on-highway fuel are burned each year, including 14.6 billion gallons of gasoline (including ethanol) and 3.2 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2019, Californians also used 194 million cubic feet of natural gas as a transportation fuel (18), or the equivalent of 183 billion gallons of gasoline.

¹ Fuel consumptions estimated utilizing information from EMFAC2017.

3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States (U.S.) Department of Transportation, the United States Department of Energy, and the U.S. Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

3.1 FEDERAL REGULATIONS

3.1.1 INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA)

The ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

3.1.2 THE TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

3.2 CALIFORNIA REGULATIONS

3.2.1 INTEGRATED ENERGY POLICY REPORT (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301a). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2019 IEPR was adopted January 31, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2019 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast (19). The 2020 IEPR Update is currently in progress but is not anticipated to be adopted until February 2021.

3.2.2 STATE OF CALIFORNIA ENERGY PLAN

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

3.2.3 CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission. These standards are updated periodically to allow consideration and possible incorporation of new technologies and methods. The most recent approved update is the 2022 Building Code Standards which will be effective January 1, 2023². As the project's building construction is anticipated in 2024, it is presumed that the project would be required to comply with the Title 24 standards in place at that time (20).

3.2.4 AB 1493 PAVLEY REGULATIONS AND FUEL EFFICIENCY STANDARDS

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

² The 2022 California Green Building Standard Code will be published July 1, 2022

3.2.5 CALIFORNIA'S RENEWABLE PORTFOLIO STANDARD (RPS)

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable resources to 33% of total retail sales by 2020 (21).

3.2.6 CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

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4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

In compliance with Appendix G of the *State CEQA Guidelines* (22), this report analyzes the project's anticipated energy use during construction and operations to determine if the Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.2 METHODOLOGY

Information from the CalEEMod Version 2020.4.0 outputs for the *Prairie View Village Air Quality and GHG Impact Analysis* (Giroux & Associates) (AQIA) (GHGA) (23) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.

4.2.1 CAL EEMOD

In June 2021, the California Air Pollution Control Officers Association, in conjunction with the California air districts, released the latest version of the CalEEMod Version 2020.4.0. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources as well as energy usage. (24). Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Output from the annual CalEEMod runs is provided in Appendix 4.1.

4.2.2 EMISSION FACTORS MODEL

On August 19, 2019, the EPA approved the 2017 version of the EMISSIONS FACTOR model (EMFAC) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (25). This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2017 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of analysis, the 2022 and 2024 analysis years were utilized to determine the average vehicle fuel economy for construction and operation the Project, respectively. These are conservative years as fuel efficiencies improve each year over the previous year and energy consumption lowers.

4.3 CONSTRUCTION ENERGY DEMANDS

4.3.1 CONSTRUCTION POWER COST AND ELECTRICITY USAGE

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project.

CONSTRUCTION DURATION

Construction is expected to commence in September 2022 and will last through January 2024. The construction schedule utilized in the analysis, shown in Table 4-1, represents a “worst-case” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.³ The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines. The duration of construction activities was based on the Project Applicant’s schedule.

TABLE 4-1: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Grading	9/1/2022	10/12/2022	30
Building Construction	10/13/2022	12/6/2023	300
Paving	12/7/2023	1/3/2024	20
Architectural Coating	1/4/2024	1/31/2024	20

Source: CalEEMod, Appendix 4.1.

The *2022 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of \$2.41, which was used to calculate the Project’s total construction power cost (26).

Based on Table 4-2, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately \$16,103.12.

³ As shown in the CalEEMod User’s Guide Version 2020.4.0, Section 4.3 “Offroad Equipment” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 4-2: CONSTRUCTION POWER COST

Land Use	Power Cost (per 1,000 SF of building per month of construction)	Total Building Size (1,000 SF)	Construction Duration (months)	Total Project Construction Power Cost
Apartments Mid Rise	\$2.41	133.912	16	\$5,163.65
Health Club	\$2.41	22.700	16	\$875.31
Parking Lot	\$2.41	261.000	16	\$10,064.16
TOTAL PROJECT CONSTRUCTION COST				\$16,103.12

The SCE’s general service rate schedule were used to determine the Project’s electrical usage. As of June 1, 2022, SCE’s general service rate is \$0.13 per kilowatt hours (kWh) of electricity for residential services (27). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 128,825 kWh.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Total Project Construction Electricity Usage (kWh)
Apartments Mid Rise	\$0.13	41,309
Health Club	\$0.13	7,002
Parking Lot	\$0.13	80,513
TOTAL PROJECT CONSTRUCTION ELECTRICITY USAGE (kWh)		128,825

4.3.2 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction.

CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 4-4 will operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the code. It should be noted that most pieces of equipment would likely operate for fewer hours per day. A summary of construction equipment assumptions by phase is provided at Table 4-4.

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Phase Name	Equipment	Amount	Hours Per Day
Grading	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Tractors/Loaders/Backhoes	2	8
Building Construction	Cranes	1	7
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	7
	Welders	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	6

Source: CalEEMod, Appendix 4.1

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-5. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (28). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is consistent with industry standards.

Calculations assume all construction equipment is diesel-powered consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the City and region. As presented in Table 4-5, Project construction activities would consume an estimated 49,374 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Activity/Duration	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Grading	30	Excavators	158	2	8	0.38	961	1,558
		Graders	187	1	8	0.41	613	995
		Rubber Tired Dozers	247	1	8	0.40	790	1,282
		Scrapers	367	2	8	0.48	2,819	4,571
		Tractors/Loaders/Backhoes	97	2	8	0.37	574	931
Building Construction	300	Cranes	231	1	7	0.29	469	7,604
		Forklifts	89	3	8	0.20	427	6,928
		Generator Sets	84	1	8	0.74	497	8,064
		Tractors/Loaders/Backhoes	97	3	7	0.37	754	12,222
		Welders	46	1	8	0.45	166	2,685
Paving	20	Pavers	130	2	8	0.42	874	944
		Paving Equipment	132	2	8	0.36	760	822
		Rollers	80	2	8	0.38	486	526
Architectural Coating	20	Air Compressors	78	1	6	0.48	225	243
CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								49,374

4.3.3 CONSTRUCTION TRIPS AND VMT

Based on the CalEEMod, the Trip and VMT are the number and length (in terms VMT⁴) of on-road vehicle trips for workers and vendors for each construction phase. The trips identified in Table 4-6 are based on information taken from CalEEMod.

TABLE 4-6: CONSTRUCTION TRIPS AND VMT

Phase Name	Worker Trips / Day	Vendor Trips / Day	Hauling Trips / Day	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Grading	20	0	150	14.7	6.9	20
Building Construction	326	77	0	14.7	6.9	20
Paving	15	0	0	14.7	6.9	20
Architectural Coating	65	0	0	14.7	6.9	20

Source: CalEEMod, Appendix 4.1.

4.3.4 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 1,480,878 VMT during the 16 months of construction (23). Based on CalEEMod methodology, emissions from construction worker trips are generated by light-duty-auto vehicles (LDA), light-duty-trucks 1 (LDT1⁵), and light-duty-trucks 2 (LDT2⁶). Based on EMFAC2017 vehicle population data for Year 2022, 70.9% of these vehicles would be LDA, 7.2% would be LDT1, and 21.9% would be LDT2. Data regarding Project related construction worker trips were based on EMFAC2017 inputs utilized within the AQIA.

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2017 version of the EMFAC developed by CARB. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (25). EMFAC2017 was run for the LDA, LDT1, and LDT2 vehicle class within the Los Angeles-South Coast sub-area for the 2022 calendar years. Data from EMFAC2017 is shown in Appendix 4.2. Using the static year 2022 is considered conservative for estimating fuel consumption as it does not account for fuel efficiency improvements each year.

As generated by EMFAC2017, an aggregated fuel economy of LDAs are estimated to have a fuel efficiency of 32.77 miles per gallon (mpg). Table 4-7 provides an estimated annual fuel consumption resulting from LDAs related to the Project construction worker trips. Based on Table 4-7, it is estimated that 31,944 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

⁴ For purposes of analysis, VMT is calculated by multiplying to number of trips by the trip length.

⁵ Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

⁶ Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDA)

Construction Activity	Duration (Days)	Worker LDA Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	30	15	14.7	6,615	32.77	202
Building Construction	300	232	14.7	1,023,120	32.77	31,222
Paving	20	11	14.7	3,234	32.77	99
Architectural Coating	20	47	14.7	13,818	32.77	422
TOTAL CONSTRUCTION WORKER (LDA) FUEL CONSUMPTION						31,944

The EMFAC2017 aggregated fuel economy of LDT1s are estimated to have a fuel efficiency 27.55 mpg. Table 4-8 provides an estimated annual fuel consumption resulting from LDT1s related to the Project construction worker trips. Based on Table 4-8, it is estimated that 3,948 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

TABLE 4-8: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDT1)

Construction Activity	Duration (Days)	Worker LDT1 Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	30	2	14.7	882	27.55	32
Building Construction	300	24	14.7	105,840	27.55	3,841
Paving	20	2	14.7	588	27.55	21
Architectural Coating	20	5	14.7	1,470	27.55	53
TOTAL CONSTRUCTION WORKER (LDT1) FUEL CONSUMPTION						3,948

The EMFAC2017 aggregated fuel economy of LDT2s are estimated to have a fuel efficiency of 26.03 mpg. Table 4-9 provides an estimated annual fuel consumption resulting from LDT2s related to the Project construction worker trips. Based on Table 4-9, it is estimated that 12,497 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

TABLE 4-9: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDT2)

Construction Activity	Duration (Days)	Worker LDT2 Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	30	5	14.7	2,205	26.03	85
Building Construction	300	72	14.7	317,520	26.03	12,198
Paving	20	4	14.7	1,176	26.03	45
Architectural Coating	20	15	14.7	4,410	26.03	169
TOTAL CONSTRUCTION WORKER (LDT2) FUEL CONSUMPTION						12,497

It should be noted that construction worker trips would represent a “single-event” gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

4.3.5 CONSTRUCTION VENDOR AND HAULING FUEL ESTIMATES

Construction vendor trips (vehicles that deliver materials to the site during construction) are estimated to generate 161,460 VMT and hauling is anticipated to generate in 3,000 VMT along area roadways for the Project over the duration of construction activity (23). Based on CalEEMod standard inputs, vehicles associated with vendor trips are limited to medium-heavy duty trucks (MHDT) and heavy-heavy duty trucks (HHDT) (23). Similar to LDA, LDT1, and LDT fuel estimates, vehicle fuel efficiencies for MHDTs and HHDTs for vending trips were estimated using information generated within EMFAC2017. Based on EMFAC2017 vehicle population data for Year 2022, 54.7% of the heavy-duty vehicles would be HHDTs and 45.3% would be MHDTs. For debris and soil hauling all trucks were assumed to be HHDT constituent with CalEEMod standard settings. Data from EMFAC2017 is shown in Appendix 4.2.

As generated by EMFAC2017, an aggregated fuel economy of MHDTs are estimated to have a fuel efficiency of 10.37 mpg. Based on Table 4-10, it is estimated that 6,986 gallons of fuel will be consumed related to construction vendor trips (MHDTs) during full construction of the Project.

TABLE 4-10: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (MHDT)

Construction Activity	Duration (Days)	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Building Construction	300	35	6.9	72,450	10.37	6,986
TOTAL CONSTRUCTION VENDOR (MHDT) FUEL CONSUMPTION						6,986

Table 4-11 shows the estimated fuel economy of HHDTs accessing the Project site. As generated by EMFAC2017, an aggregated fuel economy of HHDTs are estimated to have a fuel efficiency of

7.06 mpg. Based on Table 4-11, fuel consumption from construction vendor trips (HHDTs) will total approximately 12,604 gallons.

TABLE 4-11: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (HHDT)

Construction Activity	Duration (Days)	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Building Construction	300	43	6.9	89,010	7.06	12,604
TOTAL CONSTRUCTION VENDOR (HHDT) FUEL CONSUMPTION						12,604

As generated by EMFAC2017, HHDTs are estimated to have a fuel efficiency of 7.06 mpg in 2022. Based on Table 4-12, it is estimated that 425 gallons of fuel will be consumed related to soil debris hauling trips (HHDTs) during construction of the Project.

TABLE 4-12: SOIL HAULING FUEL CONSUMPTION ESTIMATES (HHDT)

Construction Activity	Duration (Days)	Hauling Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	30	5	20	3,000	7.06	425
TOTAL CONSTRUCTION HAULING (HHDT) FUEL CONSUMPTION						425

It should be noted that Project construction vendor trips would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

4.3.6 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or

unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures. For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that “grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.” In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

4.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by passenger car and truck vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

4.4.1 TRANSPORTATION ENERGY DEMANDS

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. As shown in Table 4-13, the Project will result in 4,452,481 annual VMT and an estimated annual fuel consumption of 166,211 gallons of fuel. These calculations are conservative as they do not include any TDM measures, which are designed to reduce VMT from vehicles.

TABLE 4-13: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (ALL VEHICLES)

Vehicle Type	Annual Miles Traveled ¹	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
LDA	2,381,405	34.9	68,286
LDT1	249,437	29.3	8,526
LDT2	768,672	28.0	27,405
MDV	627,831	22.2	28,249
LHD1	118,423	14.8	8,002
LHD2	32,548	15.5	2,105
MHD	50,433	10.9	4,608
HHD	83,230	7.5	11,040
OBUS	2,743	6.9	399
UBUS	1,403	5.0	279
MCY	107,113	37.9	2,829
SBUS	4,898	8.1	602
MH	24,346	6.3	3,881
Total (All Vehicles)	4,452,481	NA	166,211

¹ Total VMT may not match CalEEMod output due to rounding.

4.4.2 FACILITY ENERGY DEMANDS

Project building operations activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied to the Project by SCE. Annual natural gas and electricity demands of the Project are summarized in Tables 4-14 and 4-15 and provided in Appendices 4.1.

TABLE 4-14: PROJECT ANNUAL OPERATIONAL NATURAL GAS DEMAND SUMMARY

Natural Gas Demand	kBTU/year
Apartments Mid Rise	4,127,680
Health Club	733,891
Parking Lot	0
TOTAL PROJECT NATURAL GAS DEMAND	4,861,571

kBTU – kilo-British Thermal Units

TABLE 4-15: PROJECT ANNUAL OPERATIONAL ELECTRICITY DEMAND SUMMARY

Electricity Demand	kWh/year
Apartments Mid Rise	1,136,520
Health Club	225,184
Parking Lot	91,350
TOTAL PROJECT ELECTRICITY DEMAND	1,453,054

kWh – Kilo Watt Hours

4.4.3 OPERATIONAL ENERGY EFFICIENCY/CONSERVATION MEASURES

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title24, California Green Building Standards Code).

ENHANCED VEHICLE FUEL EFFICIENCIES

Project annual fuel consumption estimates presented previously in Table 4-13 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands.

4.5 SUMMARY

4.5.1 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately \$16,103.12. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be approximately 128,825 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 49,374 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Best available control measure inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 48,390 gallons of fuel. Additionally, fuel consumption from construction vendor and hauling trips (MHDTs and HHDTs) will total approximately 20,439 gallons. Diesel fuel would be supplied by regional commercial vendors. Indirectly, construction energy efficiencies and

energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2021 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (19). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.5.2 OPERATIONAL ENERGY DEMANDS

TRANSPORTATION ENERGY DEMANDS

Annual vehicular trips and related VMT generated by the operation of the Project would result in a fuel demand of 166,211 gallons of fuel.

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other mixed residential uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers Trip Generation Manual (11th Ed., 2021); and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to other residential developments of similar size.

In addition, enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT in the future. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-term bicycle parking accommodations. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

FACILITY ENERGY DEMANDS

Project facility operational energy demands are estimated at: 4,861,571 kBTU/year of natural gas; and 1,453,054 kWh/year of electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied by SCE. The Project proposes conventional residences that reflect contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential developments of similar scale and configuration.

Lastly, the Project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

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4.6 ENERGY FINDINGS AND RECOMMENDATIONS

4.6.1 ENERGY IMPACT 1

Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California.

4.6.2 ENERGY IMPACT 2

Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The Project's consistency with the applicable state and local plans is discussed below.

CONSISTENCY WITH ISTE A

Transportation and access to the Project site is provided by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTE A because Southern California Association of Governments is not planning for intermodal facilities on or through the Project site.

CONSISTENCY WITH TEA-21

The Project site is located near major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.

CONSISTENCY WITH IEPR

Electricity may be provided to the Project by SCE. SCE's *Clean Power and Electrification Pathway* white paper builds on existing state programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2021 IEPR.

CONSISTENCY WITH STATE OF CALIFORNIA ENERGY PLAN

The Project site is located proximate to transportation corridors with access to the Interstate freeway system. The site selected for the Project facilitates access and takes advantage of existing infrastructure systems. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

CONSISTENCY WITH CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

The 2022 version of Title 24 was adopted by the California Energy Commission (CEC) and will become effective on January 1, 2023. As the Project building construction is anticipated in 2024, it is presumed that the Project would be required to comply with the Title 24 standards in place at that time. Therefore, the Project is would not result in a significant impact on energy resources (29).

CONSISTENCY WITH AB 1493

AB 1493 is not applicable to the Project as it is a statewide measure establishing vehicle emissions standards. No feature of the Project would interfere with implementation of the requirements under AB 1493.

CONSISTENCY WITH RPS

California's Renewable Portfolio Standard is not applicable to the Project as it is a statewide measure that establishes a renewable energy mix. No feature of the Project would interfere with implementation of the requirements under RPS.

CONSISTENCY WITH SB 350

The proposed Project would use energy from SCE, which have committed to diversify their portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350. Additionally, the Project would be designed and constructed to implement the energy efficiency measures for new residential developments and would include several measures designed to reduce energy consumption.

As shown above, the Project would not conflict with any of the state or local plans. As such, a less than significant impact is expected.

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6 REFERENCES

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7 CERTIFICATIONS

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed Prairie View Village. The information contained in this energy analysis report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – CARB • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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APPENDIX 4.1:
CALEEMOD PROJECT MODEL OUTPUTS

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**PRAIRIE VIEW, Perris
Riverside-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	261.00	1000sqft	5.99	261,000.00	0
Health Club	22.70	1000sqft	0.52	22,700.00	0
Apartments Mid Rise	287.00	Dwelling Unit	7.55	133,912.00	821

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - measurements from plans
 Construction Phase -
 Grading - 1200 CY Export after balance
 Construction Off-road Equipment Mitigation -
 Area Mitigation - natural gas hearth
 Vehicle Trips - trip gen from project traffic analysis. health club modeled for community center no extra trips

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	287,000.00	133,912.00

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblTripsAndVMT	HaulingTripNumber	0.00	150.00
tblVehicleTrips	ST_TR	4.91	4.54
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	SU_TR	4.09	4.54
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	WD_TR	5.44	4.54
tblVehicleTrips	WD_TR	32.93	0.00

2.0 Emissions Summary

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction
Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2022	0.1403	1.1613	1.2637	3.0400e-003	0.2586	0.0496	0.3082	0.0872	0.0461	0.1333	0.0000	273.8048	273.8048	0.0450	8.6700e-003	277.5118
2023	0.3457	2.2507	3.4729	8.7300e-003	0.4959	0.0941	0.5900	0.1330	0.0885	0.2215	0.0000	792.3749	792.3749	0.0824	0.0321	803.9987
2024	0.5670	0.0279	0.0598	1.2000e-004	7.3900e-003	1.3500e-003	8.7400e-003	1.9600e-003	1.2900e-003	3.2500e-003	0.0000	11.1124	11.1124	1.2400e-003	1.4000e-004	11.1848
Maximum	0.5670	2.2507	3.4729	8.7300e-003	0.4959	0.0941	0.5900	0.1330	0.0885	0.2215	0.0000	792.3749	792.3749	0.0824	0.0321	803.9987
tons/yr											MT/yr					

Mitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2022	0.1403	1.1613	1.2637	3.0400e-003	0.1744	0.0496	0.2240	0.0537	0.0461	0.0999	0.0000	273.8046	273.8046	0.0450	8.6700e-003	277.5116
2023	0.3457	2.2507	3.4729	8.7300e-003	0.4959	0.0941	0.5900	0.1330	0.0885	0.2215	0.0000	792.3746	792.3746	0.0824	0.0321	803.9983
2024	0.5670	0.0279	0.0598	1.2000e-004	7.3900e-003	1.3500e-003	8.7400e-003	1.9600e-003	1.2900e-003	3.2500e-003	0.0000	11.1124	11.1124	1.2400e-003	1.4000e-004	11.1848
Maximum	0.5670	2.2507	3.4729	8.7300e-003	0.4959	0.0941	0.5900	0.1330	0.0885	0.2215	0.0000	792.3746	792.3746	0.0824	0.0321	803.9983
tons/yr											MT/yr					

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	11.05	0.00	9.29	15.05	0.00	9.34	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2022	11-30-2022	1.0503	1.0503
2	12-1-2022	2-28-2023	0.6877	0.6877
3	3-1-2023	5-31-2023	0.6742	0.6742
4	6-1-2023	8-31-2023	0.6731	0.6731
5	9-1-2023	11-30-2023	0.6680	0.6680
6	12-1-2023	2-29-2024	0.7422	0.7422
		Highest	1.0503	1.0503

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6682	0.1086	4.7865	4.8100e-003		0.2905	0.2905		0.2905	0.2905	30.4849	63.4232	93.9080	0.0956	2.0700e-003	96.9139
Energy	0.0262	0.2262	0.1112	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	517.1253	517.1253	0.0267	7.3900e-003	519.9963
Mobile	0.6647	1.0962	6.9420	0.0164	1.6842	0.0133	1.6975	0.4499	0.0125	0.4624	0.0000	1,526.5106	1,526.5106	0.0789	0.0758	1,551.0793
Waste						0.0000	0.0000		0.0000	0.0000	53.0639	0.0000	53.0639	3.1360	0.0000	131.4635
Water						0.0000	0.0000		0.0000	0.0000	6.3583	71.1293	77.4876	0.6591	0.0162	98.7763
Total	2.3591	1.4309	11.8397	0.0226	1.6842	0.3219	2.0060	0.4499	0.3210	0.7710	89.9071	2,178.1883	2,268.0953	3.9962	0.1014	2,398.2292

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7344	0.0877	2.9849	5.0000e-004		0.0207	0.0207		0.0207	0.0207	0.0000	66.8691	66.8691	5.8500e-003	1.1400e-003	67.3542
Energy	0.0262	0.2262	0.1112	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	517.1253	517.1253	0.0267	7.3900e-003	519.9963
Mobile	0.6647	1.0962	6.9420	0.0164	1.6842	0.0133	1.6975	0.4499	0.0125	0.4624	0.0000	1,526.5106	1,526.5106	0.0789	0.0758	1,551.0793
Waste						0.0000	0.0000		0.0000	0.0000	53.0639	0.0000	53.0639	3.1360	0.0000	131.4635
Water						0.0000	0.0000		0.0000	0.0000	6.3583	71.1293	77.4876	0.6591	0.0162	98.7763
Total	1.4253	1.4101	10.0380	0.0183	1.6842	0.0522	1.7363	0.4499	0.0513	0.5013	59.4222	2,181.6342	2,241.0564	3.9065	0.1005	2,368.6695

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	39.58	1.46	15.22	19.07	0.00	83.79	13.45	0.00	84.01	34.98	33.91	-0.16	1.19	2.25	0.92	1.23

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2022	10/12/2022	5	30	
2	Building Construction	Building Construction	10/13/2022	12/6/2023	5	300	
3	Paving	Paving	12/7/2023	1/3/2024	5	20	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Architectural Coating	Architectural Coating	1/4/2024	1/31/2024	5	20
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 5.99

Residential Indoor: 271,172; Residential Outdoor: 90,391; Non-Residential Indoor: 34,050; Non-Residential Outdoor: 11,350; Striped Parking Area: 15,660 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment 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
Grading	8	20.00	0.00	150.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	9	326.00	77.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	65.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	0.0544	0.5827	0.4356	9.3000e-004	0.1381	0.0245	0.1626	0.0548	0.0226	0.0774	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3000e-004	0.0101	2.1500e-003	4.0000e-005	1.2900e-003	1.1000e-004	1.4100e-003	3.6000e-004	1.1000e-004	4.6000e-004	0.0000	4.1745	4.1745	6.0000e-005	6.6000e-004	4.3719
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.2000e-004	0.0102	3.0000e-005	3.3000e-003	2.0000e-005	3.3100e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.6074	2.6074	7.0000e-005	7.0000e-005	2.6306
Total	1.2800e-003	0.0109	0.0124	7.0000e-005	4.5900e-003	1.3000e-004	4.7200e-003	1.2400e-003	1.3000e-004	1.3500e-003	0.0000	6.7819	6.7819	1.3000e-004	7.3000e-004	7.0025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0538	0.0000	0.0538	0.0214	0.0000	0.0214	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	0.0544	0.5827	0.4356	9.3000e-004	0.0538	0.0245	0.0784	0.0214	0.0226	0.0439	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3000e-004	0.0101	2.1500e-003	4.0000e-005	1.2900e-003	1.1000e-004	1.4100e-003	3.6000e-004	1.1000e-004	4.6000e-004	0.0000	4.1745	4.1745	6.0000e-005	6.6000e-004	4.3719
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.2000e-004	0.0102	3.0000e-005	3.3000e-003	2.0000e-005	3.3100e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.6074	2.6074	7.0000e-005	7.0000e-005	2.6306
Total	1.2800e-003	0.0109	0.0124	7.0000e-005	4.5900e-003	1.3000e-004	4.7200e-003	1.2400e-003	1.3000e-004	1.3500e-003	0.0000	6.7819	6.7819	1.3000e-004	7.3000e-004	7.0025

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0486	0.4451	0.4664	7.7000e-004		0.0231	0.0231		0.0217	0.0217	0.0000	66.0417	66.0417	0.0158	0.0000	66.4372
Total	0.0486	0.4451	0.4664	7.7000e-004		0.0231	0.0231		0.0217	0.0217	0.0000	66.0417	66.0417	0.0158	0.0000	66.4372

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3.3 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4900e-003	0.0974	0.0328	4.0000e-004	0.0139	1.3400e-003	0.0152	4.0000e-003	1.2800e-003	5.2800e-003	0.0000	38.4295	38.4295	4.0000e-004	5.7000e-003	40.1390
Worker	0.0325	0.0253	0.3165	8.7000e-004	0.1021	5.2000e-004	0.1026	0.0271	4.8000e-004	0.0276	0.0000	80.7498	80.7498	2.1500e-003	2.2400e-003	81.4697
Total	0.0360	0.1227	0.3493	1.2700e-003	0.1160	1.8600e-003	0.1178	0.0311	1.7600e-003	0.0329	0.0000	119.1793	119.1793	2.5500e-003	7.9400e-003	121.6087

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0486	0.4451	0.4664	7.7000e-004		0.0231	0.0231		0.0217	0.0217	0.0000	66.0416	66.0416	0.0158	0.0000	66.4372
Total	0.0486	0.4451	0.4664	7.7000e-004		0.0231	0.0231		0.0217	0.0217	0.0000	66.0416	66.0416	0.0158	0.0000	66.4372

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3.3 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4900e-003	0.0974	0.0328	4.0000e-004	0.0139	1.3400e-003	0.0152	4.0000e-003	1.2800e-003	5.2800e-003	0.0000	38.4295	38.4295	4.0000e-004	5.7000e-003	40.1390
Worker	0.0325	0.0253	0.3165	8.7000e-004	0.1021	5.2000e-004	0.1026	0.0271	4.8000e-004	0.0276	0.0000	80.7498	80.7498	2.1500e-003	2.2400e-003	81.4697
Total	0.0360	0.1227	0.3493	1.2700e-003	0.1160	1.8600e-003	0.1178	0.0311	1.7600e-003	0.0329	0.0000	119.1793	119.1793	2.5500e-003	7.9400e-003	121.6087

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1911	1.7478	1.9737	3.2700e-003		0.0850	0.0850		0.0800	0.0800	0.0000	281.6428	281.6428	0.0670	0.0000	283.3177
Total	0.1911	1.7478	1.9737	3.2700e-003		0.0850	0.0850		0.0800	0.0800	0.0000	281.6428	281.6428	0.0670	0.0000	283.3177

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3.3 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0101	0.3208	0.1278	1.6400e-003	0.0591	2.6700e-003	0.0618	0.0171	2.5500e-003	0.0196	0.0000	157.4068	157.4068	1.5900e-003	0.0233	164.3825
Worker	0.1286	0.0953	1.2435	3.6100e-003	0.4354	2.0800e-003	0.4374	0.1156	1.9100e-003	0.1175	0.0000	335.2235	335.2235	8.2600e-003	8.7900e-003	338.0498
Total	0.1387	0.4160	1.3713	5.2500e-003	0.4945	4.7500e-003	0.4992	0.1327	4.4600e-003	0.1371	0.0000	492.6303	492.6303	9.8500e-003	0.0321	502.4323

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1911	1.7478	1.9736	3.2700e-003		0.0850	0.0850		0.0800	0.0800	0.0000	281.6424	281.6424	0.0670	0.0000	283.3174
Total	0.1911	1.7478	1.9736	3.2700e-003		0.0850	0.0850		0.0800	0.0800	0.0000	281.6424	281.6424	0.0670	0.0000	283.3174

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3.3 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0101	0.3208	0.1278	1.6400e-003	0.0591	2.6700e-003	0.0618	0.0171	2.5500e-003	0.0196	0.0000	157.4068	157.4068	1.5900e-003	0.0233	164.3825
Worker	0.1286	0.0953	1.2435	3.6100e-003	0.4354	2.0800e-003	0.4374	0.1156	1.9100e-003	0.1175	0.0000	335.2235	335.2235	8.2600e-003	8.7900e-003	338.0498
Total	0.1387	0.4160	1.3713	5.2500e-003	0.4945	4.7500e-003	0.4992	0.1327	4.4600e-003	0.1371	0.0000	492.6303	492.6303	9.8500e-003	0.0321	502.4323

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7800e-003	0.0866	0.1240	1.9000e-004		4.3400e-003	4.3400e-003		3.9900e-003	3.9900e-003	0.0000	17.0228	17.0228	5.5100e-003	0.0000	17.1605
Paving	6.6700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0155	0.0866	0.1240	1.9000e-004		4.3400e-003	4.3400e-003		3.9900e-003	3.9900e-003	0.0000	17.0228	17.0228	5.5100e-003	0.0000	17.1605

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3.4 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.1000e-004	4.0000e-003	1.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.0791	1.0791	3.0000e-005	3.0000e-005	1.0882
Total	4.1000e-004	3.1000e-004	4.0000e-003	1.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.0791	1.0791	3.0000e-005	3.0000e-005	1.0882

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7800e-003	0.0866	0.1240	1.9000e-004		4.3400e-003	4.3400e-003		3.9900e-003	3.9900e-003	0.0000	17.0228	17.0228	5.5100e-003	0.0000	17.1605
Paving	6.6700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0155	0.0866	0.1240	1.9000e-004		4.3400e-003	4.3400e-003		3.9900e-003	3.9900e-003	0.0000	17.0228	17.0228	5.5100e-003	0.0000	17.1605

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3.4 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.1000e-004	4.0000e-003	1.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.0791	1.0791	3.0000e-005	3.0000e-005	1.0882
Total	4.1000e-004	3.1000e-004	4.0000e-003	1.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.0791	1.0791	3.0000e-005	3.0000e-005	1.0882

3.4 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4800e-003	0.0143	0.0219	3.0000e-005		7.0000e-004	7.0000e-004		6.5000e-004	6.5000e-004	0.0000	3.0040	3.0040	9.7000e-004	0.0000	3.0283
Paving	1.1800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6600e-003	0.0143	0.0219	3.0000e-005		7.0000e-004	7.0000e-004		6.5000e-004	6.5000e-004	0.0000	3.0040	3.0040	9.7000e-004	0.0000	3.0283

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3.4 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	6.6000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.1859	0.1859	0.0000	0.0000	0.1874
Total	7.0000e-005	5.0000e-005	6.6000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.1859	0.1859	0.0000	0.0000	0.1874

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4800e-003	0.0143	0.0219	3.0000e-005		7.0000e-004	7.0000e-004		6.5000e-004	6.5000e-004	0.0000	3.0040	3.0040	9.7000e-004	0.0000	3.0283
Paving	1.1800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6600e-003	0.0143	0.0219	3.0000e-005		7.0000e-004	7.0000e-004		6.5000e-004	6.5000e-004	0.0000	3.0040	3.0040	9.7000e-004	0.0000	3.0283

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	6.6000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.1859	0.1859	0.0000	0.0000	0.1874
Total	7.0000e-005	5.0000e-005	6.6000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.1859	0.1859	0.0000	0.0000	0.1874

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5605					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	0.5623	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

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3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9700e-003	1.3900e-003	0.0191	6.0000e-005	7.1400e-003	3.0000e-005	7.1800e-003	1.9000e-003	3.0000e-005	1.9300e-003	0.0000	5.3694	5.3694	1.2000e-004	1.3000e-004	5.4124
Total	1.9700e-003	1.3900e-003	0.0191	6.0000e-005	7.1400e-003	3.0000e-005	7.1800e-003	1.9000e-003	3.0000e-005	1.9300e-003	0.0000	5.3694	5.3694	1.2000e-004	1.3000e-004	5.4124

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5605					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	0.5623	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

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3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9700e-003	1.3900e-003	0.0191	6.0000e-005	7.1400e-003	3.0000e-005	7.1800e-003	1.9000e-003	3.0000e-005	1.9300e-003	0.0000	5.3694	5.3694	1.2000e-004	1.3000e-004	5.4124
Total	1.9700e-003	1.3900e-003	0.0191	6.0000e-005	7.1400e-003	3.0000e-005	7.1800e-003	1.9000e-003	3.0000e-005	1.9300e-003	0.0000	5.3694	5.3694	1.2000e-004	1.3000e-004	5.4124

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	0.6647	1.0962	6.9420	0.0164	1.6842	0.0133	1.6975	0.4499	0.0125	0.4624	0.0000	1,526.5106	1,526.5106	0.0789	0.0758	1,551.0793
Unmitigated	0.6647	1.0962	6.9420	0.0164	1.6842	0.0133	1.6975	0.4499	0.0125	0.4624	0.0000	1,526.5106	1,526.5106	0.0789	0.0758	1,551.0793

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,302.98	1,302.98	1302.98	4,452,481	4,452,481
Health Club	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,302.98	1,302.98	1,302.98	4,452,481	4,452,481

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Health Club	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	257.6932	257.6932	0.0218	2.6400e-003	259.0226
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	257.6932	257.6932	0.0218	2.6400e-003	259.0226
Natural Gas Mitigated	0.0262	0.2262	0.1112	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	259.4321	259.4321	4.9700e-003	4.7600e-003	260.9738
Natural Gas Unmitigated	0.0262	0.2262	0.1112	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	259.4321	259.4321	4.9700e-003	4.7600e-003	260.9738

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.12768e+006	0.0223	0.1902	0.0809	1.2100e-003		0.0154	0.0154		0.0154	0.0154	0.0000	220.2689	220.2689	4.2200e-003	4.0400e-003	221.5778
Health Club	733891	3.9600e-003	0.0360	0.0302	2.2000e-004		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003	0.0000	39.1632	39.1632	7.5000e-004	7.2000e-004	39.3960
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0262	0.2262	0.1112	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	259.4321	259.4321	4.9700e-003	4.7600e-003	260.9738

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.12768e+006	0.0223	0.1902	0.0809	1.2100e-003		0.0154	0.0154		0.0154	0.0154	0.0000	220.2689	220.2689	4.2200e-003	4.0400e-003	221.5778
Health Club	733891	3.9600e-003	0.0360	0.0302	2.2000e-004		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003	0.0000	39.1632	39.1632	7.5000e-004	7.2000e-004	39.3960
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0262	0.2262	0.1112	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	259.4321	259.4321	4.9700e-003	4.7600e-003	260.9738

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.13652e+006	201.5573	0.0170	2.0600e-003	202.5971
Health Club	225184	39.9354	3.3700e-003	4.1000e-004	40.1414
Parking Lot	91350	16.2005	1.3700e-003	1.7000e-004	16.2841
Total		257.6932	0.0218	2.6400e-003	259.0226

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.13652e+006	201.5573	0.0170	2.0600e-003	202.5971
Health Club	225184	39.9354	3.3700e-003	4.1000e-004	40.1414
Parking Lot	91350	16.2005	1.3700e-003	1.7000e-004	16.2841
Total		257.6932	0.0218	2.6400e-003	259.0226

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	0.7344	0.0877	2.9849	5.0000e-004		0.0207	0.0207		0.0207	0.0207	0.0000	66.8691	66.8691	5.8500e-003	1.1400e-003	67.3542
Unmitigated	1.6682	0.1086	4.7865	4.8100e-003		0.2905	0.2905		0.2905	0.2905	30.4849	63.4232	93.9080	0.0956	2.0700e-003	96.9139

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0561					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.9401	0.0744	1.8244	4.6500e-003		0.2740	0.2740		0.2740	0.2740	30.4849	58.5815	89.0663	0.0909	2.0700e-003	91.9557
Landscaping	0.0893	0.0341	2.9621	1.6000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	4.8417	4.8417	4.6600e-003	0.0000	4.9581
Total	1.6682	0.1086	4.7865	4.8100e-003		0.2905	0.2905		0.2905	0.2905	30.4849	63.4232	93.9080	0.0956	2.0700e-003	96.9139

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0561					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.2700e-003	0.0536	0.0228	3.4000e-004		4.3300e-003	4.3300e-003		4.3300e-003	4.3300e-003	0.0000	62.0274	62.0274	1.1900e-003	1.1400e-003	62.3960
Landscaping	0.0893	0.0341	2.9621	1.6000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	4.8417	4.8417	4.6600e-003	0.0000	4.9581
Total	0.7344	0.0877	2.9849	5.0000e-004		0.0207	0.0207		0.0207	0.0207	0.0000	66.8691	66.8691	5.8500e-003	1.1400e-003	67.3542

7.0 Water Detail

7.1 Mitigation Measures Water

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	77.4876	0.6591	0.0162	98.7763
Unmitigated	77.4876	0.6591	0.0162	98.7763

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.6992 / 11.7886	72.3402	0.6149	0.0151	92.2030
Health Club	1.34255 / 0.822853	5.1474	0.0442	1.0800e-003	6.5733
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		77.4876	0.6591	0.0162	98.7763

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.6992 / 11.7886	72.3402	0.6149	0.0151	92.2030
Health Club	1.34255 / 0.822853	5.1474	0.0442	1.0800e-003	6.5733
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		77.4876	0.6591	0.0162	98.7763

8.0 Waste Detail

8.1 Mitigation Measures Waste

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	53.0639	3.1360	0.0000	131.4635
Unmitigated	53.0639	3.1360	0.0000	131.4635

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	132.02	26.7989	1.5838	0.0000	66.3931
Health Club	129.39	26.2650	1.5522	0.0000	65.0704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		53.0639	3.1360	0.0000	131.4635

PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	132.02	26.7989	1.5838	0.0000	66.3931
Health Club	129.39	26.2650	1.5522	0.0000	65.0704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		53.0639	3.1360	0.0000	131.4635

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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PRAIRIE VIEW, Perris - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

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APPENDIX 4.2:
EMFAC 2017 MODEL OUTPUTS

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class	Mix
Riverside (SC)	2022	HHD	Aggregate	Aggregate	Gasol	6.576938112	469.290096	131.5914	111.263246	276720.944	469.290096	1954241.273	7.06	HHD	54.7%
Riverside (SC)	2022	HHD	Aggregate	Aggregate	Diesel	15714.36952	1943053.846	165079.1	272096.2785		1943053.846				
Riverside (SC)	2022	HHD	Aggregate	Aggregate	Natur	263.7933161	10718.13672	1028.794	4513.402274		10718.13672				
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Gasol	581991.6725	23700815.4	2755730	737396.3282	741995.8718	23700815.4	24314627.74	32.77	LDA	70.9%
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Diesel	5627.648407	239612.1354	26937.89	4599.543626		239612.1354				
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Electr	9519.079074	374200.2044	47839.25	0		374200.2044				
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Gasol	60037.51621	2261929.707	273557.5	82622.73159	82646.09985	2261929.707	2277084.362	27.55	LDT1	7.2%
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Diesel	27.76404389	601.6680241	91.61243	23.36826688		601.6680241				
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Electr	356.2042589	14552.98677	1810.859	0		14552.98677				
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Gasol	182118.8677	7165411.096	853062.8	277891.5039	279116.8158	7165411.096	7265624.392	26.03	LDT2	21.9%
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Diesel	1054.483634	48028.55818	5205.89	1225.311901		48028.55818				
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Electr	1677.633962	52184.73813	8507.233	0		52184.73813				
Riverside (SC)	2022	LHDT1	Aggregate	Aggregate	Gasol	15417.55767	499086.0807	229698.6	46202.19857	71521.2169	499086.0807	1029280.982	14.39	LHDT1	
Riverside (SC)	2022	LHDT1	Aggregate	Aggregate	Diesel	15837.49513	530194.9018	199215.8	25319.01832		530194.9018				
Riverside (SC)	2022	LHDT2	Aggregate	Aggregate	Gasol	2252.42518	73474.64451	33557.78	7773.72894	18506.82986	73474.64451	279062.9473	15.08	LHDT2	
Riverside (SC)	2022	LHDT2	Aggregate	Aggregate	Diesel	6123.275766	205588.3028	77023.11	10733.10092		205588.3028				
Riverside (SC)	2022	MCY	Aggregate	Aggregate	Gasol	28171.90267	180969.5918	56343.81	4771.14182	4771.14182	180969.5918	180969.5918	37.93	MCY	
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Gasol	154199.5457	5597389.871	706482.9	273167.7758	277942.5828	5597389.871	5763801.187	20.74	MDV	
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Diesel	3261.4865	137165.9419	15860.64	4774.807066		137165.9419				
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Electr	916.717804	29245.37498	4686.481	0		29245.37498				
Riverside (SC)	2022	MH	Aggregate	Aggregate	Gasol	4849.122996	37965.37359	485.1063	7358.586255	8794.495605	37965.37359	53583.34508	6.09	MH	
Riverside (SC)	2022	MH	Aggregate	Aggregate	Diesel	1986.085476	15617.97149	198.6085	1435.90935		15617.97149				
Riverside (SC)	2022	MHDT	Aggregate	Aggregate	Gasol	1326.926938	54049.91102	26549.15	10273.53802	76587.82765	54049.91102	794309.7864	10.37	MHDT	45.3%
Riverside (SC)	2022	MHDT	Aggregate	Aggregate	Diesel	11907.6705	740259.8754	118276.6	66314.28963		740259.8754				
Riverside (SC)	2022	OBUS	Aggregate	Aggregate	Gasol	438.8357563	15270.69972	8780.226	2957.8564	4724.84948	15270.69972	31059.30019	6.57	OBUS	
Riverside (SC)	2022	OBUS	Aggregate	Aggregate	Diesel	222.2197269	15788.60048	2124.34	1766.993079		15788.60048				
Riverside (SC)	2022	SBUS	Aggregate	Aggregate	Gasol	417.9532809	14725.72528	1671.813	1664.498557	5223.410044	14725.72528	41715.56692	7.99	SBUS	
Riverside (SC)	2022	SBUS	Aggregate	Aggregate	Diesel	852.548169	26989.84164	9838.288	3558.911487		26989.84164				
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Gasol	164.4551683	23154.43353	657.8207	3756.059553	10115.00541	23154.43353	50069.98905	4.95	UBUS	
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Diesel	1.105797941	58.57190354	4.423192	6.56634569		58.57190354				
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Electr	0.058469431	1.251702935	0.233878	0		1.251702935				
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Natur	204.1188773	26855.73191	816.4755	6352.37951		26855.73191				

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class	Mix
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Gasol	6.027894532	477.2704955	120.6061	106.7708591	271743.0154	477.2704955	2048681.333	7.54	HHDT	55.6%
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Diesel	16452.58246	2034696.705	173528.1	266128.1332		2034696.705				
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Natur	332.158218	13507.35785	1295.417	5508.111343		13507.35785				
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Gasol	617514.3579	24478836.56	2921790	721470.804	726280.6176	24478836.56	25328365.52	34.87	LDA	71.1%
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Diesel	6395.726935	263555.9906	30567.97	4809.813607		263555.9906				
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Electr	14425.0696	585972.9711	72164.25	0		585972.9711				
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Gasol	63219.76211	2347037.162	289438	81177.10169	81197.11132	2347037.162	2375472.135	29.26	LDT1	7.1%
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Diesel	24.10721025	533.616122	80.30352	20.00963334		533.616122				
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Electr	661.8262843	27901.35626	3349.232	0		27901.35626				
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Gasol	191595.1165	7375145.522	898075.5	266552.8329	267908.866	7375145.522	7514447.512	28.05	LDT2	21.8%
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Diesel	1293.932614	56317.20384	6361.076	1356.033097		56317.20384				
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Electr	2788.874311	82984.78588	14057.46	0		82984.78588				
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Gasol	15013.79924	481213.6981	223683.2	43423.53163	67451.72241	481213.6981	998190.6333	14.80	LHDT1	
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Diesel	15906.59016	516976.9352	200084.9	24028.19078		516976.9352				
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Gasol	2255.583712	72284.45286	33604.84	7458.415808	17725.50125	72284.45286	274022.3619	15.46	LHDT2	
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Diesel	6233.384608	201737.9091	78408.14	10267.08544		201737.9091				
Riverside (SC)	2024	MCY	Aggregate	Aggregate	Gasol	28768.15998	177525.5663	57536.32	4688.277597	4688.277597	177525.5663	177525.5663	37.87	MCY	
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Gasol	154289.1501	5478215.24	706842.2	250698.2454	255621.6083	5478215.24	5681257.863	22.23	MDV	
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Diesel	3716.540326	149587.74	17947.53	4923.362916		149587.74				
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Electr	1759.655155	53454.88255	8929.865	0		53454.88255				
Riverside (SC)	2024	MH	Aggregate	Aggregate	Gasol	4447.773714	34330.11049	444.9553	6493.354428	7837.177365	34330.11049	49162.63643	6.27	MH	
Riverside (SC)	2024	MH	Aggregate	Aggregate	Diesel	1971.591273	14832.52594	197.1591	1343.822937		14832.52594				
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Gasol	1398.543137	56941.89869	27982.05	10447.42239	74446.36944	56941.89869	814710.6157	10.94	MHDT	44.4%
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Diesel	12021.28574	757768.717	119800.3	63998.94705		757768.717				
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Gasol	436.1488407	14690.22853	8726.466	2754.009451	4521.769124	14690.22853	31108.69558	6.88	OBUS	
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Diesel	228.3141363	16418.46704	2176.175	1767.759673		16418.46704				
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Gasol	439.6915571	15094.65462	1758.766	1692.046723	5334.702422	15094.65462	43431.01966	8.14	SBUS	
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Diesel	894.0425814	28336.36505	10317.13	3642.655698		28336.36505				
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Gasol	166.3958246	23427.66786	665.5833	3649.202734	10088.86033	23427.66786	50660.84089	5.02	UBUS	
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Diesel	0.141961099	11.67769301	0.567844	1.254696744		11.67769301				
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Electr	0.058469431	1.251702935	0.233878	0		1.251702935				
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Natur	207.5051617	27220.24364	830.0206	6438.402902		27220.24364				

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**PRAIRIE VIEW, Perris
Riverside-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	261.00	1000sqft	5.99	261,000.00	0
Health Club	22.70	1000sqft	0.52	22,700.00	0
Apartments Mid Rise	287.00	Dwelling Unit	7.55	133,912.00	821

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - measurements from plans
- Construction Phase -
- Grading - 1200 CY Export after balance
- Construction Off-road Equipment Mitigation -
- Area Mitigation - natural gas hearth
- Vehicle Trips - trip gen from project traffic analysis. health club modeled for community center no extra trips

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	287,000.00	133,912.00

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblTripsAndVMT	HaulingTripNumber	0.00	150.00
tblVehicleTrips	ST_TR	4.91	4.54
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	SU_TR	4.09	4.54
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	WD_TR	5.44	4.54
tblVehicleTrips	WD_TR	32.93	0.00

2.0 Emissions Summary

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	lb/day											CO _{2e}				
	ROG	NOx	CO	SO ₂	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO _{2e}
2022	3.7195	39.5331	30.4918	0.0741	9.5147	1.6434	11.1581	3.7370	1.5122	5.2493	0.0000	7,409.350	7,409.350	1.9535	0.3032	7,517.478
2023	2.8506	17.6365	29.2394	0.0724	4.1371	0.7387	4.8758	1.1084	0.6951	1.8035	0.0000	7,262.018	7,262.018	0.7174	0.2873	7,365.061
2024	56.4489	9.5548	15.1410	0.0242	0.7266	0.4693	0.7907	0.1927	0.4317	0.4762	0.0000	2,354.836	2,354.836	0.7171	0.0142	2,373.737
Maximum	56.4489	39.5331	30.4918	0.0741	9.5147	1.6434	11.1581	3.7370	1.5122	5.2493	0.0000	7,409.350	7,409.350	1.9535	0.3032	7,517.478

Mitigated Construction

Year	lb/day											CO _{2e}				
	ROG	NOx	CO	SO ₂	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO _{2e}
2022	3.7195	39.5331	30.4918	0.0741	4.1371	1.6434	5.5439	1.5082	1.5122	3.0205	0.0000	7,409.350	7,409.350	1.9535	0.3032	7,517.478
2023	2.8506	17.6365	29.2394	0.0724	4.1371	0.7387	4.8758	1.1084	0.6951	1.8035	0.0000	7,262.018	7,262.018	0.7174	0.2873	7,365.061
2024	56.4489	9.5548	15.1410	0.0242	0.7266	0.4693	0.7907	0.1927	0.4317	0.4762	0.0000	2,354.836	2,354.836	0.7171	0.0142	2,373.737
Maximum	56.4489	39.5331	30.4918	0.0741	4.1371	1.6434	5.5439	1.5082	1.5122	3.0205	0.0000	7,409.350	7,409.350	1.9535	0.3032	7,517.478

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

2.2 Overall Operational
Unmitigated Operational

Category	lb/day											CO _{2e}				
	ROG	NOx	CO	SO ₂	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO ₂		NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O
Area	79.4191	6.2277	169.6512	0.3736		22.0547	22.0547		22.0547	22.0547	2.688,305	5,208,696	7,897,002	8.0581	0.1825	8,152,829
Energy	0.1436	1.2393	0.6091	7.8300e-003		0.0992	0.0992		0.0992	0.0992	1,566,985	9	1,566,985	0.0300	0.0287	1,576,297
Mobile	4.2355	5.6457	41.8294	0.0953	9.4087	0.0732	9.4819	2.5103	0.0686	2.5789	9,802,890	3	9,802,890	0.4683	0.4473	9,947,884
Total	83.7982	13.1127	212.0896	0.4767	9.4087	22.2272	31.6358	2.5103	22.2226	24.7329	2,688,305	6	16,578,57	8.5565	0.6585	19,677,01

Category	lb/day											CO _{2e}				
	ROG	NOx	CO	SO ₂	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO ₂		NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O
Area	4.7162	4.5777	25.5201	0.0286		0.4777	0.4777		0.4777	0.4777	0.0000	5,512,579	5,512,579	0.1459	0.1003	5,546,110
Energy	0.1436	1.2393	0.6091	7.8300e-003		0.0992	0.0992		0.0992	0.0992		1,566,985	9	0.0300	0.0287	1,576,297
Mobile	4.2355	5.6457	41.8294	0.0953	9.4087	0.0732	9.4819	2.5103	0.0686	2.5789		9,802,890	3	0.4683	0.4473	9,947,884
Total	9.0953	11.4427	67.9585	0.1318	9.4087	0.6501	10.0588	2.5103	0.6456	3.1558	0.0000	16,882,45	16,882,45	0.6443	0.5763	17,070,29

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	89.15	12.74	67.96	72.36	0.00	97.08	68.20	0.00	97.10	87.24	100.00	-1.83	12.38	92.47	12.48	13.25

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2022	10/12/2022	5	30	
2	Building Construction	Building Construction	10/13/2022	12/6/2023	5	300	
3	Paving	Paving	12/7/2023	1/3/2024	5	20	
4	Architectural Coating	Architectural Coating	1/4/2024	1/31/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 5.99

Residential Indoor: 271,172; Residential Outdoor: 90,391; Non-Residential Indoor: 34,050; Non-Residential Outdoor: 11,350; Striped Parking Area: 15,660 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment 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
Grading	8	20.00	0.00	150.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HDDT
Building Construction	9	326.00	77.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HDDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HDDT
Architectural Coating	1	65.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HDDT

3.1 Mitigation Measures Construction

Water Exposed Area

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0158	0.6386	0.1420	2.8700e-003	0.0875	7.4200e-003	0.0949	0.0240	7.1000e-003	0.0311		306.6760	306.6760	4.1500e-003	0.0483	321.1760
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0788	0.0511	0.7973	2.0300e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		206.7078	206.7078	5.1200e-003	5.0800e-003	208.3509
Total	0.0946	0.6897	0.9393	4.9000e-003	0.3111	8.5300e-003	0.3196	0.0833	8.1300e-003	0.0914		513.3838	513.3838	9.2700e-003	0.0534	529.5269

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	lb/day										lb/day					
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	3.5894	1.6349	5.2243	1.4250	1.5041	2.9291	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0158	0.6386	0.1420	2.8700e-003	0.0875	7.4200e-003	0.0949	0.0240	7.1000e-003	0.0311		306.6760	306.6760	4.1500e-003	0.0483	321.1760
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0788	0.0511	0.7973	2.0300e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		206.7078	206.7078	5.1200e-003	5.0800e-003	208.3509
Total	0.0946	0.6897	0.9393	4.9000e-003	0.3111	8.5300e-003	0.3196	0.0833	8.1300e-003	0.0914		513.3838	513.3838	9.2700e-003	0.0534	529.5269

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 2022

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1253	3.2560	1.1322	0.0140	0.4932	0.0469	0.5401	0.1420	0.0449	0.1869		1,485.6791	1,485.6791	0.0157	0.2203	1,551.7275
Worker	1.2847	0.8326	12.9962	0.0331	3.6439	0.0182	3.6621	0.9664	0.0167	0.9831		3,369.3375	3,369.3375	0.0835	0.0829	3,396.1192
Total	1.4100	4.0886	14.1284	0.0471	4.1371	0.0651	4.2022	1.1084	0.0616	1.1700		4,855.0166	4,855.0166	0.0992	0.3032	4,947.8466

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1253	3.2560	1.1322	0.0140	0.4932	0.0469	0.5401	0.1420	0.0449	0.1869		1,485.6791	1,485.6791	0.0157	0.2203	1,551.7275
Worker	1.2847	0.8326	12.9962	0.0331	3.6439	0.0182	3.6621	0.9664	0.0167	0.9831		3,369.3375	3,369.3375	0.0835	0.0829	3,396.1192
Total	1.4100	4.0886	14.1284	0.0471	4.1371	0.0651	4.2022	1.1084	0.0616	1.1700		4,855.0166	4,855.0166	0.0992	0.3032	4,947.8466

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Building Construction - 2023

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0868	2.5156	1.0358	0.0135	0.4932	0.0219	0.5151	0.1420	0.0210	0.1630		1,426.5867	1,426.5867	0.0146	0.2108	1,489.7708
Worker	1.1910	0.7360	11.9596	0.0321	3.6439	0.0171	3.6610	0.9664	0.0157	0.9821		3,280.2218	3,280.2218	0.0749	0.0765	3,304.8850
Total	1.2778	3.2516	12.9954	0.0455	4.1371	0.0390	4.1761	1.1084	0.0367	1.1451		4,706.8085	4,706.8085	0.0895	0.2873	4,794.6559

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 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	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0868	2.5156	1.0358	0.0135	0.4932	0.0219	0.5151	0.1420	0.0210	0.1630		1,426.5867	1,426.5867	0.0146	0.2108	1,489.7708
Worker	1.1910	0.7360	11.9596	0.0321	3.6439	0.0171	3.6610	0.9664	0.0157	0.9821		3,280.2218	3,280.2218	0.0749	0.0765	3,304.8850
Total	1.2778	3.2516	12.9954	0.0455	4.1371	0.0390	4.1761	1.1084	0.0367	1.1451		4,706.8085	4,706.8085	0.0895	0.2873	4,794.6559

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7847					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.8174	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0548	0.0339	0.5503	1.4700e-003	0.1677	7.9000e-004	0.1685	0.0445	7.2000e-004	0.0452		150.9305	150.9305	3.4500e-003	3.5200e-003	152.0653
Total	0.0548	0.0339	0.5503	1.4700e-003	0.1677	7.9000e-004	0.1685	0.0445	7.2000e-004	0.0452		150.9305	150.9305	3.4500e-003	3.5200e-003	152.0653

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 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	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7847					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.8174	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0548	0.0339	0.5503	1.4700e-003	0.1677	7.9000e-004	0.1685	0.0445	7.2000e-004	0.0452		150.9305	150.9305	3.4500e-003	3.5200e-003	152.0653
Total	0.0548	0.0339	0.5503	1.4700e-003	0.1677	7.9000e-004	0.1685	0.0445	7.2000e-004	0.0452		150.9305	150.9305	3.4500e-003	3.5200e-003	152.0653

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.7847					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7729	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0511	0.0302	0.5153	1.4300e-003	0.1677	7.5000e-004	0.1684	0.0445	6.9000e-004	0.0452		147.2888	147.2888	3.1200e-003	3.2700e-003	148.3411
Total	0.0511	0.0302	0.5153	1.4300e-003	0.1677	7.5000e-004	0.1684	0.0445	6.9000e-004	0.0452		147.2888	147.2888	3.1200e-003	3.2700e-003	148.3411

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 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	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.7847					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7729	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0511	0.0302	0.5153	1.4300e-003	0.1677	7.5000e-004	0.1684	0.0445	6.9000e-004	0.0452		147.2888	147.2888	3.1200e-003	3.2700e-003	148.3411
Total	0.0511	0.0302	0.5153	1.4300e-003	0.1677	7.5000e-004	0.1684	0.0445	6.9000e-004	0.0452		147.2888	147.2888	3.1200e-003	3.2700e-003	148.3411

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	56.0468					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	56.2275	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2214	0.1308	2.2328	6.1900e-003	0.7266	3.2600e-003	0.7298	0.1927	3.0000e-003	0.1957		638.2516	638.2516	0.0135	0.0142	642.8115
Total	0.2214	0.1308	2.2328	6.1900e-003	0.7266	3.2600e-003	0.7298	0.1927	3.0000e-003	0.1957		638.2516	638.2516	0.0135	0.0142	642.8115

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 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	lb/day										lb/day					
Archit. Coating	56.0468					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	56.2275	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2214	0.1308	2.2328	6.1900e-003	0.7266	3.2600e-003	0.7298	0.1927	3.0000e-003	0.1957		638.2516	638.2516	0.0135	0.0142	642.8115
Total	0.2214	0.1308	2.2328	6.1900e-003	0.7266	3.2600e-003	0.7298	0.1927	3.0000e-003	0.1957		638.2516	638.2516	0.0135	0.0142	642.8115

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.2355	5.6457	41.8294	0.0953	9.4087	0.0732	9.4819	2.5103	0.0686	2.5789		9,802.890 3	9,802.890 3	0.4683	0.4473	9,947.884 1
Unmitigated	4.2355	5.6457	41.8294	0.0953	9.4087	0.0732	9.4819	2.5103	0.0686	2.5789		9,802.890 3	9,802.890 3	0.4683	0.4473	9,947.884 1

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,302.98	1,302.98	1302.98	4,452,481	4,452,481
Health Club	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,302.98	1,302.98	1,302.98	4,452,481	4,452,481

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LD1	LD2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Land Use	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Apartments Mid Rise	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Health Club	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	CO _{2e}	NOx	CO	SO ₂	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO _{2e}
Natural Gas Mitigated	0.1436	1.2393	0.6091	7.8300e-003	0.0992	0.0992	0.0992	0.0992	0.0992	0.0992	1,566.9859	1,566.9859	1,566.9859	0.0300	0.0287	1,576.2977
Natural Gas Unmitigated	0.1436	1.2393	0.6091	7.8300e-003	0.0992	0.0992	0.0992	0.0992	0.0992	0.0992	1,566.9859	1,566.9859	1,566.9859	0.0300	0.0287	1,576.2977
	lb/day															

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11308.7	0.1220	1.0422	0.4435	6.6500e-003		0.0843	0.0843		0.0843	0.0843		1,330.4376	1,330.4376	0.0255	0.0244	1,338.3438
Health Club	2010.66	0.0217	0.1971	0.1656	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.5483	236.5483	4.5300e-003	4.3400e-003	237.9540
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.1436	1.2393	0.6091	7.8300e-003		0.0992	0.0992		0.0992	0.0992		1,566.9859	1,566.9859	0.0300	0.0287	1,576.2977

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11.3087	0.1220	1.0422	0.4435	6.6500e-003		0.0843	0.0843		0.0843	0.0843		1,330.4376	1,330.4376	0.0255	0.0244	1,338.3438
Health Club	2.01066	0.0217	0.1971	0.1656	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.5483	236.5483	4.5300e-003	4.3400e-003	237.9540
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.1436	1.2393	0.6091	7.8300e-003		0.0992	0.0992		0.0992	0.0992		1,566.9859	1,566.9859	0.0300	0.0287	1,576.2977

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.7162	4.5577	25.5201	0.0286		0.4777	0.4777		0.4777	0.4777	0.0000	5,512.5790	5,512.5790	0.1459	0.1003	5,546.1105
Unmitigated	79.4191	6.2277	169.6512	0.3736		22.0547	22.0547		22.0547	22.0547	2,688.3056	5,208.6966	7,897.0022	8.0581	0.1825	8,152.8291

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3071					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1934					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	75.2043	5.9548	145.9544	0.3723		21.9235	21.9235		21.9235	21.9235	2,688.3056	5,166.0000	7,854.3056	8.0171	0.1825	8,109.1058
Landscaping	0.7143	0.2730	23.6968	1.2500e-003		0.1313	0.1313		0.1313	0.1313		42.6966	42.6966	0.0411		43.7233
Total	79.4191	6.2277	169.6512	0.3736		22.0547	22.0547		22.0547	22.0547	2,688.3056	5,208.6966	7,897.0022	8.0581	0.1825	8,152.8291

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3071					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1934					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.5014	4.2847	1.8233	0.0274		0.3464	0.3464		0.3464	0.3464	0.0000	5,469.8824	5,469.8824	0.1048	0.1003	5,502.3871
Landscaping	0.7143	0.2730	23.6968	1.2500e-003		0.1313	0.1313		0.1313	0.1313		42.6966	42.6966	0.0411		43.7233
Total	4.7162	4.5577	25.5201	0.0286		0.4777	0.4777		0.4777	0.4777	0.0000	5,512.5790	5,512.5790	0.1459	0.1003	5,546.1105

7.0 Water Detail

7.1 Mitigation Measures Water

PRAIRIE VIEW, Perris - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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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